Spring 5-1997

Manic Depression and Artistic Creativity

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Appendix D - UNIVERSITY HONORS PROGRAM SENIOR PROJECT - APPROVAL

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PROJECT TITLE: Manic Depression and Artistic Creativity

I have reviewed this completed senior honors thesis with this student and certify that it is a project commensurate with honors level undergraduate research in this field.

Signed: __________________________, Faculty Mentor
Date: May 6, 1987

Comments (Optional):

**Manic Depression and Artistic Creativity**

Brooks Davis  
Senior Honors Project  
May 7, 1997

ABSTRACT

This report gives a thorough view of manic depressive illness and its link to artistic creativity. It begins with the diagnostic criteria and symptoms of manic depression. Subsequent to this is the major focus of the report where evidence is presented that some artists have a higher incidence of manic depression than the general population. This proof is given through research studies and family histories. The report then discusses the genetic inheritance of the disease using twin and adoption studies for evidence. The final part of the report examines treatment of manic depression. It explains how the illness is caused and how lithium combats it. It also discusses why many artists want to refuse treatment.
# TABLE OF CONTENTS

## INTRODUCTION

1. DEFINITION OF MANIC DEPRESSION
   1.1 Description of Mania 2
   1.2 Description of Depression 3

2. THE LINK BETWEEN MANIC DEPRESSION AND ARTISTIC CREATIVITY 4
   2.1 Research 5
   2.2 How Manic Depression and Artistic Creativity Work Together 9

3. GENETICS OF MANIC DEPRESSION 10
   3.1 Genetic Evidence through Twin and Adoption Studies 11
   3.2 Explanations for Genetic Inheritance 11
   3.3 Family History of Alfred, Lord Tennyson 13

4. TREATMENT OF MANIC DEPRESSION 17
   4.1 How Lithium Affects the Brain 18
   4.2 Side Effects of Lithium Treatment 21
   4.3 Lithium and Artistic Creativity 21

CONCLUSION: In the Wind’s Eye They Sail 22

SOURCES CITED 23

SELECT BIBLIOGRAPHY 25
List of Illustrations

Figure 1. Lifetime Prevalence of Mental Illness in Writers and Subjects 6

Figure 2. Mood, Cognitive, and Behavioral Changes Reported During Intense Creative Episodes 8

Figure 3a. Twin Studies Suggesting Genetic Influences within Manic Depression 12

Figure 3b. Adoptee Studies Suggesting Genetic Influences within Manic Depression 12

Figure 4. Risks of Mood Disorder in Family Members of Manic Patients 14

Figure 5. Family History of Alfred, Lord Tennyson 15

Figure 6. Resident Patients in State and County Mental Hospitals 17

Figure 7. Diagram of a synapse 19

Figure 8. Diagram of rupturing synaptic vesicles and release of transmitter 19
INTRODUCTION

“'I feel the jagged gash with which my contemporaries died,'”[1] wrote Robert Lowell. This “jagged gash” of which Lowell speaks is the personal anguish he shared with many of his peers such as John Berryman, Theodore Roethke, Delmore Schwartz, and Anne Sexton. He felt there was something evil stalking them that was unavoidable. What was “stalking” them was manic depressive illness. This disease made them subject to destructive moods, but also intensified their artistic creativity. Sadly, hospitalization was necessary for all of them, and suicide was the end of Berryman and Sexton.

Although manic depression only afflicts one percent of the general population, a large percentage of poets, writers, composers, and visual artists are its victims. This phenomena has been noticed by many scientists, but little information has been put together to form a cohesive investigation of occurrences of manic depressive artists. This report investigates the connection between manic depression and creativity and assimilates the what researchers have begun to discover into one report. The goal is to also describe the genetic background of the illness and relate its influence in many well-known artists’ works. This paper is written to show people the artistic side of mental illness, a side usually not recognized. It is also written in hopes that it betters people’s understanding of manic depression. Communicating this information is the most effective way to disarm blind prejudices that make each day harder for those who already suffer. If society becomes more accepting of the disease, people will become more willing to lift the stigmas attached to the mentally ill.
1. THE DEFINITION OF MANIC DEPRESSION

Manic depression (also called bipolar disorder) is an illness that is comprised of two mood disorders, mania and depression, that affect a person in a cyclic manner. Episodes of manic depression can last for months or sometimes for only hours. Within these episodes come periods of stable moods. However, this stability is deceptive because only with lithium treatment is one able to sustain partial control over the illness. Before lithium was discovered to be an effective treatment, one in five people with manic depression committed suicide. Today, sixty to eighty percent of all adolescents and adults who commit suicide have a history of either manic depression or major depression. The mortality rate for untreated manic depressive illness is higher than it is for many types of heart disease and cancer.[2]

1.1 Description of Mania

The part of the illness called “mania” is when one’s mood changes from its normal state to an extremely overactive state. During this time a person often experiences elation and euphoria. This state has been described as being “on top of the world.” The painter Benjamin Haydon said of his manic experiences, “I have been like a man with air balloons under his armpits and ether in his soul.”[3] During a manic episode a person may talk continually and rapidly, sleep and eat very little, become more irritable, and feel like her thoughts are racing. This part can be the all-too-brief period of a silver lining among the illness’s many black clouds. During mania, patients experience “increased energy, risk taking, and fluency of thought”[4] that can sometimes lead to periods of “superhuman” productivity. Sadly, the manic state often progresses to a point where judgment is impaired and reality is lost. The brain goes out of
control and devastating financial, legal, occupational, or social decisions can result. One manic depressive, Dr. Kay Jamison, recalls an episode: “I remember whipping around a drugstore, convinced that there was a major rattlesnake problem in San Fernando Valley. As it turns out there was a problem, but not something to worry about. I got worried about it. They had these snakebite kits, very portable, and I knew every one of my friends would want to have one. So I bought all of them... My brother is an economist for the World Bank -- he helped me pick up after my manic sprees, when I was hopelessly in debt.”[5]

1.2 Description of Depression

The other half of the illness, depression, is a condition in which one’s mood changes from its normal state to that of being low, blue, sad, or unhappy. A person may experience changes in sleep pattern, decreased appetite, lack of energy, increased worrying, loss of pleasure, and difficulty concentrating. Accomplishing normal daily activities, such as going to school or work, becomes difficult or impossible. F. Scott Fitzgerald described his depression by writing, “I found I was good and tired. I could lie around and was glad to, sleeping or dozing sometimes twenty hours a day and in the intervals trying resolutely not to think... I realized that every act of life from the morning toothbrush to the friend at dinner had become an effort... I hated the night when I couldn’t sleep and hated the day because it went toward night. All rather inhuman and undernourished, isn’t it? Well, that children, is the true sign of cracking up.”[6]
2. THE LINK BETWEEN MANIC DEPRESSION AND ARTISTIC CREATIVITY

We of the craft are all crazy,” once wrote Lord Byron about himself and his fellow poets. “Some are affected by gaiety, others by melancholy, but all are more or less touched.”[7] For a long time, people have shared this view of some connection between genius and insanity. History has many examples of a fine madness that equates psychopathology and artistic expression. In the time of the famous philosophers, Plato and Socrates, it was believed that holy men and poets communicated with the gods through “inspired madness.” This madness was thought to be gained only when an individual was afflicted with illness or states of possession. Socrates wrote, “Madness, provided it comes as the gift of heaven, is the channel by which we receive the greatest blessings... Madness comes from God, whereas sober sense is merely human.”[8]

In the late 19th and early 20th centuries, researchers studied accounts written by prominent artists, physicians, and friends suggesting that writers, artists, and composers experienced mood disorders and committed suicide far more often than the general population. Artists documented their creative voyages as compelled not only by fierce energies, euphoria, sharp intelligence, feverish temperament, but also by darker moods containing grimmer energies and bouts of madness. These moods form not only common artistic temperament, but also the basis of manic depressive illness. However, it was not until twenty years ago that these accounts linking artists to manic depression were actually confirmed through systematic studies.
2.1 Research

Just because a person is afflicted with a mood disorder, it does not mean that they are automatically an artistic or literary genius. Most manic depressives do not possess extraordinary creativity, and most artists do not suffer from mood swings. Thus, it is not the disease that causes the artistic creativity. However, recent research has determined a definite link between the two.

The first study exploring this issue was done by Nancy C. Andreason at the University of Iowa (see figure 1). She studied 30 writers who were all participants in the University of Iowa’s Writer’s Workshop and compared them to 30 controls who were not writers. Interestingly, 80 percent of the writers met the formal criteria for a mood disorder. Almost half of the writers met the criteria for full blown manic depression, and two-thirds of them had psychiatric treatment.[9] She also determined that there was a higher prevalence of mood disorder and creativity in the writers’ first-degree relatives. This is indicative of traits running together in families.

Other investigators delved into biographical research. Also known as “beyond the grave” research, it is performed in a systematic method. It gauges the symptomatic presentation of the artist (pronounced changes in mood, energy, sleep, thinking, behavior) and associated behavior (alcohol and drug abuse, pathological gambling, pronounced and repeated financial reversals, chaotic personal relationships). In addition, suicide is taken into account along with the natural course of the illness and any family history of depression, mania, psychosis, or suicide.

The first major biographical study was performed by Dr. Kay Jamison. She chose 47 distinguished British writers and visual artists and found that 38 percent of these artists and writers had been treated for a mood disorder. Three-fourths of those treated required medication or hospitalization. Eighty-nine percent of the creative writers and artists said they
## LIFETIME PREVALENCE OF MENTAL ILLNESS IN WRITERS AND CONTROL SUBJECTS

<table>
<thead>
<tr>
<th>Research Diagnostic Criteria</th>
<th>Writers (N=30) %</th>
<th>Controls (N=30) %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Any affective disorder</td>
<td>80</td>
<td>30</td>
</tr>
<tr>
<td>Any bipolar disorder</td>
<td>43</td>
<td>10</td>
</tr>
<tr>
<td>Bipolar I</td>
<td>13</td>
<td>0</td>
</tr>
<tr>
<td>Bipolar II</td>
<td>30</td>
<td>10</td>
</tr>
<tr>
<td>Major Depression</td>
<td>37</td>
<td>17</td>
</tr>
<tr>
<td>Schizophrenia</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Alcoholism</td>
<td>30</td>
<td>7</td>
</tr>
<tr>
<td>Drug Abuse</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>Suicide</td>
<td>7</td>
<td>0</td>
</tr>
</tbody>
</table>

**Figure 1.** The writers had a much higher incidence of mood disorder than the control group.

had experienced intense, highly productive and creative episodes that usually lasted two weeks.

As shown in figure 2, these episodes were characterized by pronounced increases in enthusiasm, energy, self-confidence, and faster mental association.[10]

Jamison also did a study of 36 British and Irish poets born between 1705 and 1805. She found that manic depression was thirty times more incident among them as compared to the general population at that time. Additionally, these poets were twenty times as likely to be committed to an asylum and also five times as likely to commit suicide as the general population.[11]

These findings were also echoed in those of Joseph J. Schildkruit and his coworkers. Again, earlier generation of artists and writers showed consistency higher rates of suicide, depression, and manic depression. The artists he studied were found to have a suicide rate eighteen times that of the general population. The rate of manic depression was ten to twenty times that of the general population. Half of the fifteen 20th century abstract-expressionist artists studied suffered from depression or manic depression. Their suicide rate was thirteen times that of the current rate of the United States.[12]

Ruth L. Richards did a study in reverse to what the other researchers had pursued. Rather than screening for mood disorders among those already deemed highly creative, she attempted to rate creativity among those already diagnosed with manic depression. Compared to individuals with no person or family history or psychiatric disorders, manic depressives showed much greater creativity.[13]
2.2 How Manic Depression and Artistic Creativity Work Together

It is obvious from the research that talent sometimes accompanies mental illness. There is definitely a correlation between manic depression and artistic creativity, but not every artist has manic depression and vice versa. It was concluded by Drs. A. Myerson and R.D. Boyle of Boston’s McLean Hospital that “The manic drive in its controlled form and phase is of value only if joined to ability. A feebleminded person of manic temperament would simply be one who carried on more activity at a feebleminded level...the bulk of manic depressive temperaments are of no special value to the world. If, however, the manic temperament is joined to high ability, an independent characteristic, then the combination may well be more effective than the union of high ability with normal temperament and drive might be.”[14] Thus, it is the psychiatric illness that is conducive to the already present creative ability.

Coupled with a manic depressive’s increased energy, sensitivity, and enthusiasm, artistic creativity explodes. The experience of periods of melancholy, interspersed with episodes of manic temperament, leads to a different type of insight and compassion. Original thoughts and connections are generated by the grandiose, fluent, and quick thinking. It has been shown that manic patients use rhyme and alliteration more often than non-manic depressives. In addition, manic depressives use idiosyncratic words three times as much as control subjects and can list synonyms more rapidly than what is thought to be normal.

The emotions of manic depressives are also highly contributory to increased creativity. During episodes of mania and depression, a patient can be caught up in an intensive fervor and not sleep. He can have an increased desire to work and produce. Somehow, manic depressives are able to shape all the emotional chaos into something familiar and use that to spur their artistic notions. William Meredith said of Robert Lowell, “No one predicts how long it will be
before the drugs take hold and Lowell begins to be himself again. Meanwhile he writes and
revises translations furiously and with some kind of crooked brilliance, and talks about himself
in connection with Achilles, Alexander, Hart, Hitler, and Christ, and breaks your heart.”[15]

3. GENETICS OF MANIC DEPRESSION

Robert Burton, as early as the seventeenth century, wrote “I need not therefore make any
doubt of Melancholy, but that it is an hereditary disease.”[16] This view has been held by the
medical field both before and after his time. The passing of madness from generation to
generation is a well-founded medical belief as well as a familiar literary theme. Edgar Allan
Poe, describes the genetics of mental disorders in The Fall of the House of Usher:

Its proprietor, Roderick Usher... spoke of acute bodily illness--of a mental
disorder which oppressed him...

I was at once struck with an incoherence--an inconsistency...an excessive nervous
agitation...His action was alternatively vivacious and sullen. His voice varied rapidly
from a tremulous indecision (when the animal spirits seemed utterly in abeyance) to that
species of energetic concision... which may be observed in the lost drunkard, or the
irreclaimable eater of opium, during the periods of his most intense excitement...

It was, he said, a constitutional and family evil, and one for which he despaired to
find a remedy--[17]
3.1 Genetic Evidence through Twin and Adoption Studies

There is strong evidence from twin and adoption studies that genetic factors play a role in manic depression. They show that close relatives of someone with the disorder are more likely to develop the disorder than someone in the general population. Twin studies, pooled from seven major studies in the USA, Germany, England, Denmark, and Norway, are highly suggestive of genetic influence. As shown in figure 3a, the identical and fraternal-twin concordance rates from these studies combined are 76 percent and 19 percent, respectively.[18] In another study it was found that among twins reared apart from each other, 67 percent were found to be concordant for manic depression.[19] This rate is close to the rate of twins brought up together who have manic depression, thus strengthening the evidence that genetic factors are involved in the mental illness.

Adoption studies are also indicative of genetic influence. In 1969, the biological and adoptive parents of a group of adopted children with manic depression were studied (see figure 3b). The most important finding of the study indicated that parents genetically related to manic depressive adopted children had a higher incidence of mental illness (especially mood disorders) than the parents who adopted and raised them (40 percent vs. 16 percent).[20] The conclusion drawn was that it appeared not to matter whether or not the biological parents raised the manic depressive children.

3.2 Explanations for Genetic Inheritance of Manic Depression

Even though it is demonstrated from twin and adoption studies that manic depression is an inheritable disease, psychiatric geneticists realize that it is not a case of simple Mendelian
### TWIN STUDIES SUGGESTING GENETIC INFLUENCES WITHIN MANIC DEPRESSION

<table>
<thead>
<tr>
<th>Kind of Pair</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Identical, concordant</td>
<td>76</td>
</tr>
<tr>
<td>Fraternal, concordant</td>
<td>19</td>
</tr>
<tr>
<td>Twins reared apart, concordant</td>
<td>67</td>
</tr>
</tbody>
</table>

**Figure 3a.** This study shows evidence that mood disorder is a genetically inheritable disease. The percent of twins reared apart from each other is significantly close to the percent of identical twins raised together. Source: Tsuang, Ming and Randall Vandermey. *Genes and the Mind.* Oxford: Oxford University Press; 1980: 82.

### ADOPTEE STUDIES SUGGESTING GENETIC INFLUENCES WITHIN MANIC DEPRESSION

<table>
<thead>
<tr>
<th>Parents</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biologically related</td>
<td>40</td>
</tr>
<tr>
<td>Adoptive</td>
<td>16</td>
</tr>
</tbody>
</table>

**Figure 3b.** Parents genetically related to manic depressive adopted children have a higher rate of mental illness than the adoptive parents. Source: Tsuang and Vandermey.
It was suggested in 1938 that manic depression could be transmitted through X-linked dominance. To test this, families were studied to see if any manic depressive fathers and sons were observed. None were. Also, in a study of families with 89 manic subjects, no father and son pairs were found, while 13 father-daughter, mother-daughter, and mother-son pairs were.[21] In another study it was found that all female family members had a 56 percent risk of mood disorder, while the male family members only have a 23 percent risk (see figure 4).[22]

Although these studies suggest manic depression to be a sex-linked trait, it is not a completely accepted theory because other studies have found pairs of manic depressive fathers and sons and high percentages of male manic depressives. It is possible that some of the males' illnesses could have been transmitted from the mother's side of the family, or it could be possible that some manic depression cases are X-linked while others are transmitted differently. Because the hereditary factors are not apparent in the families of all people with manic depressive disorder, the mystery of genetic transmission is furthered even more. As a result, it is not possible to predict accurately the risk to a person if a relative has manic depression.

### 3.3 Family History of Alfred, Lord Tennyson

Alfred, Lord Tennyson lived his life antagonized by the genetic “black blood” of his family. His fears were well-founded, as seen in the Tennyson genealogy (see figure 5). The Tennysons show mental illness as far back as seventeenth-century branches of their family. Both his father and grandfather had recurrent attacks of uncontrollable rage and melancholy. His aunts and uncle were also plagued by the same disease.

For some reason, the males of the Tennyson family seem to have inherited the worst of the disease. Alfred's father, grandfather, and two great-grandfathers, along with all six of his
## RISKS OF MOOD DISORDER IN FAMILY MEMBERS OF MANIC PATIENTS

<table>
<thead>
<tr>
<th>Family relation</th>
<th>Risk of mood disorder percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mothers</td>
<td>55</td>
</tr>
<tr>
<td>Fathers</td>
<td>17</td>
</tr>
<tr>
<td>Sisters</td>
<td>52</td>
</tr>
<tr>
<td>Brothers</td>
<td>29</td>
</tr>
<tr>
<td>Daughters</td>
<td>83</td>
</tr>
<tr>
<td>Sons</td>
<td>17</td>
</tr>
<tr>
<td>All parents</td>
<td>41</td>
</tr>
<tr>
<td>All siblings</td>
<td>42</td>
</tr>
<tr>
<td>All children</td>
<td>50</td>
</tr>
<tr>
<td>All female family members</td>
<td>56</td>
</tr>
<tr>
<td>All male family members</td>
<td>23</td>
</tr>
</tbody>
</table>

**Figure 4.** Further evidence for genetic inheritability. Source: Tsuang and Vandermey.
Figure 5. Alfred, Lord Tennyson
Partial Family History

George 1684-1741

Mary 1753-1825

Ralph

"long been suffering a despondency and had not
left his bed for two years"

Charles 1784-1861

"inherited his father's instability and
footlessness", somnolent tendencies, expulsive,
grandiose activities and interests

Elisabeth k. 1776

Mary k. 1777

"frequent penaltos": constant quarrelling
and gloominess

Elisabeth Pynche 1784-1865

"very quiet" and
"sweet tempered"

George Claytons Tennyson 1778-1881

"melancholic states between frenzy and
laziness": somnolent; alcoholic; "fun";
somnolent

Charles 1750-1820

"choleric rage" and recurrent melancholic;
unpredictable temper;
"too susceptible of melancholy from
every passing cloud"

(1) Manic-depressive illness

(2) Recurrent depressive illness

(3) Mania, unstable moods, and/or mania

George

Charles 1825-1829

addicted to licentious;
"complete nervous breakdown"; had to be segregated from
outside world; extreme mood swings and
"excessive fits of psychopathic depression"

Mary 1816-1884

"as a wild sort of countenance": obsessed with
socialism

Edward 1815-1888

"suffered from nervous depression"; frequent
attempts at suicide;
"the most notable of all the Tennysons"

Frederick 1827-1829

irritability; eccentric; violent temper and
volatility; obsessed with socialism

ALFRED 1820-1884

"suffered much from depression": one year in
Glasgow as a patient for the "insane"

Emily 1811-1889

"suffered much from depression": one year
in Glasgow as a patient for the "insane"

Arthur 1814-1889

"some mental derangement,"
acquitted after admission to a
mental hospital; religious
obsession; "did not entirely escape
the melancholic of the Tennysons"

Horace 1815-1889

"strange personality was
legendary": "rather
grewlful": somnolent and
"vulnerable to the
"weaknesses of the
Tennyson temperament"

Source: From K. R. Jamison, Mood disorders and patterns of creativity in British writers
brothers, suffered from insanity, severe melancholia, and violent tempers. All these are symptoms of manic depression. Alfred’s brother, Edward, was confined to an insane asylum for almost sixty years and eventually died from manic exhaustion. Alfred’s two sons, Hallam and Lionel, are interesting in that Hallam became a highly practical man while Lionel was far more interesting with some poetic ability and a mercurial personality. The headmaster of their first school correctly described them: “Lionel the more brilliant, Hallam by far more accurate.”[23] Out of Lionel’s three sons, one inherited the family’s mental instability and became the sixth generation of the Tennysons to be affected.

Mental illness was not the only aspect of the family inheritance; an equally pervasive passion for poetry also was passed along. Three of the Tennyson brothers published together a book of their poems, and as undergraduates they received the university’s major literary prizes. Frederick and Charles both published volumes of verse, and Alfred is regarded as one of the foremost poets of the nineteenth century. Arthur, Septimus, Edward, Mary, Cecila, and Emily also wrote poetry, and Emily’s granddaughter became a poet and novelist.

Alfred struggled throughout his life not only with deep and recurrent depressions, but also with the fear of following in the footsteps of his family. The conflict between his melancholic and poetic sides was described by T.S. Eliot: “He was not only a minor Virgil, he is also with Virgil as Dante saw him, a Virgil among the Shades, the saddest of all English poets.”[24]
4. TREATMENT OF MANIC DEPRESSION

There is a long history of cruel treatment for the mentally ill because doctors and society did not understand affective disorders. Until 40 years ago, patients usually found themselves institutionalized, where they were either victims of bizarre and horrifying treatment or were forgotten forever. For example, doctors once performed lobotomies by having a patient recite a poem or sing a song as they cut on the brain. The cutting would stop when the patient ceased reciting or singing. But because of extraordinary advances in genetics, neuroscience, and psychopharmacology, much of modern psychiatric thought and clinical practice has moved away from the earlier psychoanalysis and treatment to a more biological perspective.

Figure 6. Resident Patients in State and County Mental Hospitals. Source: Lickey, Marvin and Barbara Gordon.
Three percent of the general population has an affective disorder, either depression or manic depression. However, this number is greatly reduced from what it was before modern psychiatric drugs were developed. In the period following World War II, there were so many hospitalized mental patients that it was a common joke that the sane and insane would have to exchange housing. Figure 6 shows how the number of patients steadily increased from 150,000 to about 550,000 during the first half of the twentieth century. During this time, hospitals were dismal and overcrowded. Hallucinating patients talk to their “voices” and manic patients pace the floors for days until exhausted. These people were often put in straight jackets, isolated in padded rooms, or given debilitating sedative drugs. Sadly, there was not an effective way of relieving their symptoms. But in 1949, the discovery of a new drug changed mental health care forever. The drug was lithium, and its introduction as a psychoactive drug made it the first drug in modern pharmacopsychiatry. Without lithium, a manic depressive patient can expect ten manic or major depressive episodes in a lifetime. But if lithium is taken consistently, 80 percent of all manic depressives respond to it.

4.1 How Lithium Affects the Brain

All thoughts, emotions, and behaviors of animals result from the activity of nerve cells in the brain and spinal cord. The activity of these nerve cells depends on a complex system of chemical reactions and movements of molecules. Normally, a nerve impulse in the presynaptic terminal causes synaptic vessels to fuse with the terminal membrane and release their transmitter (the chemical that carries the message to the postsynaptic cell) into the cleft. The transmitter binds to postsynaptic receptors, and the post-synaptic membrane responds by either excitation or inhibition (see figures 7 and 8). In some cases, the binding of the transmitter to receptors can
Figure 7. Diagram of a synapse as seen with an electron microscope. The synaptic vesicles contain transmitter. The mitochondria supply the energy needed for synthesis and release of transmitter. Source: Lickey, Marvin and Barbara Gordon.

Figure 8. Diagram of rupturing synaptic vesicles and release of transmitter into cleft. The transmitter diffuses across the cleft and attaches to the receptor. The vesicle membrane is reclaimed by the presynaptic terminal. Source: Lickey, Marvin and Barbara Gordon.
also alter the biochemistry of the cell. A disruption in this chemical process can cause a change in behavior and sometimes result in a mental illness.

Lithium treatment alters a manic depressive’s brain back to its normal behavior. The drug affects the transmitters norepinephrine and serotonin at their synapses. During the first few days of lithium treatment, transmitter synthesis and breakdown increase. This increased metabolism of transmitter increases the amount of both transmitters in the cleft (see figure 8). All this has the effect of changing the cell’s biochemical reactions, including some involved in neural signaling and the synthesis of specific chemicals significant in normal brain function. Involved in these transmitter-receptor interactions are “second messengers.” They activate enzymes that alter the neuronal function. The enzymes can alter release of norepinephrine and serotonin transmitters, receptor sensitivity, or the electrical activity of postsynaptic neurons. Scientists now believe that lithium prevents the synthesis of a second messenger called phosphatidylinositol-bis-phosphate (PIP₂) thus preventing a cell from responding biochemically to the altered transmitter inputs.

In a cell that is driven by overactive inputs that cause mania, lithium would prevent the cell from synthesizing PIP₂. The decreased supply of PIP₂ would decrease the cell’s response to the manic input, preventing it from transmitting the signal any further. Similarly, another cell being driven by overactive depression inputs would be stifled by lithium. The lithium would work to dampen all postsynaptic activity depending on PIP₂ regardless of whether the presynaptic input was signaling mania or depression.[28]
4.2 Side Effects of Lithium Treatment

Lithium can produce a number of unpleasant side effects, but most patients experience only a few, and even these usually disappear within one to four weeks. Most commonly experienced are weakness, tremor, fatigue, nausea, abdominal cramps, diarrhea, weight gain, lethargy, and increased thirst and urination. The biggest risk in treatment with lithium is that the prescribed dose can be too high, resulting in lithium poisoning. These symptoms are confusion, slurred speech, drowsiness, loss of balance, tremor, vomiting, diarrhea, and eventually coma and death. To prevent lithium poisoning, the amount of lithium in the blood must be measured frequently. However, after the correct dosage has been established, blood concentrations need only to be measured three to twelve times a year.

4.3 Lithium and Artistic Creativity

Theoretically, people with a life threatening and debilitating disease such as manic depression would desire some treatment to alleviate their suffering. However, many artists with manic depression refuse treatment because it has been shown that lithium interferes with the emotional extremes that are integral to artist’s creative abilities. The drug decreases the sociability, initiative, and impulsiveness associated with mania, along with the turmoil and suffering of depression. It is described as a “brake” because it seems to diminish an artist’s drive and to make her unable to express. Artists fear that the treatment will transform them into “normal, well adjusted, bloodless souls unable to write, paint, or compose.”

But there are serious problems with refusing treatment. The disease for which lithium is prescribed is serious and life threatening. No one is creative when they are paralytically depressed, psychotic, institutionalized, or dead from suicide. And this has happened to so many
artists already. We will never know what else Vincent van Gogh would have painted or Virginia Woolf written. Ultimately, artists must make their own choice. Some will choose treatment and others will not. Hopefully, the day will come when there is a drug that eliminates side effects that impair the creative process. In this way, the individuality of an artist is never compromised.

**IN THE WIND’S EYE THEY SAIL**

Occasionally, a person comes alive with an elated and highly productive feeling and then is suddenly left suffering and desirous of death. Manic depression can be both a source of intolerable turmoil and euphoric psychosis. Yet it is the manic depression in many people that has produced powerfully moving art, literature, poetry, and music. But it is also this same disease that has led many to defeat and suicide. Indeed, it is a strange and fascinating disease—one that heightens creativity, but tears at the heart and soul of the artist as it does.

That impassioned moods and artistic temperament can be transformed into a creative madness still remains as controversial belief. It is thought by some that the destructive, often psychotic, and frequently fatal disease might be counterintuitive instead of advantageous. Others conjure up simplistic notions of the “mad genius.” But in diagnosing artists as manic depressives we are not losing our respect for their differentness, independence, or individuality. We are only beginning to understand and appreciate their anguish and melancholy.
Sources Cited


[19] Tsuang and Vandermey, p. 82.


[22] Tsueng and Vandermey, p. 93.


[26] Lickey and Gordon, p. 5.

[27] Lickey and Gordon, p. 239.


[29] Lickey and Gordon, p. 244.


