# Medicine, artists and their art



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A review is presented of examples of visual defects, mental illness, neurological disorders and other medical conditions which have affected certain artists. These have been considered in relation to the possible effects they may have had on the artist's style, technique and choice of subject matter.

Paintings with medical relevance may depict particular diseases or malformations, some with a hereditary basis<sup>1</sup>. Of historical interest are those works that illustrate diagnostic procedures or treatments current at the time<sup>2,3</sup>. Also, often unintentionally, artists may reveal in their work evidence of their own medical defects.

## Problems of interpretation

Works of art with a possible medical interest can be difficult to interpret unless something is known of the contemporary medical knowledge and culture. This can be a particular problem in early works. But even in relatively recent times it may be difficult to be certain of a diagnosis. This is clearly the case with Vincent van Gogh (1853–90) whose apparent mental aberrations have been variously attributed to schizophrenia, temporal lobe epilepsy, tinnitus, lead poisoning, absinthe addiction and even acute intermittent porphyria, though a serious depressive illness now seems the most likely interpretation in view of his family history and other factors. John Martin (1789–1854), the Victorian painter with apocalyptic visions, is another case in point. His paintings, which are 'enormous, grandiloquent, obsessed with spatial infinity and satanic heroism'4, have often been interpreted as the product of some form of madness, but could well have reflected an addiction to opium, a not uncommon problem among artists and writers in his day. Alternatively, it may only be the mundane result of the inspiration he gained from improvements in the technology of magic lanterns4.

In many instances we shall never know for certain the precise diagnosis of an artist's problem unless he or she was aware of this at the time and sought medical advice with subsequent documentary evidence. But even then we are limited by the state of medical know-

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ledge at the time. These limitations have to be remembered in any study of reputed medical problems in an artist's life which may have affected his or her work.

## Visual problems

Artists, like anyone else, have suffered from a variety of medical conditions and this is particularly obvious in the case of eye disease. The most frequently quoted example is El Greco's (1541-1614) purported astigmatism which, it has been suggested, may explain the vertical elongation evident in many of the subjects of his paintings. But this explanation is no longer accepted by experts. The primary objection is based on the historical setting of El Greco's work and his compromise between Venetian naturalism and traditional Byzantine stylisation<sup>5</sup>. Also, X-ray evidence shows that the elongations were often secondarily imposed on his original sketches. Furthermore, as Peter Medawar and others have pointed out, if the artist sees an elongated world then the likeness of it that he paints, in order to appear equally elongated, will in fact be compensated and the normal dimensions restored. More recent artists have been afflicted with well documented astigmatism and this apparently did not result in undue elongated distortions in their work; for example, John Singer Sargent (1856-1925) and Francis Bacon (1909-92).

## Myopia

In contrast to the general population it appears more artists are short-sighted than long-sighted. Myopia might have influenced the predominant use of the colour red by some short-sighted artists<sup>5</sup>. Such artists include Paul Cézanne (1839–1906), Edgar Degas (1834–1917), Georges Braque (1882–1963) and Henri Matisse (1869–1954). It has even been suggested that poor central vision may have been a significant factor in the development of the Impressionist movement in art. Holman Hunt (1827–1910), the pre-Raphaelite painter, and the theatrical designer Gordon Craig (1872–1966) were both short-sighted. If not properly corrected, marked myopia would inevitably result in loss of detail, seen in many of Gordon Craig's works.

#### Cataracts

Much has been written about cataracts and their effects on an artist's work. Turner (1775–1851) is often quoted as a good example, illustrating in his

later works the expected predominance of red-brown tints. But the best authenticated case is that of Claude Monet (1840–1926), the French Impressionist painter. As his cataracts developed there is an increasing red-dish-brown tinge to his many paintings of his celebrated water-garden in Giverny. Eventually, in 1923, he was persuaded by Prime Minister Clemenceau to undergo surgery and his subsequent work took on a more bluish tint. Of course, with cataracts the image would also become blurred.

#### Blindness

Sir Joshua Reynolds (1723-92), the first President of the Royal Academy in London, lost the sight of his left eye and then developed a cataract in his right eye, eventually becoming virtually blind in 1789. Progressive deterioration of vision leading to blindness must be the worst affliction any artist could bear. One of the earliest recorded examples, but which may be apocryphal, was the Renaissance artist and mathematician, Piero della Francesca (c 1410/20–92), who, while still active, became blind around the age of 60 'through an attack of catarrh' according to Vasari. Albrecht Dürer (1471–1528) had a divergent squint, apparently inherited from his mother, clearly evident in self-portraits and with which he became obsessed, depicting the same defect in several portraits of others<sup>6</sup>. His self-portrait at age 21 (Fig 1) shows his hand raised seemingly to counter the confusing second image seen by his divergent eye. Did this eye later become amblyopic and if so what effect did it have on his art?

In more recent times, failing vision turned some artists to sculpture or pottery, as in the case of Degas and the American artist Georgia O'Keefe

Fig 1. Self-portrait (pen and ink) (c 1491), Albrecht Dürer. (Reproduced by kind permission of Universitätsbibliothek, Erlangen-Nürnberg)



(1887–1986). The French Impressionist Camille Pissaro (1830–1903) was so troubled with deteriorating eyesight in later years that he had to abandon painting out of doors and concentrate on town scenes painted through Paris windows. Failing sight led to the colours of Malcolm Drummond (1880–1945), an English painter of the Sickert school, becoming increasingly distorted; he became totally blind for the last three years of his life. The Russian painter Mikhail Vrubel (1856–1910) also became blind (and mad) in the last ten years of his life but the cause is not documented. Percy Wyndham Lewis's (1882–1957) failing sight was due to a pituitary tumour which he refused to have removed7. He wrote to a friend: 'I have never at any time, in my worst dreams, imagined myself deprived of my sight'. Early in the course of the disease, when he could still see but very indistinctly, he was driven to holding his head very close to the canvas when painting, though this did not prevent him from producing a very fine portrait of T S Eliot at the time.

#### Colour-blindness

Perhaps the most intriguing situation arises when an artist discovers he is colour-blind. Fernand Léger (1881–1955), the Cubist artist, was red–green colourblind, which may account for the predominance of blue-yellow in his work. It is said he would ask his wife for the names of colours when preparing his palette. Piet Mondrian (1872–1944), a geometrical-abstract painter, may also have been colour-blind. The styles favoured by such artists could be the direct result of their colour-blindness. It seems incomprehensible that anyone with this defect could become a successful representational painter of portraits or landscapes. Such a stricture would not apply, of course, to engravers, who work in black and white. Such a case is Charles Meryon (1821–68) who began to paint while in the French Navy. When he left the Navy to study art he decided he could not become a professional painter because he had discovered he was colour-blind. He therefore turned from painting to etching, in which he established an international reputation. Later in life, he developed schizophrenia and on several occasions was institutionalised, eventually dying, starving and delusional, in the Charenton asylum in Paris. Interestingly, he drew Dr Gachet who later became a friend of van Gogh during his madness.

#### Mental illness

Mental illness in artists has attracted much interest over the years. The subject has been thoroughly reviewed and illustrated, for example, by MacGregor<sup>8</sup>. There seems little doubt that in many instances of manic–depressive (bipolar) illness this may have been an actual motivating force<sup>9</sup>. But as Anthony Storr<sup>10</sup> has argued, in severe bipolar psychosis and schizophrenia, creativity, rather than being enhanced in some way, is

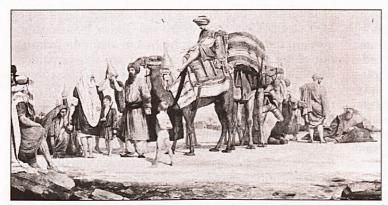


Fig 2. Caravan Halted by the Seashore (1843), Richard Dadd. (Reproduced by kind permission of Academy Editions, London)

often significantly impaired. However, when creativity does continue it is interesting to compare works before and after the onset of the illness.

## Schizophrenia and depression

Richard Dadd's (1819-87)<sup>11</sup> early paintings showed great promise, even though they were somewhat conventional. In 1842 he accompanied Sir Thomas Phillips as a travelling companion and artist on a Grand Tour of Europe and the Middle East. Toward the end of the tour he became alarmingly aggressive and suffered delusions of persecution. On returning to Britain he had an argument with his father whom he viciously attacked and killed. He then left for France where he attempted to kill a complete stranger. He was arrested and extradited to England but was found unfit to plead because of insanity and spent the rest of his life from 1844 first at Bethlem Hospital and later Broadmoor Hospital. It is interesting to compare a work painted around the time of the onset of his illness (Caravan Halted by the Seashore, 1843) (Fig 2) with one on a somewhat similar subject, but painted when he was clearly insane (*The Flight out of Egypt*, 1849–50) (Fig 3). The latter is certainly less conventional and contains much more detail, with overcrowding of the canvas, confusion of subject and barrenness of composition, all characteristics of the work of many artists suffering from schizophrenia<sup>12</sup>.

Similar changes can be seen in the works of the Swedish artist Carl Fredrik Hill (1849–1911) after he developed schizophrenia in his twenties. In the case of another Swedish painter, Ernst Josephson (1851–1906), his work became richer and less inhibited after he became ill. As Sandblom has said, 'of the measured impressionist, the disease made a savage expressionist'<sup>13</sup>.

In all these cases we are comparing works painted before and after the onset of a psychiatric illness. But the reverse situation of a transition from mental illness

to a more normal state is seen in the case of the Norwegian artist Edvard Munch (1863–1944). In his early life he was surrounded by insanity and death, his mother, brother and sister all dying of tuberculosis. In maturity, though an exceptionally talented painter, he was chronically depressed, sadistic and driven by anxieties, wonderfully expressed in his famous Scream (1893). Compounded by overwork and alcohol abuse, he had a complete breakdown in 1908 and was admitted for treatment, including ECT. Thereafter he made a good recovery. His work became less anguished and more lyrical and bright. But the change was never entirely complete because 'there remained a residue of past experiences which clamoured now and again for expression'14, which is evident in some of the works he created after 1908.

Severe clinical depression has affected a number of artists. Apart from Albrecht Dürer's (1471–1528) engraving *Melencolia* (1514) (Fig 4), one of the most graphic representations of deep depression in a work of art is the self-portrait of the Bolognese painter Annibale Carracci (1560–1609), which hangs in the Uffizi.

Extreme physical suffering of an artist can clearly affect the subject matter of his or her work. Frida Kahlo (1907–54), the Mexican artist, suffered a serious road traffic accident at the age of 25 which, after numerous operations, left her permanently encased in a painful spinal brace, and eventually she underwent an amputation of a gangrenous leg. She also had several miscarriages (she married the mural painter Diego Rivera). Her pain and disabilities are reflected in her many self-portraits<sup>15</sup> (Fig 5). These, and similar examples, express intense mental stress but hardly mental illness.

Fig 3. The Flight out of Egypt (1849–50), Richard Dadd. (Reproduced by kind permission of Academy Editions, London)



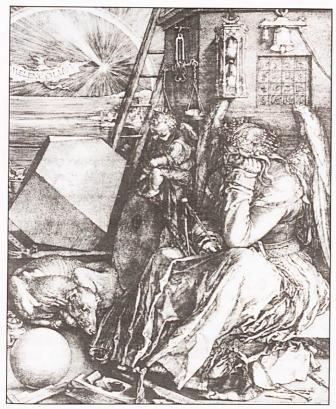


Fig 4. Melencolia (engraving) (1514), Albrecht Dürer. (Reproduced by kind permission of Philadelphia Museum of Art)

#### Alcoholism

Alcoholism has been a common problem among artists, perhaps because of an adopted lifestyle or in the belief that it heightened artistic abilities16. Wellknown examples are the French painters Henri de Toulouse-Lautrec (1864–1901) and Maurice Utrillo (1883–1955), both of whom were chronic alcoholics. There are innumerable other examples in the history of painting. More recently, the Russian-born American minimalist painter Mark Rothko (1903–70) became severely depressed in his later years, turned to alcohol, and eventually committed suicide. But it is difficult to determine just how alcohol may have manifested itself in their work. In the case of the present day Scottish painter John Bellany (born 1942), following a liver transplant for alcoholic cirrhosis in 1988 and thereafter a more abstemious lifestyle, the subject matter of his paintings became arguably less tortured - and possibly a little less yellow in colour(?).

The effects of alcoholism on painting would make an excellent subject for research in those instances where there is a clear distinction between works produced before and after discontinuing the addiction. Incidentally, the surgeon who operated on Bellany was Sir Roy Calne, himself an active painter who, under the subsequent influence of his patient, commented that he started to think of painting as a means of emo-



**Fig 5. Tree of Hope (1946), Frida Kahlo.** (Reproduced with kind permission from *Frida; a biography of Frida Kahlo* by Hayden Herrera, Bloomsbury Publishing, London, 1989)

tional expression as opposed to merely producing an attractive picture.

#### Confusional states and dementia

The Spanish painter Juan Gris (1887–1927), as a result of an attack of scarlet fever, developed chronic renal failure in the last few years of his life. Yet this disorder, which might be expected to produce a confusional state, does not seem to have affected his paintings, which remained strong and vigorous to the end<sup>13</sup>.

Frank dementia would seem to preclude any meaningful artistic expression. But the Dutch-American abstract expressionist Willem de Kooning (1904–97), while suffering from Alzheimer's disease continued to paint works which still attracted the attention of the critics<sup>17</sup>.

It is important to differentiate eccentricity from actual mental illness, although this is not always easy. Eccentricity is almost the hallmark of many artists, and Salvador Dali (1904–89) must be a prime example. Though he suffered from mild depression throughout most of his life and in later years developed Parkinsonism like his



Fig 6. Self-portrait (1978), Peter MacKarell. (Reproduced by kind permission of his widow, Mrs Joan MacKarell)

father before him, there is nothing to suggest he was ever certifiably mad, though possibly 'an enigma at the borderland of reality' 18.

### Neurological problems

In the last century, when tertiary syphilis was not uncommon among artists, this may in some way have affected their art. It may, for example, account for apparent 'dementia' in some. In Edouard Manet's (1832–83) case, there is documented evidence that he developed tabes dorsalis. The severe lightning pains he experienced were extremely debilitating and latterly he had to abandon painting altogether. He was 'treated' with ergot, developed gangrene of his left leg which then had to be amputated and he died ten days later<sup>19</sup>.

Giorgio de Chirico (1888–1978), the surrealist Italian painter, suffered from severe migraine most of his life. In his lithograph *Calligrammes* (1930) he has illustrated his impression of the fortification spectra he experienced. Others have made similar attempts. But perhaps the most detailed and revealing artist's impression of a neurological disorder and how it affected his art is provided by Peter MacKarell (Fig 6), an English artist and teacher of art who died in 1988. In the last eight or so years of his life he suffered from multiple sclerosis. How it affected his art is graphically illustrated in his book, *Depictions of an odyssey*<sup>20</sup>. When he first became affected he began studying the implications of defective eyesight in artists and in 1985 graduated with a PhD degree on the subject from the

University of London. In 1987 his left hand became paralysed and so he began to train himself to draw with his right hand. Most memorable is a series of paintings of the development and subsequent recovery of a right central scotoma. But of particular interest is how the disease affected his colour spectrum, and distorted his perceptions.

## Other physical problems

It is difficult to assess how a congenital defect, such as autosomal recessive pyknodysostosis, which may have affected Toulouse-Lautrec (but see Frey<sup>21</sup>), could have influenced an artist's work. If it had any effect at all it seems more likely that this would have been on the artist's psyche and therefore possibly on the choice of subject matter, rather than the artist's technique.

R B Kitaj (born 1932) suffered a severe heart attack which he recorded in a graphic painting<sup>22</sup>. Afterwards, on his doctor's advice, he began to take more exercise by walking, which in due course led him to a new range of subjects<sup>22</sup>

range of subjects<sup>22</sup>.

Physical defects may be seen in a number of self-portraits, though sometimes the artist has taken great pains to conceal them, as in the case of David<sup>23</sup>. Not so the Dutch painter, Dick Ket (1902–40) who, in a series of self-portraits, clearly illustrated many of the clinical features associated with what is likely to have been Fallot's tetralogy with dextrocardia, finger clubbing, cyanosis and plethora (Fig 7). He eventually died of cardiac failure at the age of 38. His last few years were

Fig 7. Self-portrait (1932), Dick Ket. (Reproduced by kind permission of Gemeentemuseum, Arnhem)

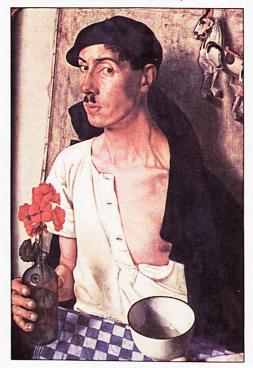




Fig 8. Rural scene (nd), Carolyn James. (Reproduced by kind permission of the artist)

spent house-bound as a semi-invalid, and as a result the subject matter of his very detailed paintings was restricted to self-portraits and still life.

A slowly progressive, crippling and disabling disease would certainly affect technique. For example, Pierre Auguste Renoir (1841-1919) became severely crippled by arthritis in later years, which (along with deteriorating vision) influenced his art: compare the detail in Le Moulin de la Galette (1876) with Woman Tying her Shoe (1918). Henri Matisse (1869–1954) also became severely crippled in later life, yet continued to paint. Raoul Dufy (1877–1953), a Fauvist, developed rheumatoid arthritis but in his case therapy, in the form of corticotrophin (ACTH) and cortisone, was available at the time, with a resultant dramatic freeingup of his style after 15 years of crippling disability24. He was able, for the first time in several years, to squeeze his tubes of paint without assistance. Paul Klee (1879–1940), the Swiss artist, developed scleroderma, a condition which progressed relentlessly from the age of 40 and latterly severely limited his style. He could no longer execute detailed work and his subject matter became increasingly depressing.

## Conclusions

Artists are subject to disease and deformities like anyone else. In this brief, and admittedly somewhat superficial review, it is clear that visual defects, mental illness, neurological disorders and other medical conditions have had profound effects on the artist's style and even choice of subject matter. Yet there have been very few detailed studies of this, mainly because in the past medical diagnosis was often limited or inaccurate. With good documentary evidence of an artist's life and medical history, this might be remedied. The combined efforts of the physician and art historian might then throw more light on the matter. The question was

well expressed by Carlos Espinel in his essay on de Kooning's dementia and creativity: 'a question that transcends neuroscience, brain and behaviour: how does creativity, a pre-eminently human function, depend upon and adapt to biological and environmental influences, to age, and to disease?'<sup>17</sup>. Furthermore, art may have sometimes played a role in the artist's search for a form of therapy. The artist Carolyn James (born 1943), as therapy<sup>25</sup>, only took up painting, *after* becoming blind (Fig 8). And finally, the problem can be viewed through the eyes of the art historian. What we see may sometimes be no more than conscious artistic convention of the time, rather than the reflection of a medical problem in the artist.

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