From the end of the 20th century a great deal of attention has focused on the brain. Many, as a result, have thought about whether neurology now might provide additional insight into the workings of the artistic mind. Specific cases accentuate this possibility. In the 1970s, for example, Oliver Sacks worked with an artist, Jonathan I., who became colorblind after his car was hit by a truck. Prior to the accident Mr. I. painted abstract, color-rich images and experienced colors when presented with musical tones. After the accident he lost his ability to see color and even lost the experience of color in response to sounds. Despite this, he continued to paint—in black-and-white, refusing to put aside the driving force of his life. More recently, while conducting a class critique in May 1997, the Berkeley artist and professor Katherine Sherwood was struck suddenly with a searing headache. Thirty seconds later, the right half of her body was paralyzed. A thin-walled collection of arteries in the left side of her brain had collapsed, and she suffered a massive stroke. Only 44 years old at the time, Sherwood was determined to return to painting and has done so. One of the most noteworthy aspects of Sherwood’s story is the degree to which she, like Mr. I., was resolute in her determination to continue her artistic activities. In her case she did so despite finding that her painting hand was paralyzed; eventually she returned to teaching as well. Sherwood now claims that although her stroke erased some skills, it also led her to learn new ones, such as a new objectivity about her work.

These contemporary cases are recent additions to the literature connecting neurology and art. Neurology and the Arts, edited by F. Clifford Rose, brings many topics within this literature to light, combining them in a source book compiled from papers delivered at the 2001 Intersociety Bequest Symposium of the Medical Society of London. These essays, I believe, offer great insight into case studies that have not received enough attention to date. Indeed, it is not easy to choose specific highlights from such a high-quality collection that reaches from anatomy to the neurological circumstances of historical artists such as da Vinci, Goya and van Gogh.

George K. York, a neurologist, sets the tone in the opening essay, where he notes that thinking neurologically is a creative act in the same way that thinking artistically, musically or scientifically is creative. Neurologists may not be able to say where the artistic process is located in the brain, but they can at least have the pleasure of knowing what it is to be creative (p. 9).

These words not only encourage readers to think about creativity per se but also aid in taking the idea of creativity to another level when they come upon later essays that examine the art of well-known neurological figures. For example, Christopher Gardner-Thorpe’s essay “The Art of Sir Charles Bell” points out that although best known as an anatomist, physiologist and neurologist, Bell’s skills as an artist had a major impact on medicine and anatomical training in art. Indeed, his success in illustrating the body and offering medical descriptions communicated information that otherwise would have been hard to capture when he lived, before the advent of photography. In addition, Gardner-Thorpe’s discussion of Bell’s watercolor work offered more insight into his feeling for art, although I wish the reproductions had been in color.

Similarly intriguing are the range of ideas that point to neurological references and misconceptions often found within the literature. For example, it is often claimed that the disease depicted in Masaccio’s St. Peter Healing the Sick with His Shadow (1426–1427) is polio. Yet this is one of several instances where the polio label is probably unlikely, since the first known epidemic of this disease dates to the 18th century. Similarly, there are so many stories surrounding van Gogh that separating the reality from the mythology is an art in itself. F. Clifford Rose’s careful analysis of 10 possible diagnoses of van Gogh’s aberrant behavior (e.g. schizophrenia, bipolar disorder, epilepsy, substance abuse, etc.) was quite illuminating. After reading through these summaries I felt better prepared to evaluate the various conclusions in relation to the artist’s list of maladies.

Perhaps the most noteworthy quality of the book is its style. Laypeople will find the articles accessible, while doctors and neurologists are likely to find the content fascinating. Leonardo readers will be particularly delighted with the balanced treatment the authors...
bring to the subject matter. Almost without exception they reach far beyond the theoretical and metaphorical arguments that predominate in the humanities literature. "Normal and Pathological Gait as Inspiration for the Artist" is one of the many selections that will certainly engage Leonardo readers. Geneviève Aubert's research in this article was prompted by her interest in Arthur Van Gehuchten (1861–1914), a pioneer in the use of cinematography for documenting clinical neurology. She successfully integrates new works (such as the Belgium composer Renauld De Putter's interpretation of Van Gehuchten's neurological films) into the discussion of the topic.

Some material spoke to gaps in my own body of knowledge, a reaction that I am certain would be the same for other readers. For example, there are many sources that have suggested El Greco suffered from astigmatism (which would have caused his retinal images to be vertically narrower than they should be). The astigmatism argument has long been used to account for the elongation of his painted saints. Perceptual laboratory experiments, however, have documented the fallacy in this argument [1]. Until reading Rose's "The Neurology of the Arts: An Overview," I was unaware that there is an alternative scientific interpretation to El Greco's elongated style. Rose cites J.R. Heron's "El Greco and Muscular Dystrophy?" [2], wherein Heron argues that the distortions in El Greco's paintings might not be an artistic license so much as deriving from the neuromuscular disorders of the inpatients of St. James Hospital, Toledo. The examples include the dystrophic facial muscles of San Sebastian, the band wasting of Santiago el Mayor, the pes cavus of the angel in The Crucifixion, the peroneal muscular atrophy of St. John in The Baptism of Christ and the facioscapulohumeral dystrophy in Adoration of the Shepherds.

Finally, even in the rare instances when an author became a bit technical, I found the articles engaging and useful. Some topics, such as epilepsy, are included in both the visual arts and literature sections. This gives the reader an opportunity to consider the condition from more than one perspective. Although I tend to focus on visual arts in my own work, I found the sections on literature and music equally compelling. The music section, for example, includes essays that cover the parts of the brain linked to perception and memory, as well as amusia (a neurological deficit in music perception, recognition or production, attributable to a central cause), and the effect of music on intelligence and learning (the Mozart effect). The section on literature relates to Shakespeare, Dostoevsky, Conan Doyle, James Joyce and the poetry of one of England's most famous neurologists, Henry Head. In summary, I highly recommend Neurology of the Arts to all who are looking for a greater understanding of how the brain and the nervous system work together. It is an accessible book, and one that a reader need not read from cover to cover to enjoy, although all of the contributions can be recommended.

References
