

On the trail of Leonardo



Penelope Johnston

In brief

A NIGHT COURSE TAKEN ALMOST 25 YEARS AGO SPARKED AN INTEREST in Leonardo da Vinci that has become a passion for a London, Ont., neurosurgeon. Dr. Rolando Del Maestro now boasts one of the largest collections of da Vinci artifacts in North America.

En bref

C'EST UN COURS DU SOIR SUIVI VOILÀ PRÈS DE 25 ANS QUI A SUSCITÉ L'INTÉRÊT — devenu une passion — d'un neurochirurgien de London (Ont.) pour Léonard de Vinci. Le Dr Rolando Del Maestro peut maintenant se vanter d'avoir réuni une des plus importantes collections d'objets d'art sur de Vinci en Amérique du Nord.

London, Ont., neurosurgeon Rolando Del Maestro's fascination with Leonardo da Vinci's scientific observations, anatomical drawings and personal search for the soul's location within the body did not begin until after he graduated from the University of Western Ontario in 1973.

The interest was sparked during his internship year at London's Victoria Hospital, when he took a night course on the psychology of creativity.

The teacher, Dr. Jaroslav Havelka, believed Mozart was one of the most creative people to ever live and challenged each student to identify a similar individual and defend the claim. Del Maestro came upon a paperback about Leonardo by Kenneth Clark while browsing in a used-book store, and the rest is history.

"Clark asserted that Leonardo's art and personality should be reinterpreted for each generation," he recalls. "As I researched the topic I became as enthralled as many others had been. Books and manuscripts based on his drawings became my passion."

By 1998 Del Maestro had amassed one of the largest private collections of da Vinci's works in North America — more than 4000 volumes, drawings, translations, manuscripts and other collectibles. His expertise in the field is now so well respected that he acted as curator for a special exhibition, "Leonardo da Vinci: The Search for the Soul," that was held in conjunction with the 31st Canadian Congress of Neurological Sciences in 1996.

Del Maestro never stops collecting. One of his recent acquisitions is an Italian edition of Leonardo's first published book, his *Treatise on Painting*. Del Maestro said that when Leonardo died in 1519 at age 67 he left all his scientific and artistic papers to his favourite pupil, Francesco Melzi (1491-1570), who attempted to organize the notes.

"When Leonardo died he left more than 12 000 pages of notes in a total of 50 to 55 pocket books," says Del Maestro. "About 50% to 60% have been lost and only 20 now exist. Leonardo car-

Features

Chroniques

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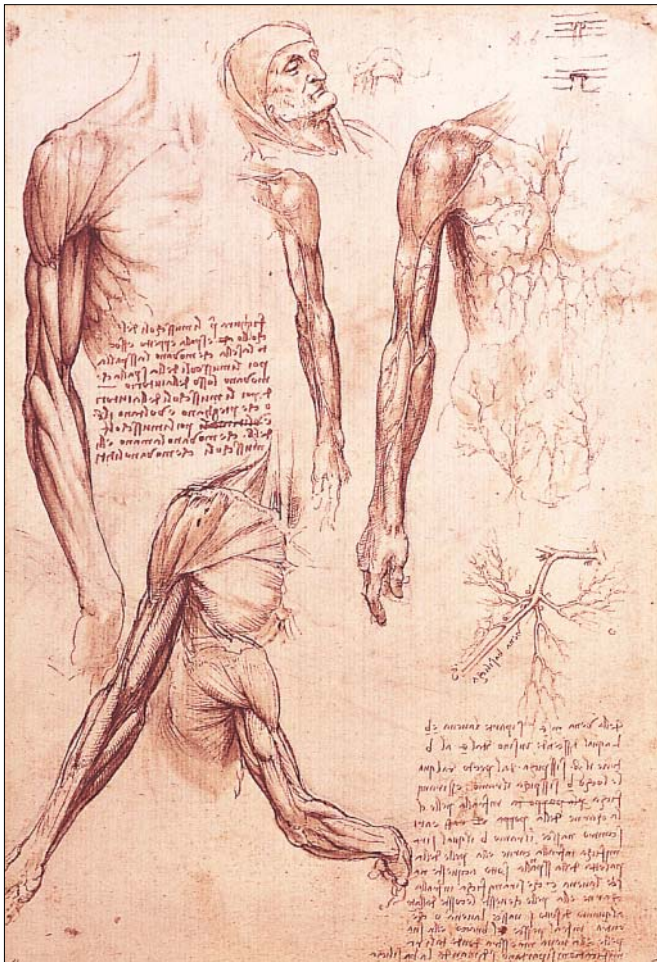
Neurosurgeon Rolando Del Maestro in the library of his London, Ont., home. Behind him is a stained-glass window based on Leonardo's painting *The Madonna of the Rocks*.



ried these pocketbooks everywhere he went, opening them to make quick notes in red or black chalk, and on returning home, outlining the figures in ink and adding elaborate notes. It fascinates me that Leonardo, being left-handed and not corrected by formal education, wrote from right to left. Medically I find it interesting that no human being — novelists included — has written so extensively or so copiously.”

Leonardo had hoped to publish 3 books during his life-

The Royal Library



Da Vinci was a member of the Guild of St. Luke the Painter, which was associated with the Guild of Physicians and Apothecaries based at the Hospital of Santa Maria Nuova in Florence. His connections gave him access to cadavers, and he conducted more than 30 autopsies for his anatomical drawings. After completing an autopsy on a centenarian he wrote: “While sitting upon a bed in the hospital of Santa Maria Nuova in Florence, without any movement or other sign of any mishap, he passed out of this life. I made an anatomy of him in order to see the cause of so sweet a death. This I found to be fainting away through lack of blood to the artery which nourishes the heart and other parts below it, which I found very dry, thin and withered. This anatomy I described very diligently and with great ease owing to the absence of fat and humours which greatly hinder the recognition of the parts.”

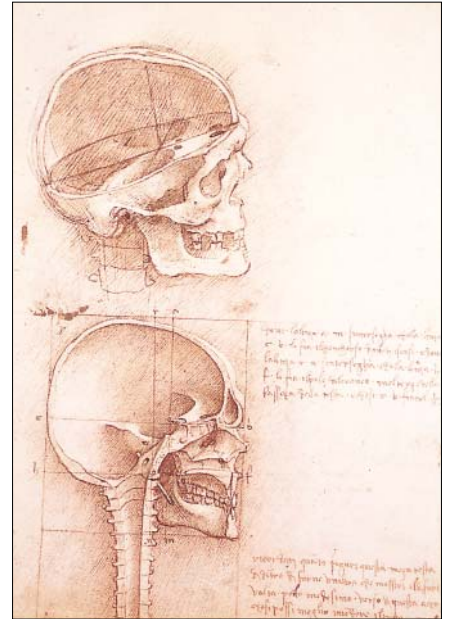
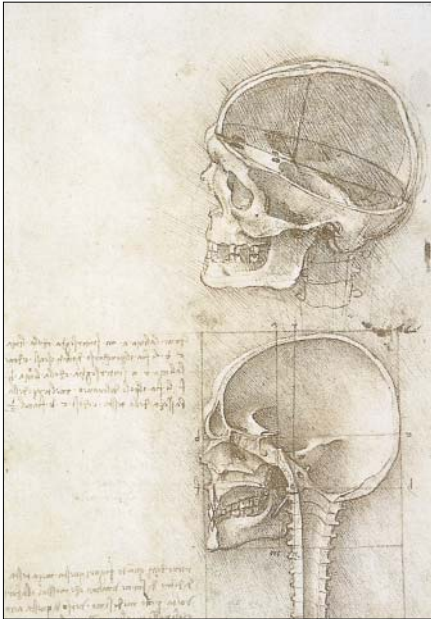
time — one each on anatomy, engineering and painting — but this task was uncompleted at his death. His pupil Melzi got his *Treatise on Painting* ready for publication. “I had owned the first French edition for more than 15 years but had never seen an Italian edition for sale — this is a very rare book. I found out through a colleague that a first edition was going up for auction in New York, and I was able to obtain it in 1997.”

Another recent acquisition was the Jan. 21, 1637, “deed” or record of a donation of *Manuscript B*, which contained diagrams of many machines, including the helicopter. After Melzi’s death the manuscript was bought by an Italian patriot, Count Galeazzo Arconati, who willed it and 10 other items to the Ambrusiana Library in Milan.

“Eventually this deed came into the possession of someone in Italy who wanted to sell it. A book dealer in New York contacted me in 1990. The amount he was asking



Leonardo had a keen interest in embryology, and after an autopsy on a pregnant woman drew this fetus in utero. Del Maestro speculates that Leonardo probably had physicians and other members of the guild contact him when a cadaver was available for dissection. It appears he was able to do things in Florence and even Milan that were not permitted in cities like Rome. Leonardo wrote: “The Pope [Leo X] has found that I have skinned three corpses and that Giovanni the mirror maker has hindered me in anatomy, blaming me before the Pope and likewise the hospital.”



Leonardo used all his skills as artist, sculptor and researcher in his personal quest for the location of the *senso comune*, or soul. There were 3 phases in his exploration of the central nervous system, cranial nerves and spinal cord anatomy. In the first phase (1487-89) he studied the physiology of vision and perspective for artistic purposes. He was strongly influenced by the writings of a Dominican priest, Albertus Magnus (1193-1280).

In 1489 Leonardo began to focus on the anatomy of the eye and optic nerves. Del Maestro describes this work: "With his careful training as a draftsman in Verrochio's studio, coupled with his knowledge of the cutaway or transparent view, Leonardo's pen and brown ink over traces of black chalk allowed him to create some of the most beautiful anatomical drawings that have ever graced paper. His three-dimensional drawing of the human skull is the best representation of a human skull done at that time, and today."

From 1508 until his death Leonardo concentrated on other organs but maintained his interest in the brain's ventricular system. He believed that memory and soul were found just above the optic chiasma in the anterior portion of the third ventricle. "As a neurosurgeon," says Del Maestro, "I became acutely aware that there were areas of the brain clustered around the anterior third ventricle-hypothalamus region which, if disturbed, result in a profound change in the way individuals perceive not only their outer world, but also their inner world."

was too high and I turned it down. The book dealer couldn't find a buyer, the price went down, and in 1996 he contacted me again. I bought it."

Del Maestro, who used part of a 3-month break from his medical practice to prepare the Leonardo exhibit for the neurological congress, says he's decided to take sabbaticals more frequently. "I'm going to mix my interests in the history of medicine and my role as a neurosurgeon. During the past 3-month sabbatical I was not working nights or on weekends and I had time to do other things. I want to spend more time in my lab."

He also wants to enjoy time at his home in south London, which he and his wife designed and which features a glass-shelved library. Besides the huge Leonardo collection, the shelves contain a large number of books by surgeon Harvey Cushing and a volume containing all of Sir Frederick Banting's early scientific articles, with the scientist's pencilled notations in the margins. The book was bound and presented to Banting by his staff.

In one corner of the house is a stained-glass window, based on Leonardo's *Madonna of the Rocks*. It is a constant subtle reminder of where Del Maestro's true passion lies. ?