

Beginnings

Constancy. Not who begins but he who perserveres.

Leonardo da Vinci MS H³, f. 101 r, c. 1494

When I set myself to the task of writing a historical introductory chapter to my second book, *Robot Evolution*, in the early 1990s, I had learned about Leonardo's Robot Knight from Carlo Pedretti's magnificent *Leonardo Architect*.¹ I had seen the book in a book store, but it was in Italian and very expensive. Later I found a copy of it used and in English. After digesting it I leapt at the opportunity to delve into Leonardo's Robot Knight, which was described near the end of the book. Taking a leap of faith that enough material had survived to reconstruct the robot, I made my way to the University of Minnesota's Rare Books Collection on the top floor of Wilson Library. There, an elderly librarian, tasked with wheeling up from the stacks the twelve elephant folios of the Codex Atlanticus, nearly collapsed his cart beneath the volumes, which weighed several hundred pounds. From this awkward beginning I traced the faint fragments one by one, perhaps even discovering an overlapping figure that had been overlooked by Pedretti, and was able to make a road map of the design and publish the fragments. My book, *Robot Evolution*, which contained the Leonardo material, was well underway but not yet published by the winter of 1994.

While in Los Angeles in February that year, where I had gone to recover from another of my bouts of chronic bronchitis brought on by the harsh and unyielding climate of Minnesota, I found myself with little to do. On a whim, I decided to contact Pedretti himself. I called and left a message at the UCLA Arts Library on Hilgard Avenue. He returned the call to my Santa Monica budget hotel room and after a lengthy conversation, I proposed sitting in on his lecture. Suggesting that for "people like you" it would be best if I came to his house for an in-person discussion, he graciously invited me to his home in Westwood.

Driving down the endless car dealerships, restaurants, and other commercial establishments on Santa Monica Boulevard, I passed under Interstate 405 and continued on past the sprawl of Kinko's and Subway sandwich shops. As I turned off I entered a tree-lined, peaceful neighborhood whose beauty is favored by artists, educators and scholars. Walking up the sidewalk to his beautiful Spanish Colonial home with its shady, well groomed yard, the "Armed Response" security sign in front and notes to deliver packages to the neighbor across the street, I began to wonder if I would find the great man at home.

I shouldn't have worried. Carlo Pedretti opened the door and invited me to "Come on in!" I was met by a gracefully aging energetic man with inquisitive brown eyes and an Italian accent. He led me along a narrow hall lined with paintings and prints, and I realized that I had entered the world of a great scholar.

Author of a shelf of books and editor of several "Monumental Leonardo Works in Facsimile" for Giunti, Carlo Pedretti seems to embody the word "Scholar." Professor Emeritus of the UCLA Art History Department, he is better known in Europe, where he maintains a second home in Vinci, Italy, the birthplace of Leonardo.

¹ Carlo Pedretti, *Leonardo Architect*. New York, Rizzoli International Publications, 1985.

Born in Bologna in 1928, Carlo began his professional life as an artist and journalist. In nearly sixty years of research he has produced a shelf of books the backbone of modern Leonardo scholarship. His most recent and spectacular achievement was the discovery of a previously unknown terracotta angel by Leonardo at San Gennaro near Vinci. The Angel's face is a self portrait of Leonardo himself.²

His Westwood living room was filled with antique furniture, an ornate marble fireplace, and a bookcase so large that the front windows of the house had to be removed to bring it into the house! Peering through the ornate grating of that bookcase, I spied a fortune in Renaissance first editions. Pedretti ushered me to the right, into his spacious, book lined office painted in water green with plaster filigree encircling the ceiling. The overhead light was very Leonardo: a geometric sphere design. In a corner stood an ornate scale, the only piece to survive from a 1952 exhibition. On top of a book case a renaissance bronze lamp sat with implements dangling on chains to service the wick.

We discussed his rare books collection, including early editions of Vitruvius. I mentioned I had bought a copy of Vitruvius' *Architecture* and he asked what edition, to which I innocently replied "Dover"—the celebrated budget publisher. This to the man who had (in multiple copies) some of the rarest editions of Vitruvius in existence. Saying it was time to "bring me up to date," he began, with the enthusiasm of a twenty-year old and not a whiff of condescension, to educate me about the various editions of Leonardo facsimiles. He showed me the Giunti facsimiles of the Codex Hammer which he had edited (the original had been purchased by Bill Gates for 30 million dollars). One funny thing that happened was when he was showing me a very rare, early printed book he accidentally tore the page and then rubbed the two pieces together as if they would miraculously heal. Then he brought out the Codex Hammer sixteen-page facsimile notebook from a massive brown leather Solander box, exclaiming in his wonderful, flamboyant Italian way: "Look at this! Magnificent!"

The manuscript, and many like it, had been admired centuries before, while Leonardo was still alive. Antonio de Beatis, who accompanied the Cardinal Luigi of Aragon on his visit to Leonardo's retirement chateau at Cloux, France on October 10, 1517, was astounded to see an "infinity of volumes" pertaining to machinery, hydraulics, anatomy, and of other fields of study.³

Leonardo's student and eventual heir, Francesco Melzi, held the collection together and worked towards publishing his book of paintings. Unfortunately, upon Melzi's death, his son Orazio saw little value in the old papers and their dispersion around the world began. Many came into the possession of the Spanish court sculptor and pupil of Michelangelo, Pompeo Leoni. He is responsible for mutilating a great deal of material in the course of creating thematic albums now known to the world as the codices of Leonardo.

In the intervening centuries, many of the codices would be bought and sold and if lucky deposited into libraries around the world by far seeing benefactors. Often named for their owners or the country where they finally came to rest, they bear names such as Codex Atlanticus (so named for its oceanic size); Codex Forster, named for John Forster, who in 1873, donated them to the Victoria and Albert Museum in London. In 1796 Napoleon looted the Ambrosian Library while in Milan, declaring "All men of genius ... are French."⁴

The legacy currently consists of over 7 000 pages of notes, some in fairly coherent notebooks much as Leonardo left them. Most of this legacy has been published twice

² Carlo Pedretti, "Un angelo di Leonardo giovane," in the Sunday Cultural Supplement of *Il Sole 24 Ore*, April 19, 1998, no. 106, p. 21.

³ Antonio de Beatis (1905) *Die Reise des Kardinals Luigi d' Aragona durch Deutschland, die Niederlande, Frankreich und Oberitalien, 1517–1518*. In: Pastor, Ludwig (ed) *Erläuterungen und Ergänzungen zu Janssens Geschichte des deutschen Volkes*, vol. 4. Herder, Freiburg.

⁴ Kate Steinitz, *Manuscripts of Leonardo da Vinci*, Los Angeles, Ward Ritchie Press, 1948, p. 12.