

BOOK REVIEW Open Access

Book review "The heart of Leonardo"

Massimo Lemma

Abstract

This a review of the book "The Heart of Leonardo" by Francis C. Wells.

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Review

Imagine if it were possible to jump back 500 years into the past, to a place and a time where there is no electricity and as a consequence technological devices, such as televisions, the internet, or cellular phones are an alien concept, where modern means of transportation do not exist and where the average life expectancy is approximately 50 years.

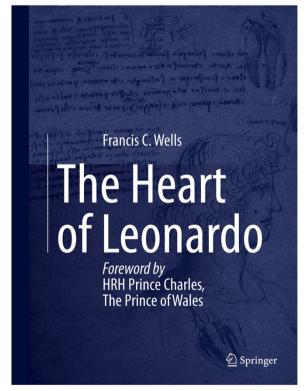
Now visualize in this simpler time meeting a person who can describe to you the anatomy and the function of your heart. Imagine your surprise when you discover that what he has told you will be scientifically proven 500 years later and that that this person you have met is not only an anatomist and a physiologist but also a painter, sculptor, architect, musician, mathematician, engineer, inventor, geologist, cartographer, botanist and writer.

And now to complete this mental picture, envisage that this polymath was born out of wedlock, is left-handed, writes form right to left and has a form of dyslexia that prevents him from learning other languages except for his native Florentine vernacular, leaving limited opportunities for this immense wealth of knowledge. You may have heard of this interesting character, his name was Leonardo da Vinci.

This is the intriguing outlook that arises from reading the book authored by Francis C. Wells entitled *The Heart of Leonardo* [1]. In this book all of the Leonardo Da Vinci's drawings and writings on the heart have been collected together for the very first time. This effort must be congratulated for its originality and completeness. It is the *summa* of Leonardo's thinking about the heart and the cardiovascular system, never published nor organized by Leonardo himself. In fact, his sketched scientific treatises on the subject were for him a constant work in progress,

from which Leonardo always had something more to discover, to readjust to restudy and to add.

Browsing through the book one is struck by the beauty and by the scientific precision of Leonardo's drawing and at the same time one can understand the limits of his communication, the reasons why all of this material remained largely unused during his lifetime, not shared nor applied by anybody else for hundreds of years. Leonardo was left-handed and for convenience and habit he always preferred



The front cover of "The Heart of Leonardo".

Correspondence: lemma.massimo@hsacco.it Minimally Invasive Cardiac Surgery Unit, Luigi Sacco University General Hospital, 20157, Milan, Italy



to write from right to left, reversing the letters in a mirror image with respect to the usual sense of handwriting.

Whilst painting is an open and clear way to expose his thoughts (in *The heart of Leonardo* there is a chapter dedicated to Leonardo's use of drawing), for Leonardo writing was a personal way of communicating to himself, completely understandable for its author but absolutely incomprehensible for anybody else. Using a mirror and getting used to his handwriting it is not impossible to read Leonardo's writings, but at that time this peculiarity presented a great communication barrier. Looking at the writings collected in this book any reader can easily understand this issue.

In the last part of the book there is the contemporary recognition of Leonardo's theories about the heart. Anatomical dissections performed by Francis C. Well's test, with astonishing results, the veracity of Leonardo's work and what Well's calls "abstract" anatomy, showing the immense power of Leonardo's mind to decipher heart function from anatomy at a time where there was no appreciation of the circulation of the blood.

Thus the book is not only suitable to an academic audience but also to more general readers. *The Heart of Leonardo* should be looked at through the eyes of a person living in the Middle Ages and not trying to assess the value of Leonardo's work based on the history of medicine, but being fascinated by the mind of a man who could jump 500 years into the future.

Competing interests

The author declares that he has no competing interests.

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