

Vesalius 500 years later: the lesson of the fabrica

Gianfranco Natale, Gloria Lazzeri, Mariangela Guagnozzi, Paola Lenzi

Department of Translational Research and New Technologies in Medicine and Surgery, University of Pisa

The year 2014 is the fifth centenary of the birth of Andreas Vesalius. This abstract aims to underline how his work influenced the changing face of science. Born in Brussels, Vesalius studied in Paris and worked in Louvain, Basle, Pisa and Padua. The prime importance of his contribution to post-Renaissance modern anatomy development is well recognized. Vesalius recorded his new approach to anatomy in 1543 in *De humani corporis fabrica*, dedicated to Charles V, the Holy Roman Emperor, and in the *Epitome*, a short version of the *fabrica*. This work comprises seven books written in Latin where the author challenged the Galen's authority on several observations made in animals. Remarkably, Vesalius insisted that anatomy must be studied only by means of human dissections. More than 200 criticisms were addressed against the mistakes of the past tradition. The *fabrica* is also a work of beauty, bearing more than 200 wonderful illustrations attributed to the Titian's pupil Jan van Calcar. The background appearing in the six muscular illustrations seems to refer to the Paduan countryside. When appropriately combined, these illustrations render a continuous landscape. The numerous historiated initials also show cherubs or men acting in anatomical procedures. In spite of the appreciable anatomical illustrations previously realized by Leonardo da Vinci and Charles Estienne, Vesalius had the merit to provide a more comprehensive and systematic anatomical book. The hieratic medieval dissection of Mondino de' Liuzzi, with the recognition of three different roles (*lector*, *sector* and *ostensor*), was completely changed by Vesalius. Importantly, the frontispiece of the *fabrica* contains several symbolic messages, which announce the anatomical revolution. Firstly, it shows Vesalius himself who recapitulates the three roles: he stands at the centre of the scene dissecting a cadaver in a crowded anatomical theatre. A monkey and a dog are placed at the bottom edges of the scene. Finally, two lower ranking surgeons, who traditionally did the actual work of dissection, are ridiculed while quarrelling under the dissecting table. It must be noted that the success of the *fabrica* was due not only to its new scientific insights, but also as a result of the accurate self-promotion of the author who personally supervised each detail and entrusted with the publication Johannes Oporinus, one of the most important printers of the 16th century. The modern technologies, including the virtual reality, seem to substitute the anatomical dissection. It must be avoided to create a modern Galen-like technological authority that leads to forget that the human body is the unique truth. The legacy of the masterpiece of Vesalius and its scientific revolution would linger even into the present and future times.

Keywords

Andreas Vesalius, history of anatomy.