Massimo Rinaldi, Arte sinottica e visualizzazione del sapere nell'anatomia del Cinquecento, Cacucci Editore, 2008, pp. 219, € 18.00, ISBN 9788884227539

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Massimo Rinaldi presents a scholarly account of the diagrammatic apparatus used by physicians during the 16th century. He claims that schematism, such as synoptic tables, and printing technologies of anatomical representation—as copperplate engravings—was applied in such an innovative way that it played a fundamental role in the practice, teaching, and diffusion of anatomical knowledge within the medical communities of the times.

According to Rinaldi, throughout the 16th century, the use of paragraphs, analytical indexes, tables, and other typographical devices had the intention of organizing knowledge, so it could be successfully transmitted not only to the future generations of physicians, but also to the scientific community and the educated public. Compendia and epitomes appeared as excellent media to recapitulate briefly, clearly, and accurately the relevant ideas stated by the authors. They embodied the humanistic quest for new forms of discourse as opposed to the scholastic commentaries based on the linear discourse and focused in understanding a text by analyzing it phrase by phrase.

Schematism was widely used with pedagogical purposes by logical and mathematical disciplines since medieval times, but Rinaldi emphasizes that it is during the 16th century that schematism, along with other known typographical strategies, was applied in a subversive way in medicine, particularly in anatomy. For example, the French Loys Vasse privileged diagrammatic schematism over the traditional scholastic linear narrative when he published his anatomical tables *In anatomen corporis humani, tabulae quatuor* (1540-1541). Vasse was transmitting relevant Galenian medical anatomical issues in a simple, clear and brief way, and thus he made learning them so easy that it was almost possible to almost grasp them at a glance (cfr. p.64).

However, the use of schematism was not only proliferating as a pedagogical tool due to its mnemonic virtues within the French intellectual milieu: in the Italian universities the tables and other synoptic devices were extensively used. It was precisely at the University of Padua that a new iconographic innovation occured with the publication of Vesalio's Epitome of his *Fabrica*, in 1543.

Rinaldi reveals that Andrea Vesalio was fully aware of the fashion of printing fraudulent compendia, so he decided to work on his own compendium: in this way he would produce an exact and simple approach to the issues he treated in his Fabrica, preventing someone else from doing it deceitfully. Vesalio presents anatomic knowledge in a descriptive and analytical way by means of tables and engravings of the body. The Vesalian typographical approach demonstrated the important role of visualization in the organization and transmission of anatomical knowledge and its superiority over the scholastic perspective. However, Vesalio not only showed that compendia and epitomes were better pedagogical instruments since they acted as introductions and guides for acquiring knowledge, due to its summarizing virtues, but he was also innovative in the way in which anatomy had to be presented and transmitted to the reader. He was not only using engravings of the body as a means of illustrating anatomical knowledge, as they were traditionally depicted in what is called the corpo-museo: Vesalio's substitution of the anatomical linear narrative with its particular style of iconographic representation made it easier and more accurate to approach anatomical subjects. Vesalio was introducing the demonstrative character of the figurative dimension in which anatomical data were represented (cfr. p.40). He used tables, schematic devices, and other printing technologies as inquisitive anatomical instruments. In this manner, Vesalio transformed the notion of corpo-museo into the corpo-laboratorio, i.e., the use of anatomical tables in the formulation of anatomical problems (cfr. p.32).

In the second half of the 16th century the Vesalian anatomical tables started to be widely applied. Rinaldi mentions numerous and relevant examples. In 1562, the Flemish Johann Jakob Wecker published his *Medicae syntaxes* which dealt with all the branches of medicine through schemes, presenting anatomy in the Vesalian manner without any variations (cfr. p.113). The work of Wecker was so successful that it was reprinted thrice, proving that the reorganization of knowledge by means of typographical devices proposed by Vesalio was effective for the learning and diffusion of science. Also the Dutchman Volcher

Coiter, in 1572, published *Externarum* et internarum tabulae principalium humani corporis partium whose iconographic apparatus is based on the Vesalian model. Coiter apparatus not only represented but also provided useful complements to the schemes which facilitated the observation of comparative anatomy. Coiter's tables are not only mnemonically oriented but also a sort of an etymological repertory that clarifies the anatomical definitions at the same time that it presents its visual relation with the body parts they refer to (cfr. p.119). Thus, one can learn at a glance instead of learning through the process of reading ambiguous descriptions. Another author who incorporates the picture techniques of mimetic representation of the human body by Vesalio is Felix Platter, who in 1583 published his *De corpis humani structura et usu*. Platter, following Vesalio to the letter, presents a thorough iconographic representation by depicting a global visualization of the body in one volume, while in another volume he dwells on the facts through schemes. Hence, according to Platter, one could verify what is perceived by the mind and what is observed through the eyes (cfr. p.131). The mere images are capable of illustrating the facts of the form and functions of the body, and the schemes could convey the theoretical explanation of the corporeal structure as presented in the images.

Understanding scientific knowledge, and its intellectual context, by means of its transmission constitutes one of the paramount issues for the scientific historians, as stated by Transmitting Knowledge: Words, Images and Instruments in Early Modern Europe, edited by Sachio Kusukawa and Ian Maclean. Rinaldi's book constitutes precisely one of the few and recent accounts of emphasizing the role of the theoretical debate and the practices of the transmission of medical knowledge within the doctrinal renewal of the Renaissance. Through a vast quantity of historical data, an excellent critical apparatus, and an attractive narrative style, Rinaldi considers with great detail and precision the consequences of the interrelation between the anatomical knowledge and its new ways of transmission in the 16th century. From a philosophical point of view, Rinaldi provides an exposition of the concept of 'seeing' [vedere] along with the which methodological principles rule the schematic organization. 'Seeing' for Vesalio, and for many of his contemporaries, as Rinaldi shows, not only meant to observe directly a body-or its depiction-but the very representation of anatomical knowledge structured and organized through printed anatomical tables. For example, Felix Platter claimed that before a student started learning directly from corpses, he needed a clear comprehension of the articulation and elements of the body: it was precisely through tables (and other schemes reinforced by images) that he would see the rational order of the anatomical knowledge, since the schemes and images worked as a bridge between logic and the senses (cfr. p.137).