VESALIUS AND HIS PUBLISHERS

Vivian Nutton*

The 1543 publication of the De humani corporis fabrica of Andreas Vesalius by the Basle printer Johann Oporinus has long been regarded as a major turning point in the history of printing as well as of anatomy. It was singled out by the American scholar Elizabeth Eisenstein as crucial in her study of the impact of printing on the world of the Renaissance, and, even if her judgment today seems exaggerated, there can be little doubt that the man and his work have deserved the attention given to them.¹ The message of the text and the quality of the illustrations mark a new era. But the scholarly concentration on the 1543 edition of the Fabrica and Epitome, and to a lesser extent the second edition of 1555, has also diverted attention away from Vesalius' minor works and the various reissues and revisions of his writings during his lifetime. The wider perspective on medical publishing and on the relationships between Vesalius and his publishers that they offer has been further amplified by the discovery of annotations made by Vesalius to his copy of the 1538 Institutiones and the 1555 Fabrica. Together they throw new light on his attitude towards his publishers and on the variety of ways in which medical information was published. The individual writings of Vesalius were printed roughly fifteen times during his lifetime. A precise figure is impossible, for Cushing's bibliography contains

^{*} Wellcome Institute of Medicine, London.

¹ EISENSTEIN E., *The printing press as an agent of change*, Cambridge, Cambridge University Press, 1982.

several entries that may be ghosts, or wrongly dated.² The reference to an edition of the *Institutiones* in 1558 is likely to be confusion with that of 1538 or 1550, while the Sessa printing of the *Institutiones* is variously dated by cataloguers to 1538 or 1540.³ Some of the printings were authorised by Vesalius himself, but others were not, copied by publishers taking advantage of the restricted range of any printing privilege to reprint a successful volume for their own local market. The unauthorised Lyons printing of the *Fabrica* in 1552 by Jean de Tournes reproduced the whole text in two volumes in a small format, designed for a student market unable to afford the expensive *Fabrica* and leaving out all the illustrations save for four plates of the cranium.⁴ The Venice printing of the *Epistula on the China root* is another example of a local publisher in Venice taking advantage to republish a work that had originally appeared across the Alps in Basle.⁵ The reproduction of the images from the *Fabrica* by Geminus in London and by Valverde also aroused Vesalius' ire.⁶

Some of the publishing houses had a reputation across Europe. Vesalius' revisions of earlier Latin versions of Galen were commissioned by the firm of Giunta, and were then included in similar large volumes put out by Froben in Basle in 1542 and by Frellon in Lyons in 1548/1549, all firms that specialised in publishing large folio volumes of classical authors for a wealthy academic market.⁷ Others, like Rutger Rescius in Louvain, Vesalius' first publisher, or Giacomo Fabriano at Padua, who reissued the *Institutiones* in 1550, had close links with their university, but had little or no access to a wider Europe.

It is not always easy to determine why Vesalius should have chosen one publisher rather than another. Rescius, who was also professor of Greek as well as a printer, would have been known to Vesalius in both capacities, while Bernardino, the Paduan publisher of the 1538 *Institutiones*, put out at the same time

² Fundamental is CUSHING H., *A bio-bibliography of Andreas Vesalius*, ed. 2, Hamden and London, 1962.

³ *Ibid.*, p. 3–7.

⁴ Vesalius A., *De humani corporis fabrica*, 2 vols, Lyons, J. de Tournes, 1552. The same publisher, along with Guillaume Gazeau, had also issued the *Paraphrasis* at Lyons in 1551.

⁵ Vesalius A., *Epistola, rationem modumque propinandi radices Chynae decocti*, Venice, n.p., n.d., but probably Comin da Trino, 1546.

⁶ Vesalius A., *Epistola, rationem modumque propinandi radices Chynae decocti,* Basle, J. Oporinus, 1546, p. 199 (his brother in the preface wrongly blamed John Caius); *Anatomicarum Gabrielis Falloppii observationum examen,* Venice, F. de' Franceschi, 1564, p. 73, 93.

⁷ Galen, Opera omnia, Venice, Giunta, 1541-1542; Galen, Opera omnia, Basle, H. Froben and N. Episcopius; Galen, Opera Omnia, Lyon, J. Frellon, 1548? -1551.

a series of Galenic medical texts for students in an identical format.⁸ Bernardino Vitale, the Venice publisher of the *Tabulae sex* in 1538, had a good local reputation, and may already have been known to Calcar, who paid for the publication almost certainly as a way of attracting artistic clients.

We are, however, better informed about the events that led up to one publication, for the publisher, Francesco de' Franceschi, explained in the preface to the *Examen* how he had been allowed to print what had in origin been a private response to Falloppia. It had been handed to the Venetian Ambassador in Madrid to be taken to Italy, but by the time that the Ambassador arrived back, Falloppia was already dead. When Vesalius passed through Venice on his way to Jerusalem, he was asked about his reply to Falloppia. He referred his friends to Signore Tiepolo, who, fortunately, had still retained the letter. Vesalius' friends then arranged with Di Francescis for its publication.⁹

Many of Vesalius' books, and most notably the *Fabrica*, first appeared in Basle. In 1981 Harry Clark plausibly suggested that the city's position as a major publishing centre with good access to both Italy and Northern Europe was the main reason why Vesalius chose to publish the *Fabrica* rather than in Venice. It was also easy to obtain there both French and imperial privileges against piracy that covered most the Europe.¹⁰ Clark's argument is plausible, for Vesalius, as we know, was a very ambitious young man, but he underplays the fact that both the *Paraphrasis* and the *Epistula* had already appeared there. By 1542 Vesalius had already established good relationships with some of the Basle printers, and the city had become, along with Paris, one of the leading centres for the publication of medical books. This was not so in 1537, when the *Paraphrasis* appeared, and Clark's question – why Basle? –, can be asked with greater validity for that publication.

Thanks to Frank Hieronymus' magnificent catalogue of Basle imprints of medicine and natural philosophy down to the Thirty Years War, it is now possible to trace easily the growth of the city as a publishing centre and the role of its printers within the intellectual life of the city. Its importance as a

⁸ The copy of the *Institutiones* in the Royal College of Physicians of London Library is bound together with four of these editions, including Galen's *De ossibus*, all bought by the same student. ⁹ Vesalius A., *Examen, pref.*

¹⁰ CLARK H., 'Foiling the Pirates: The Preparation and Publication of Andreas Vesalius's De humani corporis fabrica', *The Library Quarterly: Information, Community, Policy*, Vol. 51, 3 (1981), p. 301-311.

centre of medical books was relatively recent.¹¹ Before 1526 it concentrated on practical medical texts for a local, German-speaking market. A few Latin translations of classical authors appeared, in a small format, and, from 1529, reimpressions of Italian authors such as Benivieni and Manardi for the Northern market. But until the middle of the 1530s it lagged far behind Venice and Paris in the range and quality of its medical imprints. The situation was, however, changing, and the political and religious conflicts that affected Western Europe helped strengthen its position.

Vesalius was a young man in a hurry, eager to make a name for himself, and, through his father's position at the Imperial court, already possessed of useful contacts. The local press of Rescius at Louvain might be an obvious place to publish a university thesis, but it was no more than that. Vesalius sought a wider influence for his new work. Venice was too far away, while the hostilities between France and the Emperor made publication in Paris difficult. Basle was a good alternative, especially as his master, Guinther von Andernach had only recently published his *Institutiones anatomicae* there with the firm of Platter and Lasius in 1536. Guinther's example may also have encouraged him to choose Robert Winter, who had just dissolved his partnership with Lasius and Platter to set up his own business.¹²

But even if Vesalius' motive for choosing Basle must inevitably remain obscure, other aspects of the Basle reprint of the *Paraphrasis* have not received the attention they deserve. This was no act of piracy on the part of the Basle publishers. There are many small changes, as well as a new lay-out of the prefatory material, which scholars are agreed can only have come from Vesalius himself. In other words, this was an authorised, and typographically improved edition. When it was actually issued is a matter of dispute, for if the dates in both editions are correct, only a matter of weeks could have elapsed between them, the first appearing in February, the second in March. The gap between them is extremely short, and it is possible that the second edition appeared in 1538, the year 1537 being the result of a different calendar in use in Basle. But, although this would allow Vesalius to hand over his manuscript while on his way to

¹¹ HIERONYMUS F., *Theophrast und Galen – Celsus und Paracelsus*, Basle, Basle University Library, 2005.

¹² O'MALLEY, C.D., *Andreas Vesalius of Brussels*, *1514–1564*, Berkeley-Los Angeles, University of California Press, 1964, p. 430 suggested that it was through the influence of his cousin, Martin Stern, or that he just happened to meet him while passing through on his way to Padua. But the date of his arrival in Padua is unknown, and probably later in the year.

Padua in 1537, that is unlikely on the evidence of other dates from Basle publishers. Maurits Biesbrouck and Omer Steeno, in their careful survey of the editions of the *Paraphrasis*, prefer to keep the traditional date, arguing that Vesalius could have received his proofs from Rescius in stages, and sent his corrections almost immediately to Basle either in person or by courier.¹³ Their supposition is made more likely by the evidence of Vesalius' notes to the 1538 *Institutiones* and the 1555 *Fabrica*. In both instances, Vesalius was planning a new edition as soon as he had sent back his proofs to his publisher, even if, in the event, the proposed edition never appeared.¹⁴

Such a planned revision of a medical text was extremely unusual, and remained so for a decade or more. Whereas legal texts and some theological handbooks were frequently updated, this was not so for medical works, with a handful of exceptions. The various printings of the Articella expanded to bring in new texts and new Latin versions of the underlying Greek texts of this staple of university teaching, while the *Epistulae medicinales* of Giovanni Manardi were brought out with additional books of letters at the end.¹⁵ Similarly, newly discovered or translated works could be appended to the large volumes of Latin translations of Galen without disturbing the sequence of books. An enterprising publisher could also issue his own printing of a work likely to sell, a plague tract, for instance, without the permission of the author. Vesalius, however, intended a revision almost from the outset, making very many typographical corrections, giving instructions to the future printer where he should place a marginal note and apologising for having to write out a correction to the In*stitutiones* at the foot of the page rather than at the appropriate place by the text. In his notes to the 1555 Fabrica he gave specific instructions as to how an incorrect letter might be replaced in a plate by cutting it onto a new sliver of wood which was then to be placed in the original block. Like so much else to do with printing, Vesalius was far more aware of the possibilities of the printing press to reproduce texts and images than any of his competitors.

¹³ BIESBROUCK M. and STEENO O., 'The *Paraphrasis in nonum librum Rhazae*, first book by Vesalius', in VONS J. and VELUT S., La *Fabrique* de Vésale et autres textes, on line at www:\http://www.biusante.parisdescartes.fr /vesale/, p. 7-8

¹⁴ NUTTON V., 'Vesalius revised: his annotations to the 1555 *Fabrica', Medical History* 56, 2012, p. 415-443; 'More Vesalian second thoughts; the annotations to the *Institutiones anatomicae secundum Galeni sententiam, 1538', Gesnerus* 72/1 (2015), p. 94-116.

¹⁵ ARRIZABALAGA J., *The* Articella *in the early press, c. 1476–1534,* Cambridge, Wellcome Unit for the History of Medicine, 1998; SIRAISI N.G., *Communities of learned experience. Epistolary medicine in the Renaissance,* Baltimore, Johns Hopkins University Press, 2012.

La Fabrique dans son contexte

The Paraphrasis and his revision of the Institutiones were both handy texts, intended for a student audience and produced in a small format. They were relatively cheap and quick to produce, and had a sale in a constantly changing and growing market. Both also appeared later with other publishers who do not appear to have consulted Vesalius. The Fabrica was a different matter. It was a hugely expensive volume, with a consequently restricted ownership. It is no surprise that the Lyons student edition of 1552 left out almost all the plates, and came out in two volumes in a much smaller format, or that de' Franceschi at Venice in 1568 had the plates redrawn for his edition of the Fabrica, and the whole printed in a smaller format with smaller type to reduce costs.¹⁶ There is no earlier example of a work of such size and complexity being revised before the second edition of the Fabrica. The various spin-offs from Fuchs' Historia stirpium were not so well illustrated, and the great series of the illustrated herbals of Mattioli did not begin till 1554 – earlier editions lacked the large plates.¹⁷ Bringing out a new edition of a work that had cost so much to produce was a daunting prospect and one can sympathise with Oporinus when faced with Vesalius' revisions so soon after the first edition. He delayed for several years, and, if ever he received Vesalius' revisions for a further edition, which I doubt, he wisely did nothing about them. After all, the second edition did not sell, and must have made a substantial loss without Vesalius' subsidy.

The *Fabrica*, it should be remembered, made Oporinus' name as much as that of Vesalius. Before 1543 he had been merely one of several Basle printers, producing competent theological and academic books. He was no Froben, no Isingrin, whose publication in 1542 of Fuchs' *Historia stirpium* set new standards and may have encouraged Oporinus to risk everything on publishing the *Fabrica*. But one should not forget the personal side of their relationship. Vesalius and Oporinus were friends as well as colleagues. ¹⁸ Vesalius was godfather to the son of Robert Winter, Oporinus' father-in-law, and, a few years later, came to the rescue when Oporinus was having trouble with his stepson, Jacob.

¹⁶ Cf. note 4; Vesalius A., *De humani corporis fabrica*, Venice, F. de' Franceschi and J. Criegher, 1568, pref.

¹⁷ In general, KUSUKAWA S., *Picturing the book of nature. Image, text and argument in sixteenth century human anatomy and medical botany*, Chicago and London, University of Chicago Press, 2011; NUT-TON V., 'Mattioli and the art of the commentary', in FAUSTI D. (ed.) *La complessa Scienza dei Semplici. Atti delle Celebrazioni per il V Centenario della Nascita di Pietro Andrea Mattioli*, Siena, Accademia dei Fisiocritici Onlus, 2004, p. 133-148.

¹⁸ STEINMANN M., *Johannes Oporinus, ein Basler Buchdrucker um die Mitte des 16. Jahrhunderts,* Basle and Stuttgart, Helbing & Lichtenhahn, 1967, p. 36-37.

He generously offered to have Jacob stay with him for some months in Brussels, presumably so that he could make some useful contacts and possibly embark on a career in imperial service. His intervention proved fruitless. The young man continued his life of petty crime, and died a vagabond and criminal on the scaffold in 1568.¹⁹

Publishing, as the career of Oporinus shows, was always a hazardous business. Vesalius seems to have done what he could for his friend by buying the paper for the second edition of the *Fabrica* and by loaning him money. When around 1567 Oporinus sold his business after Vesalius' death, he made special arrangements for two publications, `*merovingische Stammtafeln'*, *i.e.* Johann Basilius Herold's massive *Klugundweys alias Clodoveus*, published in 1556, and the *Fabrica*. The new owners of the business had to repay Vesalius' heirs for four out of every five copies they sold, and when Oporinus died, he owed them a huge sum, 2582 gulden, that had still not been handed over to Vesalius' heirs two years later.²⁰ Vesalius was a very rich man, and one might consider the second edition of the *Fabrica* vanity publishing, but his generosity towards his publisher bespeaks of more than a mere commercial or academic involvement.²¹ There was a rare friendship between the two men that went back in all possibility to 1539, when Robert Winter published the letter on the China Root, if not to 1537.

The recently discovered notes by Vesalius reveal another feature that will have endeared, and possibly appalled, his publisher. The sheer number of corrections show Vesalius' obsession to get things right, as well as his remarkable eye for a printer's mistakes. Within the large page of the *Fabrica* he could detect a damaged comma or a full stop wrongly inserted. He could measure an unequal spacing or a misaligned marginal direction. In the plates he could pick out where a tiny line was ended prematurely, or the outline of a toe left incomplete. Some of the reasons for his interventions become visible only enlarged on a computer screen, while the fineness of his pen and the firmness of his hand alike demand admiration.²² Not all publishers lived up to his expectations. He

¹⁹ HARTMANN A. et al., *Die Amerbachkorrespondenz*, vol. VIII, Basle, Universitätsbibliothek, 1974, p. XXIV-XXV.

²⁰ STEINMANN M., *Oporinus*, p. 113-4. Oporinus sold the printing house for 1400 gulden, and the presses, matrices and tools for a further 800, which gives some indication of the size of his debt to Vesalius.

²¹ But publication at the expense of an author was not uncommon. The *colophon* of the *Tabulae sex* proclaims that it was published at Calcar's expense.

²² Above, note 14.

cited poor workmanship as one of the incentives to publish his revision of Guinther's *Institutiones*, although Bernardino's subsequent printing was scarcely better. Even Oporinus must have bowed to Vesalius' eye, for the first edition of the *Fabrica*, prepared under Vesalius' direct supervision, has far fewer printer's errors than the second, whose *Errata* slip notes only a small percentage of the mistakes.

Vesalius' relationships with his publishers tells us a great deal about all the parties involved. They show the great range of possibilities open to both authors and printers, from a merely local publication through to one intended from the start to be bought throughout Western Europe. The collaboration of author and publisher could take various forms. Jean de Tournes in Lyons had in all likelihood no contact with Vesalius when he brought out his editions of the *Paraphrasis* and *Fabrica*. Oporinus worked closely with Vesalius in 1542-1543, while Gadaldino, the agent for the firm of Giunta in the great 1541-1542 edition of Galen, provided his authors and revisers with ancient Greek manuscripts from which to improve their underlying text.²³ Other publishers Vesalius may never have met, whereas he established long-lasting ties with Robert Winter and his son-in-law Oporinus.

Vesalius also is revealed not only as obsessively concerned to have everything correct, and possessing a remarkable eye, but also as someone one entirely at home in the new world of printing, familiar with the techniques of the printer but and eager to harness them in new ways. In the *Tabulae sex* and in the *Fabrica* he used the power of the press to reproduce images and, in a new way, to integrate the verbal and the visual.²⁴ He also saw the possibility for publishing quickly a revision of what was already in print, as with the *Paraphrasis* and the *Institutiones*. Along with permissions and legal privileges a new version might also deter others who sought to publish their own editions without his authorisation. But revisions, as fate of the 1555 edition of the *Fabrica* shows, were a risk; publishing for a changing student market was very different, in both expense and outreach, than for wealthy medics and cognoscenti. But in this, as in so much else, Vesalius was an innovator who took risks.

²³ CAIUS J., De libris suis, London, W. Seres, 1570, fol. 6r-v.

²⁴ CARLINO A., *Paper Bodies: A Catalogue of Anatomical Fugitive Sheets 1538–1687, Medical History, Supplement 19, 1999, p. 38–58.*

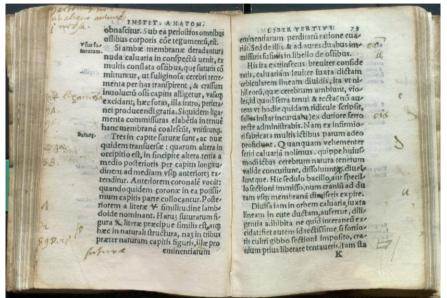


Fig. 1. Vesalius, *Institutiones anatomicae*, Venice, D. Bernardino, 1538, fols. 71v-72r. At the top of fol. 71v Vesalius emphasises the novelty of his discovery of the (true?) pericranium. © S. Rose



Fig. 2. Vesalius, *De humani corporis fabrica*, ed. 2, Basle, J. Oporinus, 1555, p. 241. Vesalius wants clearer lettering on his plate of the deltoid muscle. © G. Vogringic