

Chapter 2

Anatomical Fugitive Sheets Printing, Prints and the Spread of Anatomy in the Sixteenth Century

Interest in anatomy grew in Europe during the first half of the sixteenth century, indeed the subject became rather fashionable. It was not solely of concern to the doctors, philosophers and artists who studied it as part of the academic “curriculum”, for their own professional activities or for the sake of social standing. It actually attracted a much wider public than might be imagined, a public that did not belong to any identifiable professional group, whose members read only the vernacular (when they could read at all) and who acquired their education through images—it was, in short, a lay public.

The existence of a popular audience for anatomical works can be established beyond doubt, on a documentary basis, by a series of printed manuals produced during the course of the century, ranging from the pirate-copies of the *Tabulae* and proper anatomical atlases (like the one signed by Walter Ryff) to the fugitive sheets with superimposed flaps. These printed objects were the fruit of the same cultural and technological environment that inspired Vesalius to design the *Tabulae*, they were produced for a similar purpose and with the same conception of images—tools with which to synthesise, memorise and diffuse anatomical knowledge.

Vesalius Popularised

In his letter to Johannes Oporinus of August 1542, published in the first edition of the *Fabrica*, and in the course of a complaint about the uselessness of the privileges of princes bestowed on printers and booksellers to stop or at least limit plagiarism, Andreas Vesalius reminded the publisher of the sad fate of his anatomical tables, which had been copied a number of times, especially in Germany, in the years immediately after their publication. Only three years after the Venetian edition came out, Vesalius was able to number, without naming them, five plagiarists and six full or partial reprints of the *Tabulae*, from Augsburg, Paris, Cologne, Strasbourg, Marburg and Frankfurt.¹

¹ On plagiarisms of Vesalius, see E. Turner, ‘Les six premières planches anatomiques de Vesale et leurs contrefaçons’, *Gazette hebdomadaire de médecine et de chirurgie*, 1877, 24: 269–74; S. G. Lindberg, ‘Chrestien Wechel and Vesalius: twelve unique medical broadsides from the sixteenth century’, *Lychnos*, 1953, pp. 50–74; R. Herrlinger, *History of medical illustration* (London, 1970; originally published in German: Munich, 1967) pp. 121–31.

Anatomical Fugitive Sheets

Identifying those responsible for the plagiarised copies has on the whole not been very difficult.² The Augsburg one was produced and printed in June 1539 by Jost de Negker, a printer known in the history of woodcut for having worked for the Emperor Maximilian and for having pioneered the usage of chiaroscuro technique.³ He reproduced the six *Tabulae* with the announcement that he wanted to offer a bilingual, Latin-German edition of the sheets that Vesalius had published a year earlier. In the letter to the reader which replaces the original edition's dedication to Narciso Vertunno, the anonymous author praises de Negker for his efforts at popularisation and Vesalius for having, with the *Tabulae*, both corrected the errors of Avicenna and of the Arabic doctors, and managed to synthesise in six pages what Galen had described in thirty books.

Given the quality of de Negker's work, Vesalius, in his letter to Oporinus, censures the author of the text rather than the block cutter, while condemning in vehement and unqualified terms both the Cologne cutter, whom he describes as crude and unskilled, and the person who had written the introduction for the printer: the latter not only held that illustrations can be clearer than dissection, but had dared to assert that "he made from my most elegant figures much more pleasing ones".⁴ The only complete copy of the Cologne edition—published in 1539—is in Brussels, at the Bibliothèque Royale de Belgique.⁵ It consists of seven, rather than six *tabulae*: the author was Aegidius Macrolios, a private teacher of anatomy in Cologne, and the figures were cut by the monogrammist V. H. and printed by Laurentius Molendinus at the expense of Eberhardus Tappius. The additional figure represents the brain and the cranial nerves, ostensibly a copy of a drawing Vesalius had executed for some friends and which he intended to publish (Fig. 27).⁶ Macrolios, in a brief note inserted to the right of the woodcut, proclaims his debt to Vesalius—"the most diligent and veracious anatomist since the time of Galen"—and announces that he has wanted to render the figure drawn by Vesalius accessible to a larger public. It is a "treasure", he says, which deserves to be reproduced and circulated through the medium of print.

An even more "literal" plagiarism is that by the publisher Chrétien Wechel, who printed in Paris a copy of Vesalius's work without even taking the trouble to change the dedicatory

² The problem has been amply discussed and analysed by L. Choulant, *History and bibliography of anatomic illustration* (Chicago, 1920, originally published in German, Leipzig, 1852); H. W. Cushing, *A bio-bibliography of Andreas Vesalius* (New York, 1943), and S. G. Lindberg, 'Chrestien Wechel'. See also the useful synthesis in C. D. O'Malley, *Andreas Vesalius of Brussels* (Berkeley and Los Angeles, 1964), pp. 88–90 especially.

³ See C. Dodgson, *Catalogue of early German and Flemish woodcuts, preserved in the Department of Prints and Drawings in the British Museum* (London, 1903), vol. 2, p. 204. On de Negker's plagiarism, see K. Sudhoff and M. Geisberg (eds), *Die anatomischen Tafeln des Jost de Negker, 1539* (Munich, 1928). On chiaroscuro woodcuts and de Negker, see D. Landau and P. Parshall, *The Renaissance print, 1470–1550* (New Haven and London, 1994), pp. 179–202 and 211–12.

⁴ The sentence, which Vesalius quotes in the letter (see A. Vesalius, *Fabrica*, fol. *5v), can be found in the introduction to the first table of the Cologne edition ("Ipsium autem corpus picturae suis lineamentis ex elegantissimo reddidimus longe elegantius"). There is a facsimile reproduction of the Cologne and Augsburg editions in A. Vesalius *Bruxellensis, Tabulae Anatomicae* (Brussels, 1965).

⁵ See E. Cockx-Indestege, *Andreas Vesalius: a Belgian census: a contribution towards a new edition of H. W. Cushing's bibliography* (Brussels, 1994).

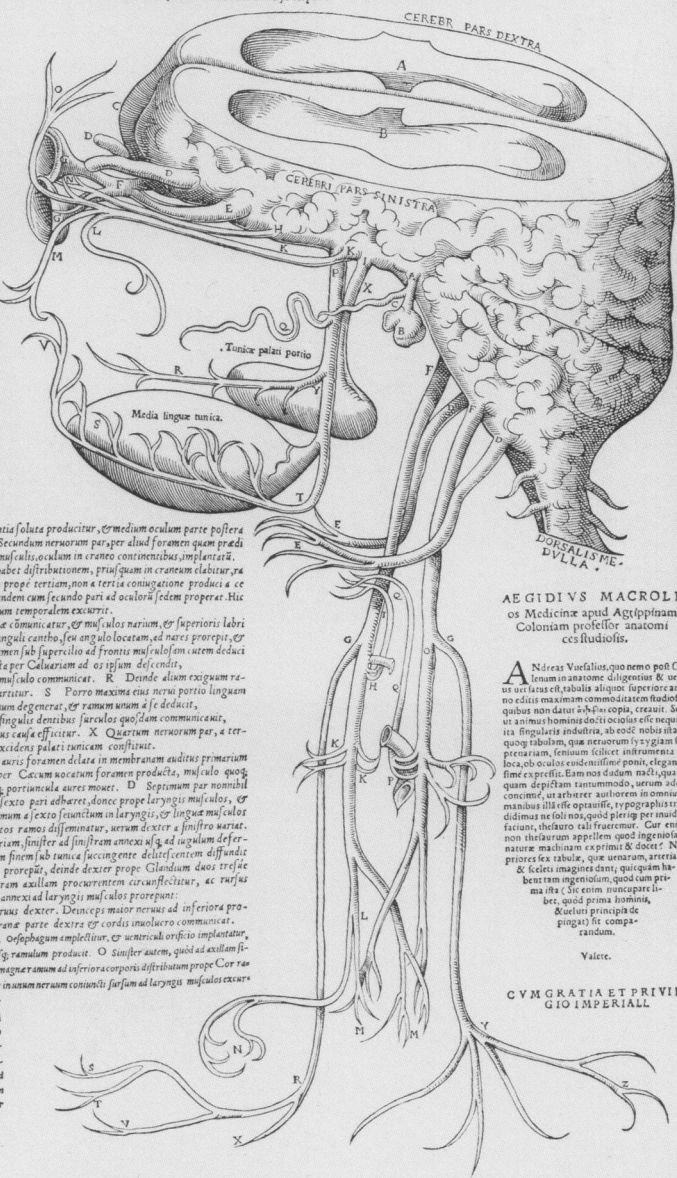
⁶ A. Vesalius, *Fabrica*, fol. *5v. The title of the print is *Cerebrum animalis facultatis fons et principium, sensum et motum voluntarium per nervos communicans ab se, et dorsali Medulla enatos universo corpori*. In his preface to the *Tabulae anatomicae sex*, Vesalius had mentioned an illustration of the nerves which does not appear anywhere in the work. There is in the *Fabrica* (p. 319) a very similar figure, conceived according to the same scheme of pictorial representation as that of Macrolios.

CEREBRVM ANIMALIS FACVLTATIS FONVS

ET PRINCIPVM, SENSVM ET MOTVM VOLVNTARIVM PER NERVOS COMMVNICANS

ab Fr. & dorsali Medulla enato: uniuerso corpori.

- A Ventriculus primus cerebri dexter, quod dextrā Cerebri partem occupat appellatur.
- B Ventriculus sinister, & secundus in sinistra Cerebri parte excavatus. Ii ambo in unam concavitatem commūne cōtinent, quae rursus in longam meentem definit, quae sub Glia; & Conario in cerebello ventriculam proripit, sibi habens in umbentem unifornem protuberantiam, quem superioris Cerebelli foramen cerebellum ea parte, quae hinc parvi uncū habet, & hinc in lignis nascenti telis formae quae simillima. Meatum hunc commūnem si cum Hierophilo ventriculam nominare dignatus fueris. IIII. in uniuersum cerebri ventriculos confinitus: Dextrā videlicet & sinistrā Cerebri. II. meatum hunc commūnem unum, & quartum manus fossissimū capiat, & cerebellum efformatur. Verum in praesenti tabula haeq; delineari nequeunt.
- C Additamenta Mammillaria, quaedam ueluti cerebri tubercula, cum tangentiā Caluariae partem, quae cauitas illa ofibus oculis est. Haec nonnulli rei A natomicae imperiti, uisus hunc esse autumant.
- D Olfactus organum uerum, unum & cerebro a parte anteriori inferius enatū, & neruis molliora. Neruis autem, quod caluariae non excedant, non obtinent, etiamsi neruorum naturam mollem tantum referre adperiant. Sunt qui nulla sectione uisā ex Galeni quibusdam locis, ea anteriores uentriculos cerebri esse rixosū, & uisum hunc esse ad anteriori uentriculorum fauce enatū, non negamus.
- E Neruis duobus, hoc est uisus, inter cerebri neruis mollioribus & crassioribus.
- F Coniunctio dextrā cum sinistro, nec opinetur quisiptum eos sensualem crucis instar transtendere: aut ut hodie Sarcosus imperiti, illum uniuersum in fronte extra cranium esse imaginatur.
- G Quasi tunica duplex, quae ex neruis substantia soluta producit, & medium oculum parte posteriori ambi. Hoc neruorum primum par censetur. H Secundum neruorum par, per aliud foramen quam praedictū, ex caluariae protuberantibus masculis, oculum in craneo continetibus, implantatū.
- I Tertium neruorum par, uariū, & multiplicem habet distributionem, primum in craneo elabitur, raram a se propagare dicitur. K Qui mihi tamen prope tertium non a tertia coniugatione produci, & retro apparet: quod si sit sub cerebro delatus tandem cum secundo pari ad oculos sedem preparat. Hic in. IIII. partibus Sarcosus. L Primum in masculum temporalem excurrit.
- M Secundus per foramen superioris maxillae communitur, & masculum uariū, & superioris labri mouet. N Tertius post carunculam in magno angulo cantho, seu angulo locatur, ad nates proripit, & neruorum tantum continet. O Quartus per foramen sub supercilio ad frontis masculum uicem deducitur: P Ceterum maior tertij ueris portio recte per Caluariam ad os ipsum descendit.
- Q Vbi ramum cephalico modo inuolutum temporali musculo communicat. R Deinde alium exiguum ramulum superioris maxillae dentium radicibus impartitur. S Porro maxima eius nerui portio linguam tangens in eius tunica praecipuum uisus organum degenerat, & ramum unum a se deducit.
- T Qui per maxillam inferiorem delatus postquam singulis dentibus Sarcosus quodam communicat.
- V Cuius altera ex maxilla esse excidit, & istis motus causa efficitur. X Quartum neruorum par, a tertio non procul ortum. Y & perinde foramen excidens palati tunicam confinitur.
- A Quintum neruorum par, cuius maxima portio ad auri foramen dilata in membranam auditus primarium inuolutum finitur. B Minor autem portio per Caxum hoc auri foramen producta, masculo quoque caluariae implantatur. C Et in bruiis ea quoque portio uicem aures mouet. D Septimum par nonnullū temporali implantatur. E Et in bruiis ea quoque portio uicem aures mouet. D Septimum par nonnullū temporali implantatur. G Super colorem finem sub tunica succingente delitescit, & diffusū qui ramus ad inferiorem uentrem (ut mox audies) proripit, deinde dexter prope Glanidam duo, & tresque Sarcosus producit. H Qui ad arteriam in dextram axillam procurantem circumflectitur, & rursus Sarcosus producit. I Qui ad arteriam in dextram axillam procurantem circumflectitur, & rursus Sarcosus producit. I Qui ad arteriam in dextram axillam procurantem circumflectitur, & rursus Sarcosus producit. I Qui ad arteriam in dextram axillam procurantem circumflectitur, & rursus Sarcosus producit.



AE GIDIVS MACROLIVS
 os Medicinæ apud Agrippinam
 Coloniam professor: anatomi
 ces fluidios.

Andreas Vesalius, quo nemo post Galenum in anatome diligentius & uerius utitur, hanc tabulam aliquot annos ante edidit maximam commoditatem studio quibus non datur & hinc copta, creata. Sed ut in unius hominis oculis esse nequit, ita singularis industria, ab eodem nobis istam quoque tabulam, que neruorum in cranium partem, & raram a se propagare dicitur, elegantissimè esse excidit. Eam non dicitur maxillam, quoniam deprimam tantummodo, uerum adeo concinnet, ut arbiter autorem in omnium manibus illi esse oportuisse, typographi tradidimus, nec solum, quod pueri per nuntium faciunt, theatro tali fruatur. Cur enim non thesaurum appellent, quod ingeniosum nature maxillam ex primi & docet: Nec priores sex tabulae, que uentrum, arteriarum & fecies imaginis dant, quicquam habent rem ingensiom, quod cum prima sita. Sic enim nunc parte libet, quod prima hominis, & ueluti principia de pingat fit comparandum.

Valte.
 CVM GRATIA ET PRIVILEGIO IMPERIALI

Figure 27: Aegidius Macrolious (cut by the monogrammist V. H.), *Cerebrum animalis facultatis fons* . . . , in reprint of Andreas Vesalius, *Tabulae anatomicae sex*, Cologne, L. Molendinus, 1539, woodcut (Wellcome Library, London).

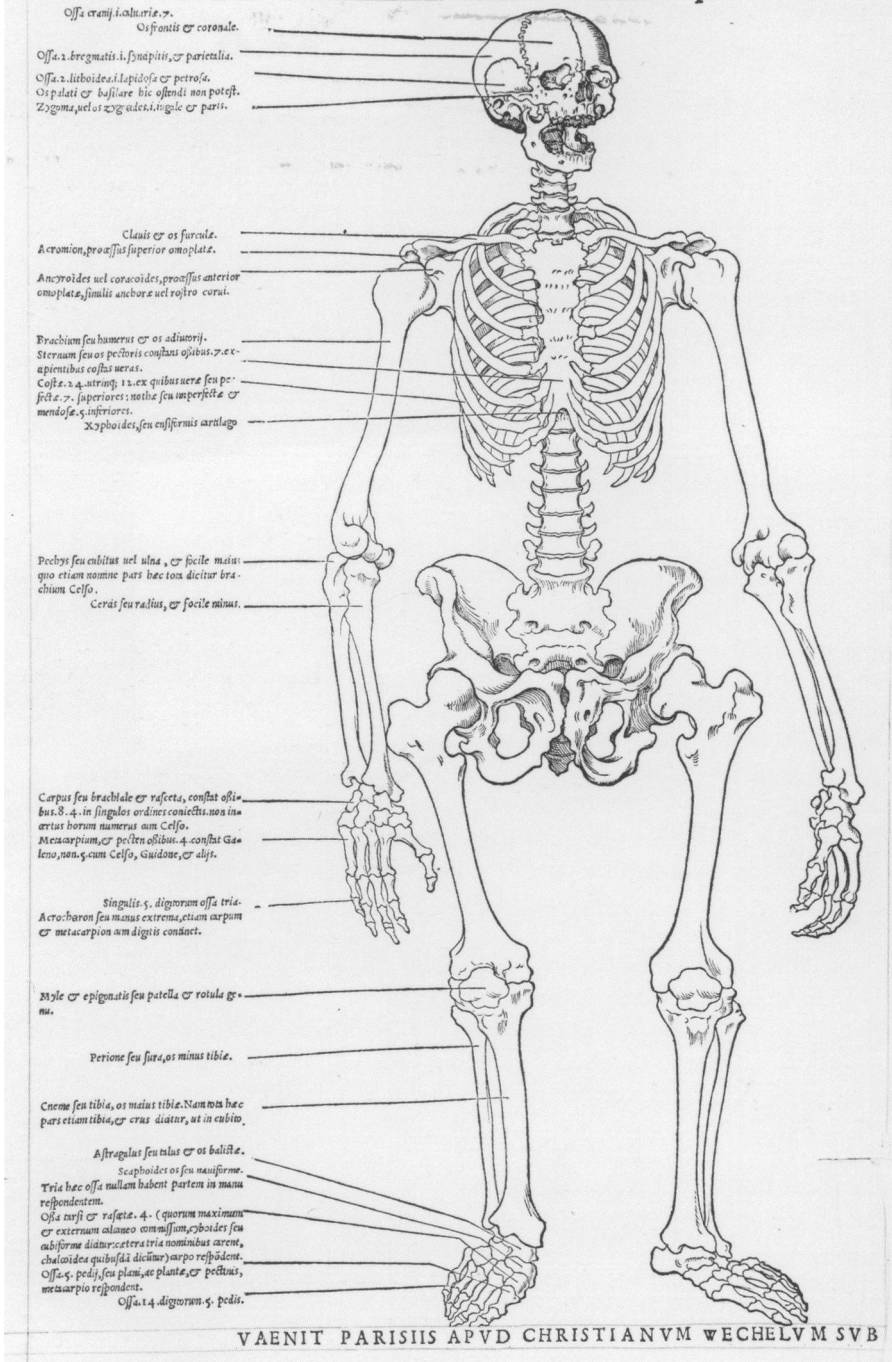
letter to Narciso Vertunno, which stands as an introduction. The only alterations are the correction of some misprints from the Venetian edition and the addition of Wechel's imprint to the foot of the first page, which reads: "Parisiis apud Christianum Wechelium sub scuto Basiliensi in vico Iacobeo". Sten Lindberg, following the rediscovery in the Royal Library in Stockholm of a collection of Vesalian plagiarisms, has brought out a chronology of the undated editions of the sheets published by Wechel and given an accurate account of the relationships that prevailed between the latter, Vesalius and the Parisian academic environment.⁷ Chrétien Wechel was one of the most prestigious Parisian publishers of the first half of the sixteenth century, and a rather specialised one since his catalogue included fifty-two medical titles. In 1536 he issued two fugitive sheets entitled *Osteotome .i. [sic] ossium corporis humani divisio, ex Galeno praecipue collecta*, in which is represented a skeleton, seen from the front and the back, with the names of the bones indicated, as the title states, according to Galen's classification. Vesalius was still a student in Paris at the time, and on the basis of a shrewd comparative analysis of the terminology adopted respectively by Vesalius in the *Tabulae* and by Wechel in the *Osteotome*, Lindberg suggests that either one or other of two hypotheses about the relationship between these works must be true: since Vesalius most certainly knew Wechel's skeletons, he must either have collaborated on their realisation or have used them for the preparation of the *Tabulae*, gleaning from them the secrets of a pictorial representation of bones. The existence of this 1536 edition was noted by Choulant (who reported a coloured copy⁸) but it has proved impossible to locate a single one. There is a second edition of the *Osteotome*, which was reissued by Wechel in 1538 (Figs. 28 and 29). Moreover, he printed the first three *tabulae* plagiarised from the Venice edition only a few months after its publication. These are the ones Vesalius refers to in his letter to Oporinus: "Parisiis tres priores [tabulas] eleganter expresserunt". Wechel thus published, between 1538 and 1539, a work which consisted solely of three sheets and which was called *Tabulae tres de anatomia venarum et arteriarum . . .* The three skeletons, which he probably printed at around the same time and which are today in the Stockholm Royal Library, might well be a supplement to those, though they are a separate publication and not a plagiarism in the strict sense.

These, then, are the "literal" plagiarisms of the *Tabulae*, that is, those that aimed at an exact reproduction of what Vesalius had produced in Venice in 1538. These three reprints—from Augsburg, Cologne, Paris—did attribute, each in their own way, their paternity, literary property and conception to Vesalius, and not, I think, for the sake of publicity, or of the putative guarantee of quality his name might have brought; indeed in those years his name was only just becoming known amongst anatomy students. Vesalius himself, much as he complained about such usurpation, never, in fact, called these authors, wood-block cutters and editors "plagiarists". He did, however, hurl the accusation of plagiarism at Ryff, explicitly and angrily, and in calmer terms at Dryander: they had not only taken images created by others in spite of the privilege, but had reproduced them badly, reducing them, distorting their iconography, transforming their meaning, simplifying their contents, changing their function.

⁷ S. Lindberg, 'Chrestien Wechel'.

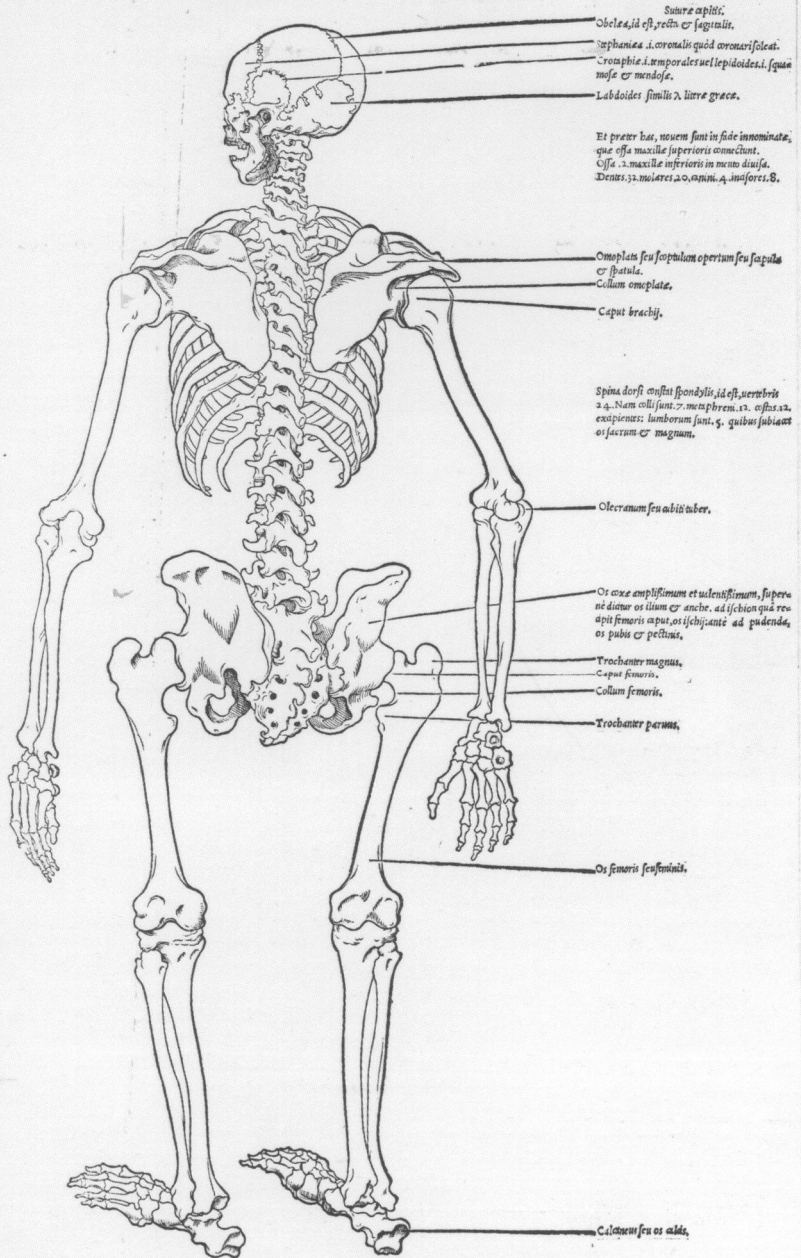
⁸ L. Choulant, *History*, p. 156.

Osteotome .i. ossium corporis humani



Figures 28 and 29: *Osteotome .i. [sic] ossium corporis humani divisio, ex Galeno præcipue collecta*, Paris, C. Wechel, 1538, woodcuts (Collections of the Swedish Royal Library, Stockholm).

diuisio, ex Galeno præcipue collecta.



SCVTO BASILIENSI, IN VICO IACOBEO, ANNO M.D.XXXVIII.

Figure 29

Johann Dryander is indeed commonly identified as the author who, according to Vesalius, used other people's images in the books he published in Marburg and Frankfurt together with his own woodcuts. One can, in particular, recognise the representation of the urogenital tract from Vesalius's first *Tabula* (and from some anatomical fugitive sheets) in the *Anatomia Mundini* edited by Dryander and printed by Christian Egenolff in Marburg in 1541 (Fig. 30).⁹ But it is Walter Hermann Ryff who undoubtedly is best known in the history of medicine and printing as the most prolific "author" of other people's works. He owes his fame as a plagiarist mostly to his contemporaries—Vesalius foremost, but also Leonhart Fuchs and Conrad Gesner.¹⁰

In 1541, the Strasbourg publisher Balthasar Beck (Pistor) printed two editions—one German, the other Latin—of a booklet of anatomical figures, *Omnium humani corporis partium descriptio seu ut vocant Anatomia*. It consists of ten sheets sewn at the centre, printed on one side only, and totalling nineteen illustrated pages, plus the title page. The *Tabulae decem*—as they are usually called—also include, besides the printed information, a short introduction from the author "ad candidum lectorem" in which the reader, particularly the student, is invited to use the images as a visual aid to Johann Winther's manual, the *Institutiones anatomicae*: having before your eyes the representation of the parts of the body, "you can see more easily, and remember, and write down" ("multo facilius tum percipies, tum memoriae inseres, atque inscribes"). What Ryff did was to choose existing published images of the human body, have them redrawn and cut by a skilled artist, with at the top of each sheet a very brief text—the caption, with the names of the parts represented on the figure with letters.¹¹ Ryff copied from Vesalius's *Tabulae* the illustrations of veins and arteries as well as those of the male and female genital organs, seen here within the body; the anatomy of the internal organs of the man (Fig. 32) is an obvious adaptation of 'Wechtlin's dissection' (Fig. 33), published in Strasbourg in 1517; two woodcuts of muscles, from the front and the back, are adaptations from

⁹ The images of the bowels in this book also seem—as C. Singer suggests—to be copies of a drawing Vesalius had done earlier. See C. Singer, *The evolution of anatomy* (London, 1925), p. 98. I would say that they are a very close imitation of the representation of the bowels we can find in many anatomical fugitive sheets published few years earlier (Fig. 31).

¹⁰ Vesalius writes: "Caeterum Argentinensis ille, . . . de studiis pessime est meritus, quod tabulas quae nunquam satis magnae studiosis proponi poterunt, tam foede contraxerit, et turpissime pictas, ac praeter omnem rationem circumscriptas, cum Augustani versione, tanquam suas emiserit" (*Fabrica*, p. viii). Leonhart Fuchs devotes to Ryff the virulent dedicatory letter which opens the *De sanandis totius humani corporis . . . malis*, written in Tübingen in August 1542, and concerned with the problem of plagiarism. Vesalius refers to this letter in his own letter to Oporinus. Conrad Gesner, in his *Bibliotheca universalis*, devotes two pages of insults to Ryff and associates him, as an "impostor", with Christian Egenolff, the Frankfurt printer who also published a number of works by Dryander (*Bibliotheca universalis*, Zurich, 1545, fols. 284v–285r). Here is a brief passage that should give an idea of the tone of Gesner's description of Ryff: "tam enim rapax alieni est, cum propriae eruditionis nihil habeat, ut non solum observationes aliorum particulares, et capita vel partes librorum, sed integros enim libros sibi adscribat, ac impudenter pro suis usurpet". On Ryff's productions, see J. Benzing, *Walter H. Ryff und sein literarisches Werk. Eine Bibliographie* (Hamburg, 1959).

¹¹ The hypothesis has been advanced by many that the author of a good number of these drawings, used for the woodcuts of Ryff's anatomy, was Hans Baldung Grien. See C. Koch, 'Katalog der erhaltenen Gemälde, der Einblattholzschnitte und illustrierten Bücher von Hans Baldung-Grien', *Kunstchronik*, 1953, 6 (11): 297–303; A. Pfister, Introduction to W. H. Ryff, *Die zehn anatomischen Tafeln des Walter Hermann Ryff, Strassburg, bei Balthasar Beck (Pistor), 1541*, textliche Beilage von A. Pfister (Basel, 1954); M. C. Oldenburg, *Die Buchholzschnitte des Hans Baldung Grien. Ein bibliographisches Verzeichnis ihrer Verwendungen* (Baden-Baden and Strasbourg, 1962), p. 162. More recently, K. B. Roberts and J. D. W. Tomlinson, *The fabric of the body: European traditions of anatomical illustration* (Oxford, 1992), p. 47.

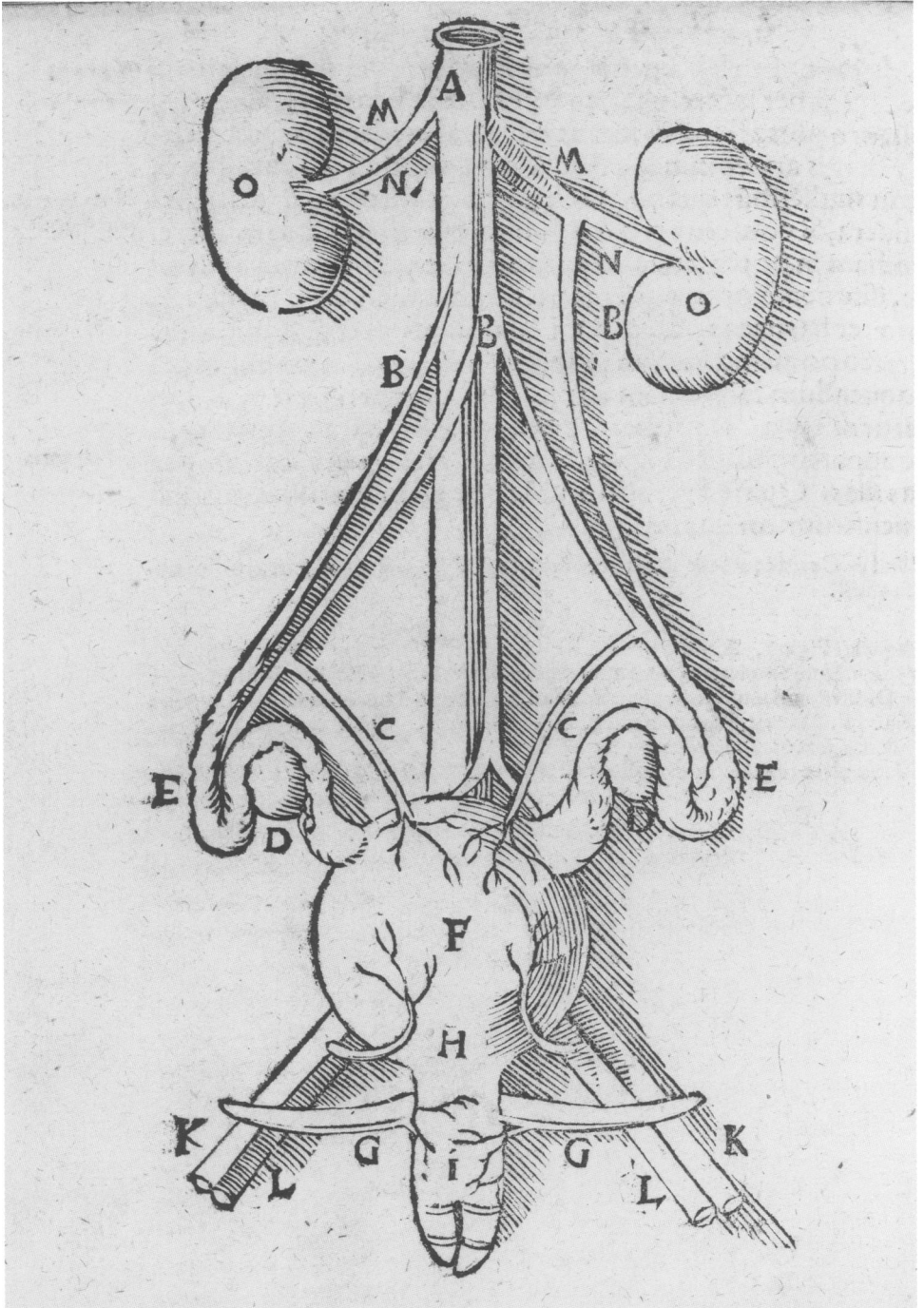


Figure 30: Johannes Dryander (ed.), *Anatomia Mundini . . .*, Marburg, C. Egenolff, 1541. *Urinary tract* (fol. H1v), woodcut (Wellcome Library, London).

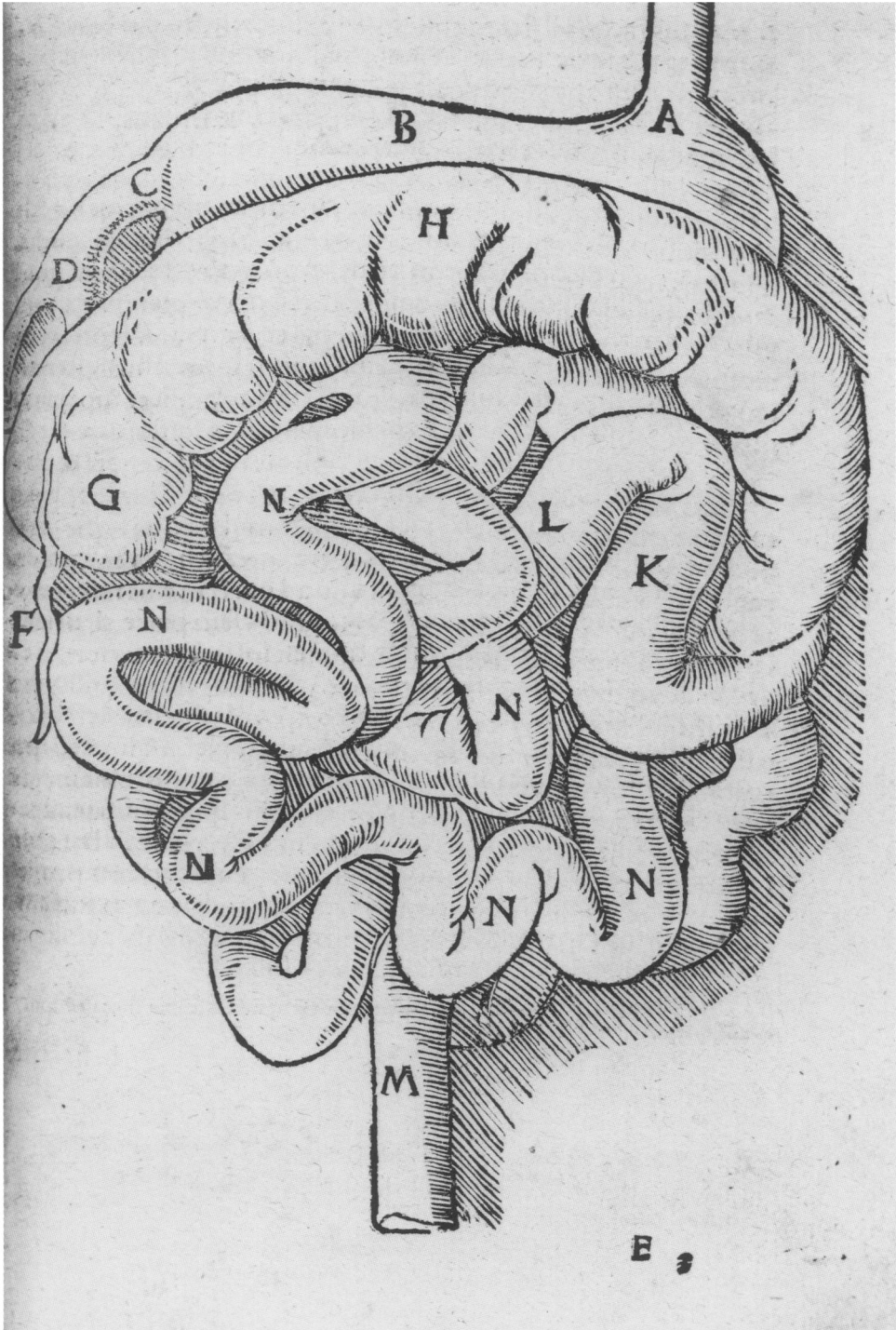


Figure 31: Johannes Dryander (ed.), *Anatomia Mundini . . .*, Marburg, C. Egenolff, 1541. *Intestines* (fol. E3r), woodcut (Wellcome Library, London).

Berengario da Carpi's *Isagoge breves*; while the illustrations of the head were all, except for one figure, copied from Dryander's *Anatomia capitis* (Figs. 34 and 35).¹² The three images of the skeleton were, for their part, printed from the same blocks used by Wechel for the 1538–39 publication of his tables.¹³ He had presumably lent them to or, more probably, left them with Ryff and Beck for the publication of an anatomy book in eighty leaves and for the two editions of the booklet published in Strasbourg in 1541.¹⁴ In 1543, the blocks were returned to Wechel's printing house and in that year he published a French and a Latin edition of Ryff's anatomy, both of which were reprinted in 1545.¹⁵ But the extraordinary fate of the Strasbourg plagiarist's work does not end here. In 1542 Cornelis Bos, an artist and print merchant, produced in Antwerp—perhaps, ironically, without Ryff's knowledge—a new series of blocks which faithfully copied the previous year's Strasbourg edition. These were published twice in Latin (*Omnium humani corporis partium descriptio seu ut vocant Anatomia . . .*) and in French (*Description ou Anatomie de toutes les parties du corps humain . . .*).¹⁶ The author is recorded in the title as “le Renômé docteur en Médecine M. Gaultier H. Ryff, Médecin de la ville de Strasbourg”, but the bookseller and printer Antoine des Goys, “studieux de Médecine”, wrote a new, brief introduction in which he now addressed not only doctors and students, but also all those (theologians, philosophers, jurists and orators) who wanted to know themselves better.¹⁷ This theme recurs throughout the production of anatomical fugitive sheets. The blocks of Cornelis Bos reached Paris from Antwerp—through the agency either of his wife, or of the broadsheet printer Sylvester van Parijs—and were there reissued by Jérôme de Gourmont.¹⁸

The number of editions of Ryff's work—at least ten editions and reprints over four years—and before then, the wide circulation of Vesalius's *Tabulae anatomicae sex* showed the immediate success of these short anatomical compendia, which were based

¹² J. Dryander, *Anatomia capitis humani, in Marpurgensi Academia superiori anno publice exhibita* (Marburg, 1536).

¹³ Sheets D and E of Ryff's anatomy.

¹⁴ The title of the anatomical text published by Ryff and Beck together with the 1541 *Tabulae decem* is *Des aller fürtrefflichsten, höchsten unnd adelichsten geschöpffs aller Creaturen . . . das ist, des menschen . . . warhafftige beschreibung oder Anatomi . . . erstmals inn Teutsche sprach verfasst*. The identification of Ryff's skeleton woodcuts with those published by Wechel in Paris has been made by S. Lindberg, ‘Chrestien Wechel’, pp. 62–3. The same hypothesis had been put forward some time before, but on the basis of mistaken premises, by H. Cushing, *A bio-bibliography*, pp. 22–8 and 39–42, who also gave a clear, though incomplete description of the various editions of Ryff's booklet.

¹⁵ Both the 1543 editions—entitled, respectively, *Anatomica omnium humani corporis partium descriptio* and *Description anatomique*—and those of 1545 were printed by Wechel in Paris. The three blocks which represent the skeleton were used by the same printer in J. Tagault's *De chirurgica institutione*, also printed in 1543.

¹⁶ On the verso of the French title-page is printed: “En la maison de Cornelius Bos, en Anvers, en la Rue du lombars, ces tables se vendent”. Bos, then, also sold the illustrations as well as cutting the wood-blocks. The Latin edition has the same title as Beck's first edition and its imprint reads: Antuerpiae, imprimebat Cornelius Bos, [s.d.]. On Cornelis Bos, see S. Schéle, *Cornelis Bos: a study of the origins of the Netherland grotesque* (Stockholm, 1965), esp. pp. 155–8, on this edition of Ryff's anatomy. On this, and, more generally, for a concise and accurate account of the story of the *Tabulae decem*, see E. Cockx-Indestege, ‘A hitherto unknown edition of W. H. Ryff's *Tabulae Decem*, Antwerp, Cornelis Bos, c. 1542’, *Quaerendo*, 1976, 6 (1): 16–27.

¹⁷ “. . . car celluy qui diligemment enquera, bien institue en l'anatomie, la Nature, ses operations, et la Raison dicelle estans en l'home: facilement comme escript Plato, il perviendra iusques a la cognoissance des dieux, de la quelle sort piete, avec justice et autres vertus” (Antoine des Goys, ‘Introduction’ to W. Ryff, *Description*).

¹⁸ The title is that of Ryff's original 1541 Latin edition: *Omnium humani corporis partium descriptio, seu ut vocant Anatomia . . .* (Strasbourg).

HAEC PRIMA FIGURA VIRI OSTENDIT INTERIORA MEM
bra seu viscera. A. itaq; œsophagi initium est, via cibi atque potus. B. Trachœ artetice initium. L.
dextra. K. sinistra pars pulmonis. D. rami venarum & arteriarum cordis. E. dexter cordis ventricu
lus. F. sinister. G. cordis est extremitas. K. C. L. sunt rami insignes venarum & arteriarum, per pul
monem dispersi. H. inum œsophagi vbi diaphragmati & dorso coniungitur. I. diaphragma, septu
ransuersum. A. stomachus. B. Epar. C. splen. D. vesica bilis. E. ima ventriculi pars, portonatus.
H. monocolum intestinum. K. additamentum est grossi intestini in monocolum. F. Colon. I. Re
ctum. G. reliqua in œstina gracilia. A. venæ caux pars. BB. renes sunt. CC. testes sunt. D. venæ
seminariae. E. venæ albe. F. vesica. G. testiculi. H. epididimus, testium inuolucrum. II. glandulosa
partes vbi semen in virgam infunditur. K. vesicę collum. L. penis glans. M. venæ
caux truncus. N. Arteria aortæ pars ad crura. A

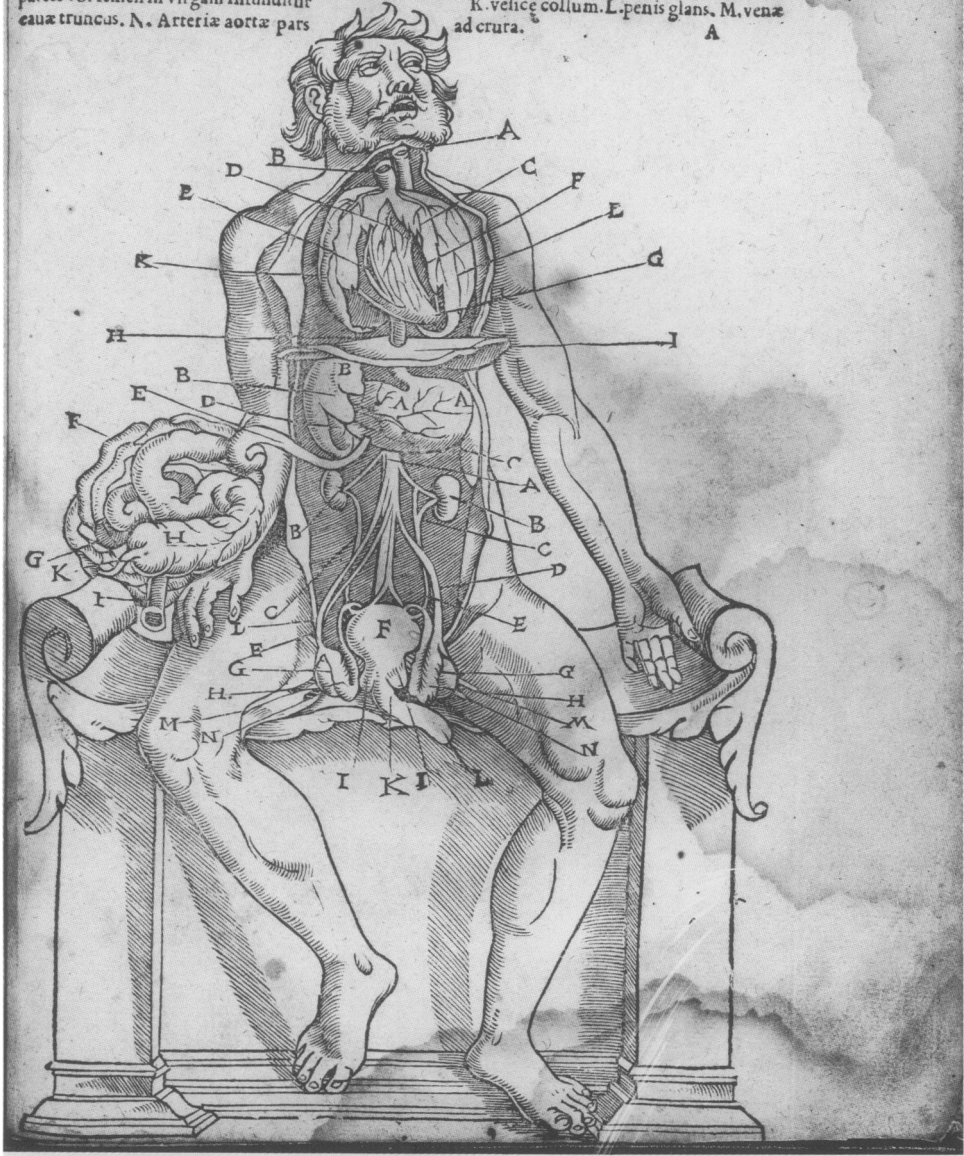


Figure 32: Walter Hermann Ryff, *Omnium humani corporis partium descriptio . . .*, Paris, J. de Gourmont, 1545. *Prima figura viri . . .* (fol. A2r), woodcut (Wellcome Library, London).

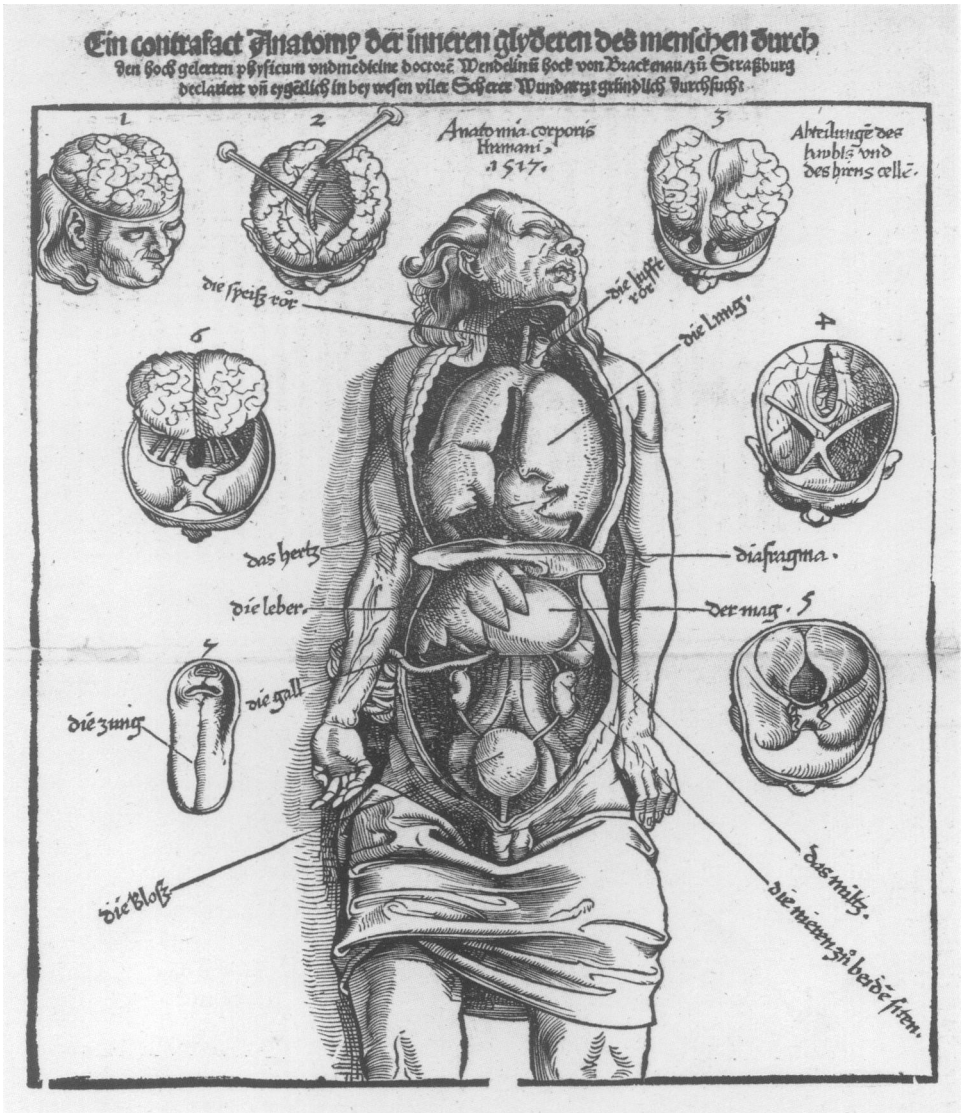


Figure 33: Hans Wechtlin (or Wächtlin), *Anatomia corporis humani*, Strasbourg, J. Schott, 1517, woodcut (Wellcome Library, London).

exclusively on illustrations and highlighted the need for iconographical material as an accompaniment to university manuals, which were mainly verbal. Ryff soon became aware of the demand for this kind of material, and he produced a printed work which, though inspired by the images of Vesalius, Dryander and Berengario, differed from them and from what I have called the “literal” plagiarisms of the *Tabulae* in a number of ways. The figures are a simplified, certainly less academic version of Vesalian images: where Vesalius had been concerned with representing some internal organs, the blood vessels and the reproductive organs, in order to achieve a legible pictorial transcription of Galenic physiology, Ryff wished only to give a general idea of the position of the organs and systems inside the body. By representing the whole body, lending somatic and at times emotional characteristics to the anatomical images (he drew for this on predecessors like Berengario), and enriching the illustration with architectural features—in short, by inserting in them elements that were not strictly of use to scientific communication—Ryff aimed to reduce the austerity and rigour of the *Tabulae* and to increase the pleasure that could be derived from the study of anatomy. The text is thus reduced to a bare caption in which each letter refers to the name in Latin, French or German—according to the edition—of the part of body, but omits the Greek, Arabic and Hebrew, which would have been of use only to scholars. The vernacular editions of Ryff’s *Anatomia*, published at the same time as the Latin ones, testify that the publishers (and presumably the author himself) were aware that its circulation might reasonably not be limited to the academic world—despite the fact that Ryff’s preface referred to his own work as a visual aid to Winther’s *Institutiones anatomicae*. Further proof of this is the Antwerp edition of Cornelis Bos and Antoine des Goys, which was published so that the reader (probably educated, but not necessarily specialist) “might get to know himself”.

Prints with Flaps: Types and Places

Of all the printed matter on the human body, surely the most interesting and strange—in terms of appearance as well as content—are the fugitive sheets with superimposed flaps. They first began to be published in 1538 (the year in which Vesalius’s sheets appeared) mostly in Germany but also in France, England, Flanders, Italy and even in Sweden and Bohemia. In most cases, the woodcuts were printed on two different sheets, one representing a man and the other a woman, in a seated position. Around the figures a text, in Latin or in the vernacular, gives the names of the parts of the body and a brief description of the organs and of their physiology. What is characteristic of these sheets, and unusual about them, is that one can lift up the figures’ torsos. The internal organs are printed on separate sheets of paper, cut and pasted together so that they in turn can be lifted up. The final layer represents the posterior side of the thoracic cage and of the spinal cord. This technique of illustration provided a virtual three-dimensional representation of the printed object and of the subject represented, and allowed the internal organs to be depicted in terms of the functional and spatial relationships between the physiological systems. In short, it translated on to paper the whole concept of anatomical dissection, mimicking the progressive unveiling of the body, from skin to guts.

Such sheets continued to appear until the end of the seventeenth century; the number of editions testifies to their prodigious commercial success, which was immeasurably greater

IN HAC SECUNDA FIGVRA ANATOMIAE HV
 mani capitis uides craneum denudatum ab exteriori cute & interiori mem-
 brana. A. itaq; crassiolem cutem ex qua capilli oriuntur nigris punctis ex-
 pressi, designat. B. sub ea cute lentor quidam mucosus est. C. panniculus est
 circūdans totum os capitis qui uocatur pericraneon. D. Craneum cum futu-
 ris, os frōtis. E. E. ossa parietalia. F. uertex. G. G. Lapidosa feu petrosa.

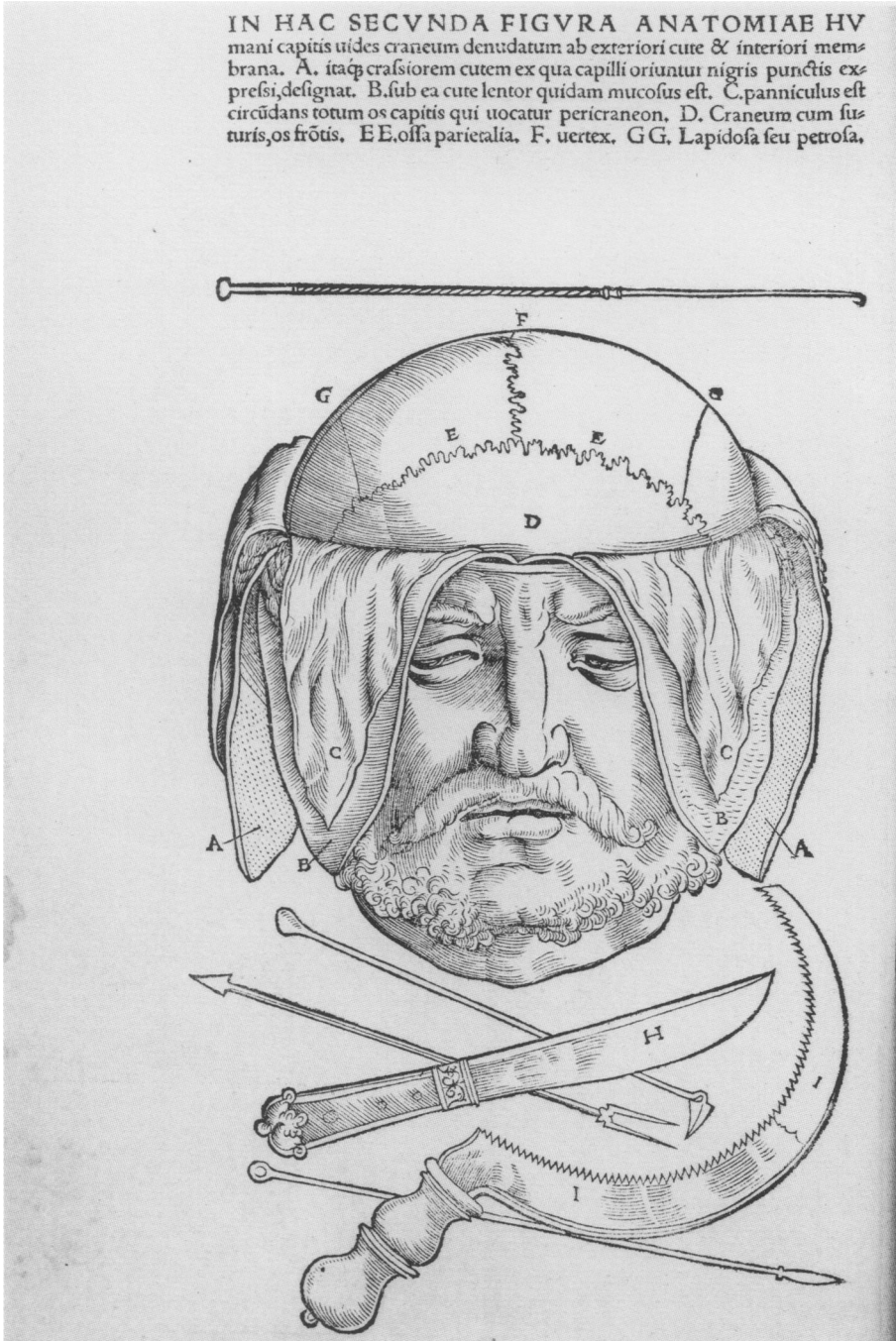


Figure 34: Walter Hermann Ryff, *Omnium humani corporis partium descriptio . . .*, Strasbourg, Balthasar Beck (alias Pistor), 1541. *Secunda figura anatomiae humani capitis* (fol. b1v), woodcut (from W. H. Ryff, *Omnium humani corporis partium descriptio . . .*, facsimile, Basel, Sandoz, 1954; photo: Wellcome Library, London).

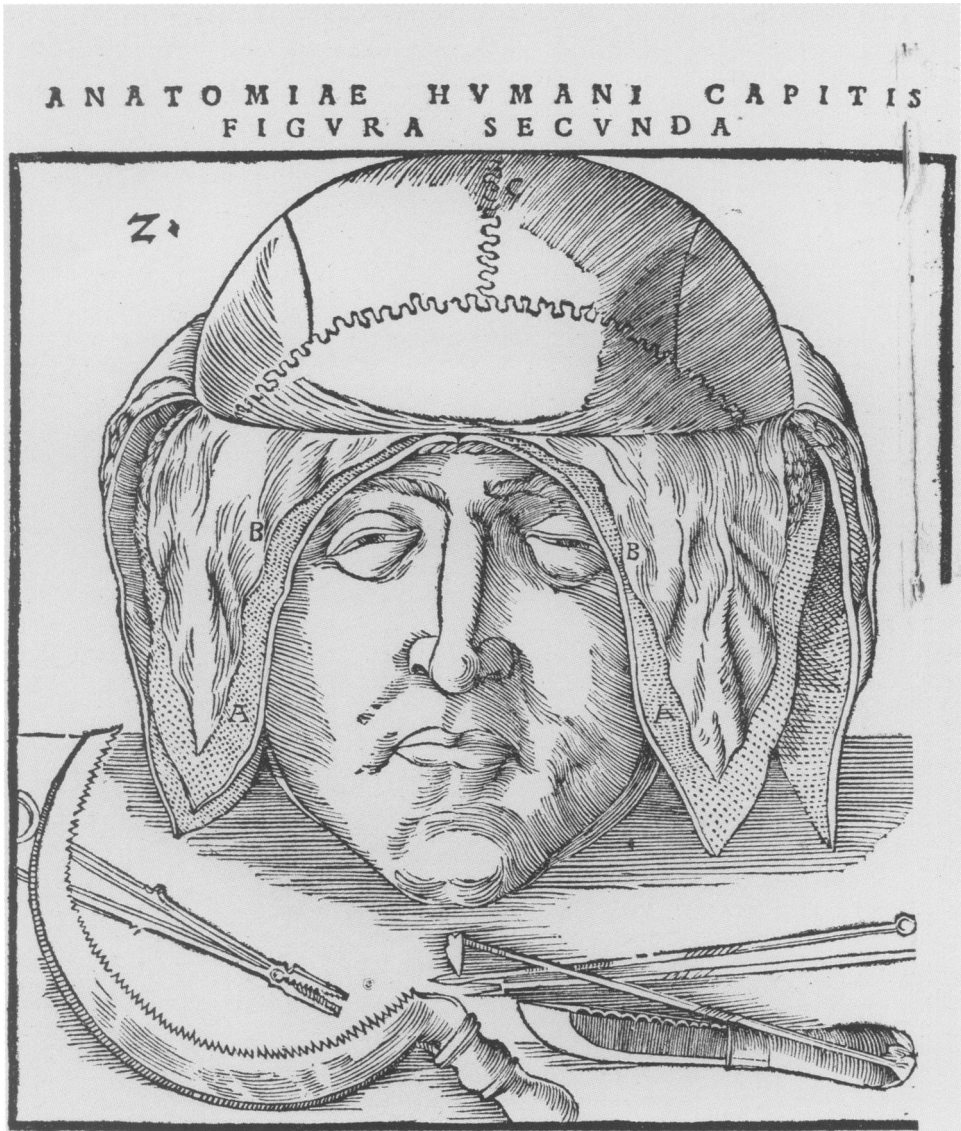


Figure 35: Johannes Dryander, *Anatomia capitis humani*, Marburg, E. Cervicornus, 1536. *Anatomiae humani capitis figura secunda*, (fol. B1r), woodcut (Wellcome Library, London).

Anatomical Fugitive Sheets

than that of any anatomical treatise: between 1538 and 1545, for example, there were at least twenty different editions in Europe. And Vesalius himself—usually so severe with plagiarists—used this technique of illustration in his *Epitome* and *Fabrica*, in what was an implicit recognition of its efficacy. Some of the images contained in Vesalius's compendium were printed—as indicated in the titles which accompany them as well as in instructions at the end—so that they could be cut out and pasted together to make a human figure, composed of superimposed flaps (Fig. 36).¹⁹

The first editions of the anatomical fugitive sheets with superimposed flaps were printed in Germany in 1538. Heinrich Vogtherr's Strasbourg edition (Cat. 1) and Jost de Negker's Augsburg one bear the same date (Cat. 2).²⁰ The representations of the female body are identical and each bears at the bottom the grant of imperial privilege. It does seem, though, that the right to publish these images was customarily passed on from one printer to the next. While in June 1539 de Negker printed a bilingual version of Vesalius's *Tabulae anatomicae sex*, with the illustrations recut, for the use of German students who had trouble with the Latin,²¹ in the same year Vogtherr twice printed a pair of fugitive sheets (Cat. 3 and 4). They were probably issued together with the booklet *Auszlegung unnd beschreibung der Anathomi, oder wahrhafften abconterfettung eynes inwendigen körpers des manns und weibes, mitt erklerung seiner innerlichen, gelider . . .* in which Vogtherr gives a short survey of human anatomy addressed to a popular audience. In this booklet, the author not only refers to his fugitive sheets, but also uses the same blocks to reproduce the organs that appear around the main figure in the loose sheets.²²

A text in German, the use of simple metaphors to explain the physiology, a terminology reduced to bare essentials, the very composition of the images—all this denotes that the public for Vogtherr's sheets, as well as for his anatomical booklet, was mainly a non-

¹⁹ For example, the heading of the penultimate page of the *Epitome*, in which the blood vessels and eleven other minor figures are represented, reads: "Figurae ad tabulam aptandam paratae, illi agglutinandam quae figurarum musculis ostendendis paratarum ultima seu quinta inscribitur sexta" (Fig. 21). Vesalius suggests that the reader of *De humani corporis fabrica* use some of the figures in a similar way (fol. m3). A copy of the *Epitome* with all the parts of the female figure pasted together is at the Library of the Karolinska Institute, Stockholm. See S. Lindberg, 'Mobiles in books', *The Private Library*, 1979, 3 ser., 2: 49–82, in particular pp. 71–2, figure on p. 78. Another is held at the Huntington Library.

²⁰ *Anathomia, oder abconterfettung eynes Mans Leyb, wie er inwendig gestaltet ist, . . . eynes Weybs leyb, wie er innwendig gestaltet ist.*, Strasbourg, 1538. See also Le R. Crummer, 'Check list of anatomical books illustrated with cuts with superimposed flaps', *Bulletin of the Medical Library Association*, n.s. 20: 131. The Augsburg edition of the anatomical woodcuts bears the same title, apart from a few minimal differences in spelling: *Anothomia, oder abconterfettung eines Weybes leyb, wie er innwendig gestaltet ist*. It is quite likely that, as is believed by many scholars, the 1538 editions—that of Vogtherr as well as that of de Negker—initially consisted of the female figure alone, and that only in the following year was the sheet representing the male figure published along with the female one, in Strasbourg. On de Negker's sheet, see E. Wickersheimer, 'Une gravure anatomique de Jobst [sic] de Negker (1538)', *Bulletin de la Société Française d'Histoire de la Médecine*, 1921, 15: 114–18.

²¹ On Vesalius's *Tabulae*, see C. Singer and C. Rabin, *A prelude to modern science: being a discussion of the history, sources and circumstances of the 'Tabulae anatomicae sex' of Vesalius* (Cambridge, 1946). On the plagiarism of Jost de Negker, see K. Sudhoff and M. Geisberg (eds), *Die anatomischen Tafeln des Jost de Negker, 1539*. On the plagiarisms of Vesalius see above pp. 46–58, and E. Turner, 'Les six premières planches anatomiques', H. W. Cushing, *A bio-bibliography*, and R. Herrlinger, *History*, pp. 121–31.

²² Strasbourg, Heinrich Vogtherr, 1539. See F. Muller, *Heinrich Vogtherr l'ancien* (Wiesbaden, 1997), nos. 226, 238 and E.15. This booklet has often been associated with the publication of fugitive sheets in Germany: it was printed anonymously in Strasbourg by Jacob Frölich in 1544, in Nuremberg by Hans Guldenmundt in 1539, 1541 and 1556, and again by Hans Weygel in 1563, 1567 and 1570.

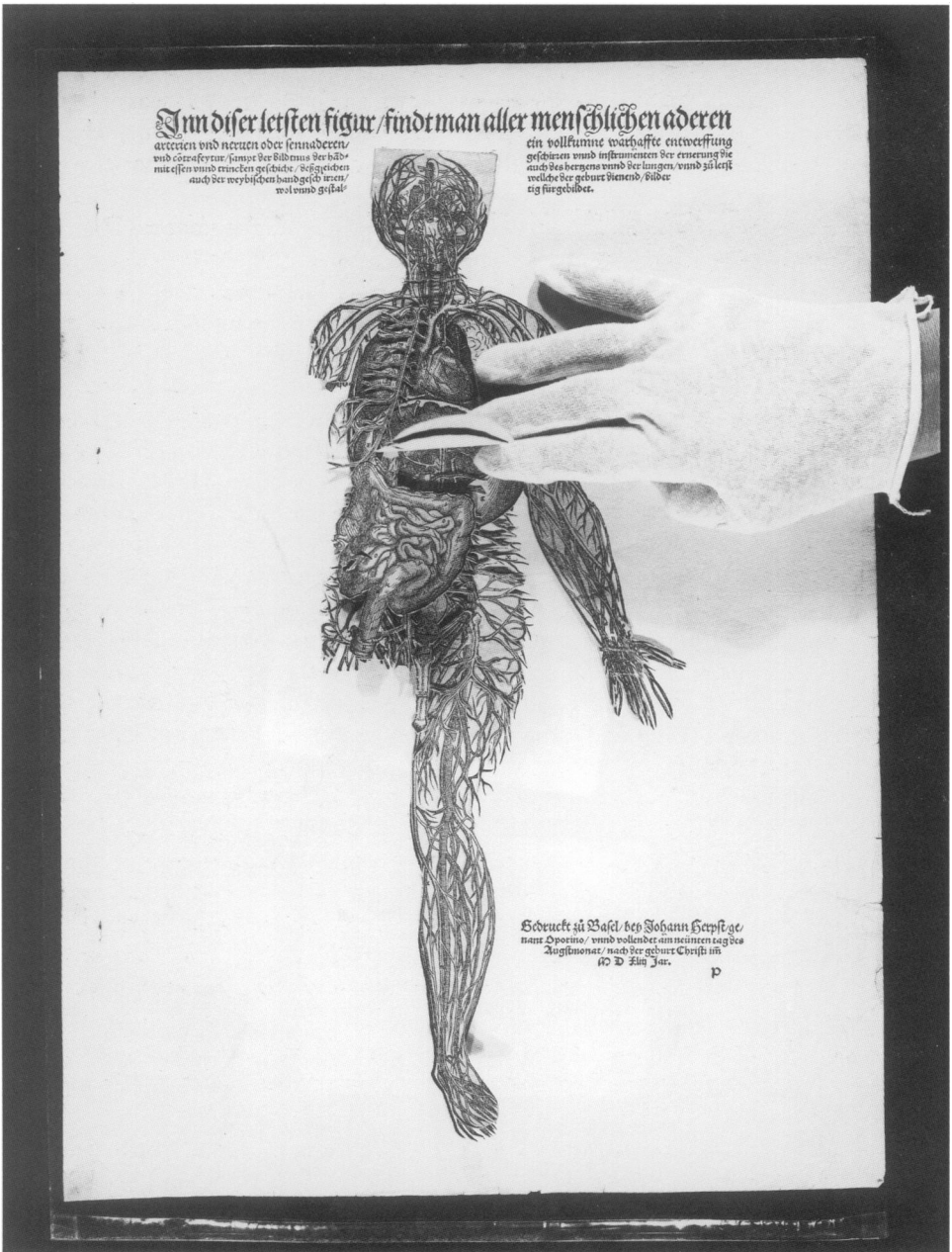


Figure 36: Andreas Vesalius, *Von des menschen Cörper Anatomey, ein kurtzer aber vast nützer Ausszug . . .*, Basel, J. Herpst (alias J. Oporinus), 1543. *Inn diser letzten figur . . .*, woodcut figures pasted together. (By permission of the Huntington Library, San Marino, CA.)

Anatomical Fugitive Sheets

specialist one, and definitely not academic. That he intended to keep the production costs down, and hence the retail price too, can be gleaned from the fact that the male and female figures were evidently made from the same drawing and printed from the same blocks. The printer only substituted the section of the block where the head appears and changed the flaps on which the thorax and reproductive organs are printed. On each organ is inscribed its name, mostly in its Latin form, but a few organs are reproduced a second time, inserted within the text which surrounds the main figure; in such cases the name is translated into the vernacular, and given along with some basic anatomical-physiological points, written by Vogtherr himself. When Vogtherr temporarily left Strasbourg in 1544 to spend a couple of years in Zürich, he very probably left the blocks of his fugitive sheets and of the anatomical booklet with Jacob Frölich. The latter used them, in fact, that very year (Cat. 20) and in 1551–52 he published a Latin version of them (Cat. 23); he coloured both editions, relieving their austerity.²³ Analysing the composition of the text, the spelling adopted, the letter-types used and the cutting of the figures, two other editions—probably published around 1540—can be attributed to either Vogtherr or Frölich (Cat. 13 and 14).

Hans Weygel, a Nuremberg woodcut engraver and a print merchant, cut new blocks, copying those of Vogtherr, though the result was inferior in quality to the original. He published them, in their coloured version and in German, in 1550 (Cat. 22), 1556 (Cat. 24), and 1564 (Cat. 29).²⁴ The year before this last edition he had also published the *Auszlegung und beschreibung der Anatomie, oder Warhafften abconterfetung eines inwendigen Cörpers des Mans und Weybes, mit erklerung seiner innerlichen glider . . .*, and a copy of this booklet and of the 1564 Weygel edition of fugitive sheets bound together was in the library of Rieter von Kornberg, senior, in the second half of the sixteenth century (Figs. 37 and 38).²⁵ The wood-blocks he made were then used by Matthes Rauch for a later edition, in 1584 (Cat. 31).²⁶ Other copies of Vogtherr's anatomical sheets were printed at the turn of the century by Konrad Corthois in Frankfurt (Cat. 41) and by Georg Lang in Nuremberg (I have counted five editions by Lang: in 1585 (Cat. 33), 1588 (Cat. 39), 1594 (Cat. 42), and 1605 (Cat. 45) and another edition surviving only in a mutilated copy with the imprint missing now at the Wellcome Library (Cat. 60)), the latter from blocks that, again, had probably been prepared by or had belonged to Hans Weygel.²⁷ These later editions too were often coloured and always printed in the vernacular.

Vogtherr's images were not, however, the only ones to be reproduced and distributed in the sixteenth century. From 1539 onwards, similar anatomical sheets made of cut-out,

²³ The copy of the 1544 edition at the Wellcome Library bears the same title as that of the 1539 edition. The Latin edition of 1551–52 is also described in L. Choulant, *History*, p. 159.

²⁴ The 1556 edition is described by L. Choulant, *History*, p. 159. The female figure of the 1564 edition is at the Wellcome Library.

²⁵ This copy was described by H. P. Kraus in *Illustrated books from the XVth and XVIth centuries. Cat. 121* (New York, 1968), no. 29, and was acquired in June 1972 by the National Library of Medicine, Bethesda.

²⁶ L. Choulant, *History*, p. 159.

²⁷ The descriptions of the Corthois and of the Lang 1588 editions can be found in L. Choulant, *History*, pp. 159–60. The first two Lang editions are mentioned in Le R. Crummer, 'Early anatomical fugitive sheets', p. 207. A copy of the 1585 edition is in Nuremberg (on this edition, see K. Jurina, *Vom Quacksalber zum Doctor Medicinae. Die Heilkunde in der deutschen Graphik des 16. Jahrhunderts* (Cologne and Vienna, 1985), p. 45, fig. 74); a copy of the 1605 edition is in the Medizinhistorisches Museum in Zürich.

Auszlegung vnd beschreyung
der Anatomii/oder Warhafften abcon-
terfetzung eines inwendigen Cörperis/ des
Mans vnd Weybes/ mit erklerung seiner in-
nerlichen glieder/ Wie vnd wo hin ein jedes
von Gott erschaffen vnd geord-
net/ das menschlich leben
zu auffenthaltten.



Dem gemeinen Menschen zu einem
kurzen vnd verstandlichen bericht

M. D. LXIII.

Gedruckt zu Nürnberg/ durch Hanns
Weygel/ Formschneider.

Figure 37: [H. Vogtherr], *Auszlegung und beschreyung der Anatomii . . .*, Nuremberg, Hans Weygel, 1563. Title-page (The National Library of Medicine, Bethesda, MD).

superimposed woodcuts and short explanatory texts began to be published repeatedly, in Germany and in other European countries. A pair of anatomical sheets very similar to those I have been describing was printed in Nuremberg by Hans Guldenmundt probably in 1539, if not in 1538 (Cat. 5). The text is in German, with figures inserted in it, as with Vogtherr's sheet; the main figures, equipped with one liftable flap only (the torso), are identifiable as Adam and Eve from the presence of an apple and of the fig leaf covering the genitals.²⁸ This edition was again associated with the publication of the booklet *Ausslegung und beschreybung der Anatomi, oder warhafften abconterfetung eines inwendigen cörpers des Manns und Weybes, mit erklerung seiner innerlichen gelider*, . . . (Gedruckt zu Nürnberg durch Hans Guldenmundt, 1539).

Guldenmundt's sheets were copied and engraved, this time on copper, by Cornelis Bos in Antwerp. There they were published three times between 1539 and 1540 (Cat. 8, 9 and 10).²⁹ Still in Antwerp, Sylvester van Parijs prepared, presumably between 1540 and 1545, a new pair of anatomical figures with superimposed flaps (made out of six or seven layers) which in iconographical terms differed, in some respects, from the previous examples. He published four editions in those years—one in French (Cat. 17), another in Flemish (Cat. 18), a bilingual Latin-German edition (Cat. 19) and a Latin one (Cat. 16).³⁰

A pair of sheets, one showing Guldenmundt's male figure, the other Vogtherr's female one, was published in Paris first by Jean Ruelle (a Latin edition came out in 1539 (Cat. 6), and two further editions, one in Latin (Cat. 11) and another in French (Cat. 12), appeared in 1540), and again later by Alain de Matonnière (in French, probably in 1560), a *tailleur d'histoire* and print merchant on the rue de Montorgueil, which was then the centre for the production of popular prints (Cat. 26).³¹

²⁸ I have not been able to trace any copy of these woodcuts and I rely on the description given by Choulant. The dating of Guldenmundt's sheets was suggested first by L. Choulant (*History*, pp. 156–7) and further discussed by S. Schéle, *Cornelis Bos*, pp. 149–55 in particular. Two sixteenth-century drawings with superimposed flaps reproducing Guldenmundt's woodcuts are now at the Bibliothèque inter-universitaire de Médecine in Paris (Cat. 62).

²⁹ Bos's engravings were printed from two different pairs of plates, clearly executed by the same artist during one short period of time. Two Flemish editions (1539 and 1540) are signed with the monogram C.B., while the Latin edition bears the caption: "Scvlpsit Me. Cornelius Bosch. an. M.D.XL" and "Antverpiae Apvd Ioannem Crintum. An. M.D.XL". See S. Schéle, *Cornelis Bos*, esp. pp. 149–55.

³⁰ I have seen two copies of Sylvester's unsigned and undated bilingual edition of anatomical sheets: one at the Taubman Library (University of Michigan) and another at the Vatican Library in Rome. On this edition see L. H. Wells, 'A remarkable pair of anatomical fugitive sheets in the Medical Center Library, University of Michigan', *Bulletin of the History of Medicine*, 1964, **38**: 470–6. Wells was the first to suggest that the male figure with Latin text and the female figure with German text were published together, as part of the same edition. His hypothesis has been confirmed by the discovery of an identical pair in the Vatican Library. The Flemish edition bears the following caption in the cartouches: "Geprint Tantwerpen by Silvester van Parijs figuresnijder op de Lombaerde veste int root huys". There is a copy of it at the U.S. National Library of Medicine, Bethesda (L. H. Wells, 'The "Sabio" and "Sylvester" families of anatomical fugitive sheets: note on a pair of sheets in the National Library of Medicine', *Bulletin of the History of Medicine*, 1966, **40**: 467–75). A copy of the French edition has been found at the University Library of Mons by E. Cockx-Indestege, 'Twee anatomische planodrukken met beweegbare onderdelen, uitgegeven bij Silvester van Parijs te Antwerpen (ca. 1540–50)', *Scientiarum Historia*, 1971, **13**: 92–102. There is no information about the location of the sheets with a Latin text for both figures, recorded and described by L. Choulant, *History*, pp. 161–2. Choulant does not give any institutional location for them, but probably the art historian J. D. F. Sotzmann (1781–1866), who according to Choulant reported them to him, was also the owner.

³¹ In Ruelle's 1539 Latin edition, the male figure bears the title: "Interiorum corporis humani partium viva delineatio"; the female one reads: "Perutilis anatomes interiorum mulieris partium cognitio, ac earumdem situs,



Die Mutter ist ein für geordnet faß
 von Gott / darin die Kindlein em-
 pfangen/erneret/ vnd zu eines menschen Körper for-
 micet werden. Die Mutter ist von starcken fellin
 gemacht/rund mit ein langen hals/auch mit zwey
 en starcken fleysch in flügeln oder hörnern zu beyde
 seytten eingehenckt/vnd des schweren lastis des kind
 leins vnd der secundina zutragen/ das sie nit vnder
 sich sincken mag. Inwendig im obern teyl der Mut-
 ter ist ein luecklöcher fleysch/voll Geblüts/ welches
 Carnosa genant wirt / durch welches zwo adern vñ
 den Brüsten des weybs gehen / dem Kindlein ein
 Milich vñ narung in Mutter leyb zu bringen/ die
 Mutter ist eingantz hert versectlossen vass / gleich
 einem Deckel/ jr mundloch schleuset sich so velt/ das

einer einen finger darein kaum zwingen mag/vnd in der zeit der begird/wol-
 lusts/vñ kurzweil/ so sie mit dem man hat/ öffnet sie sich den Weyblich en vñ
 Mänlichen samem in sich zu ziehen vnd zu empfangen. Nach solcher begird
 schleust sie sich widerumb auf das festest zu/ Der mund der Mutter hatt
 auch ein rörlein/das ein wenig in dem hals / oder rören vor der Mutter sur-
 gehet/Aber vor demselbigen rörlein oder munde der Mutter sind außwend-
 ig zu beyden seytten zwey fesslein oder Hoden in dem Weyb/welche vasa sper-
 matica genant/zu nechst an der Mutter angehenckt welche zwo adern vñ
 geng/von der ader Kilis/vnd Adorki/nechst bey den Nieren gewinnen/als
 da das geblüt durch sondere adern von der Kilis/vom Hirn vnd Herzen em-
 pfahen vnd in die vass der natur führen/vnd alda in dem Man in einem weiß-
 sen/vnd in einem Weyb in einem leibfarben samem/oder sperma verwandelt
 wirt. Die zwo adern so von der Kilis in die vasa spermatis gehen/die haben
 ire hab an den beyden fleysch in flügeln/oder Cornea/durch die sie herab gehn
 bis in die fesslein der natur / die selbigen fesslein der natur / darinnen schütet
 sich in der zeit der Weiblich en kurzweil/nit vornen sonder inwendig gerad
 vor der Mutter mundt/von beyden seytten zusammen.

Aber dz fesslein Weiblicher franckheyt/oder des blütflus/Menstrualis
 genandt/ist noch vnderster oder niderer/ an dem hals der Mutter/auff der
 rechten seytten angehenckt/welche iren vrsprung von der Lebern hat auch ein
 ader/wie hie in der Anatomie clerlich angezeygt / von der Lebern bis in das
 fesslein/das geblüt Menstrualis von der Lebern darein führend/ vnd zu seiner
 zeit sich alda außschütet/in dem hals vor der Mutter.

Die fesslein der natur des Mans/ sind inwendig angehenckt/ wie man
 wol weyß/vnd hat gleich dem Weyb seinen vrsprung/jedoch die selbig adern
 führen den samem durch ein sonder ror in des Mans ruten/an d' Blasen rören
 bis zum fordersien aufgang.

Dijer

Figure 38: [H. Vogther], *Auszlegung und beschreybung der Anatomie . . .*, Nuremberg, Hans Weygel, 1563. Woodcut figure of the matrix and related text (The National Library of Medicine, Bethesda, MD).

Two editions of fugitive sheets which copy Guldenmundt's figures were published in English (Cat. 15 and 21) and another—in Prague, by Michael Peterle (Cat. 27)—in German.³² The English sheets do not in their present state bear any bibliographical indication, but it is likely that the sheet representing the female figure, and engraved on copper, was published in about 1540 by the London printer Thomas Raynalde (Cat. 15). An inventory of his effects, drawn up in that year on the occasion of legal proceedings in which he was involved, reveals that Raynalde owned two “ffygures graven in copper the one the man the other woman with their Intryales thereto belonging”.³³ Raynalde also published, in that same year, the first English-language work on obstetrics, *The byrth of mankynde*, illustrated with eighteen copper engravings.³⁴ The 1545 edition of this book contains two engravings which differ from those in the earlier edition. Both images represent the male torso, and also appear in the *Compendiosa totius anatomie delineatio* by Thomas Geminus published, likewise, in 1545 (Fig. 39). There might well have been, then, some collaboration between Raynalde and Geminus, which could have extended beyond this one instance so that the authorship of the fugitive sheets might be attributed to Geminus.³⁵

Other elements, apart from the link between Geminus and Raynalde and stylistic considerations, seem to confirm this attribution: first, there is evidence of Geminus's ongoing interest in the genre of fugitive sheets and in its clientele of, essentially, surgeons and barbers. Around 1546, he produced a print on copper, signed “Thomas Geminus physition”, representing the points on the body at which one could let blood. The image,

figura, numerus, positio, haud iniucunda cognitu”. I have seen only the female figure from the later, 1540 Latin edition. The Wellcome Library has a coarsely coloured copy of the French edition of Alain de Matonnière. A copy of Ruelle's French edition is bound with T. Geminus, *Compendiosa totius anatomie delineatio* (London 1545), in the Royal Library in Stockholm (see S. G. Lindberg, ‘Chrestien Wechel’, especially pp. 68–71). The male figure is an exact copy of the Adam of Guldenmundt-Bos, without the apple attribute.

³² For the English editions, see *A catalogue of printed books in the Wellcome Historical Medical Library: Books printed before 1641* (London, 1962), nos. 290.6 and 291.7. The female figure (Wellcome 290.6), a copperplate engraving, was found in a fifteenth-century manuscript containing Henri de Mondeville's *Chirurgia* (Wellcome ms. 564) and is now mounted separately. The letterpress text concludes with a reference to a male figure of which, as far as is known, no copy survives. The male figure numbered 291.7 in the Wellcome catalogue was also formerly mounted in ms. 564. It is a woodcut and bears the caption: *The Anathomye of the inwarde Partes of man lvely set fourth and dylygently* (London, c.1545?). The Prague edition is reported by S. G. Lindberg, ‘Chrestien Wechel’, p. 71.

³³ The attribution to Raynalde was made by C. D. O'Malley, in his ‘Introduction’ to T. Geminus, *Compendiosa totius anatomie. A facsimile of the first English edition of 1553 in the version of Nicholas Udall*, (London, 1959), pp. 9–39. The inventory of the London printer was published for the first time by H. R. Plomer, ‘Notices of English stationers in the archives of the City of London’, *Transactions of the Bibliographical Society*, 1900, 6: 20–3. The attribution is repeated in the Wellcome Catalogue no. 290.6.

³⁴ The complete title is *The byrth of mankynde newly translated out of Laten into Englysshe*, London, T.[homas] R.[aynalde], 1540. This is a translation of E. Rösslin, *Der Swangern Frawen und Hebammen Rosegarten*, originally published in Strasbourg by M. Flach in 1513. This text was one of the greatest successes of sixteenth-century printing in western Europe. About the English editions, see Sir D'Arcy Power, ‘The birth of mankind or, the woman's book: a bibliographical study’, *The Library*, 1927, 4th series, 8: 1–37 (also published as a pamphlet of 58 pp.)

³⁵ This hypothesis was put forward by Le Roy Crummer, ‘The copper plates in Raynalde and Geminus’, *Proceedings of the Royal Society of Medicine*, 1927, 20: 53–6, and C. D. O'Malley in the ‘Introduction’ to T. Geminus, *Compendiosa*, pp. 15–17. The complete bibliographical reference to Geminus's anatomical work is *Compendiosa totius anatomie delineatio, aere exarata per Thomas Geminum* (London, 1545). On Geminus, his collaboration with Raynalde and his anatomical book, see also A. M. Hind, *Engraving in England in the sixteenth and seventeenth centuries: a descriptive catalogue* (Cambridge, 1952), vol. 1, pp. 39–58.

Paper Bodies

called *A figure for necessary lettynge off bloude* was printed by John Herford with letterpress text (Fig. 40).³⁶

Further, when in 1559 he republished the 1553 English translation of his *Compendiosa totius anatomie delineatio* with a new dedication to Queen Elizabeth and a new colophon, Geminus bound into each copy a fugitive sheet with superimposed flaps that either he himself or Gilles Godet had printed, together with two leaves of letterpress text (Cat. 25). The male and female figures are reproduced on a single sheet bearing the monogram R.S.³⁷ This fugitive sheet was subsequently also reprinted several times in France and in England. I have been able to identify three Paris editions (one, undated, by Mathurin Biesmon (Cat. 59), another by Jean de Gourmont (Cat. 32) dated 1585, and another published by Michel de Matonnière in 1613 (Cat. 49)) and four London editions, respectively in 1562 or 1563 by Gilles Godet (Cat. 28), in 1599 (Cat. 43), around 1656 by Thomas Warren (Cat. 52), and in 1658 by Peter Stent (Cat. 53).³⁸

A pair of sheets whose iconography differs from that of the others was repeatedly published in Venice. It is, to my knowledge, the only pair of anatomical figures with superimposed flaps to have been published in Italy. The first edition was in Latin and was published in 1539, bearing the names of Gianantonio dei Nicolini da Sabbio, printer, and Gianbattista Pederzani, bookseller and patron of the enterprise (Cat. 7).³⁹ A new Latin edition of da Sabbio's figures was published anonymously in 1587 (Cat. 38), while Sebastiano Combi printed one in Italian in 1611 (Cat. 46), reprinted by Giovanni Battista

³⁶ The title of the fugitive sheet is: *A table instructive whan and how a man may cōnyngly let bloude of all the necessary veynes of mans body very profitable for all Chirurgeons and Barbers*, Imprinted at London in Aldersgate strete, by John Herforde. There is a copy at the National Library of Scotland, Edinburgh (STC no.11718.9).

³⁷ The attribution of this anatomical fugitive sheet is very uncertain. It may be attributed to Geminus as it copies his feature of the basin with water to swell the veins for bloodletting. Moreover the text used by Geminus in his *A figure for necessary lettynge off bloude* has been reprinted in one of the texts accompanying the woodcut. None the less, Geminus was not a wood-block cutter. A woodcut entitled 'The anatomie of the inward partes of man and woman' was recorded under Godet's name between 1562 and 1563 in the register of the Company of Stationers of London (*A transcript of the registers of the Company of Stationers of London, 1554–1640 A.D.*, ed. E. Arber (London 1875–94), vol. 1, pp. 211–13) (Cat. 28). In this year, corresponding with Geminus's death, Godet could have issued the fugitive sheet independently.

³⁸ A copy of the Mathurin Biesmon edition is at the Bibliothèque nationale, Cabinet des Estampes, Paris. On Jean de Gourmont's edition, see L. Choulant, *History*, p. 160. Peter Stent's edition is reported in *Peter Stent, London printseller, circa 1642–1665: being a catalogue raisonné of his engraved prints and books with an historical and bibliographical introduction*, ed. A. Globe (Vancouver, 1985), p. 23 and Cat. no. 533 (a copy is located at the Library Company of Philadelphia). Warren's edition is reported as "The anatomy of man and woman" in the list of the works he deposited at the Stationers' Company in 1646 (see *A transcript of the registers of the Worshipful Company of Stationers from 1640–1708 A.D.*, ed. G. E. B. Eyre (London, 1913–14), vol. 2, pp. 46–8). A fragment of the text of the edition published in London in 1599 is in the Wellcome Library (no. 7211.15a).

³⁹ This edition was reported in A. von Haller's *Bibliotheca anatomica* (Zurich, 1774–77), reprint, ed. G. Mann (Hildesheim and New York, 1969), vol. 1, pp. 179 and 333, then described by L. Choulant, *History*, p. 156, and by L. H. Wells, 'The "Sabbio" and "Sylvester" families'. One copy of the da Sabbio sheets appeared in a series of booksellers' catalogues (N. Rauch, *Livres précieux*, Geneva, 1961; A. Brioux, *Sciences anciennes*, Paris, 1961; E. P. Goldschmidt and Co., *Catalogue 127. Medicine and science*, London, 1965, and *Catalogue 251*, London, 1980) and is now at the Nihon University Medical Library in Tokyo. Another copy, bound inside J. de Valverde, *Vivae imagines partium corporis humani* (Antwerp, 1566), recently acquired by the Wellcome Library, is described and discussed in Robin Halwas Ltd., *Catalogue 3. Illustrated and other rare books 16th–19th centuries*, London, 1995.

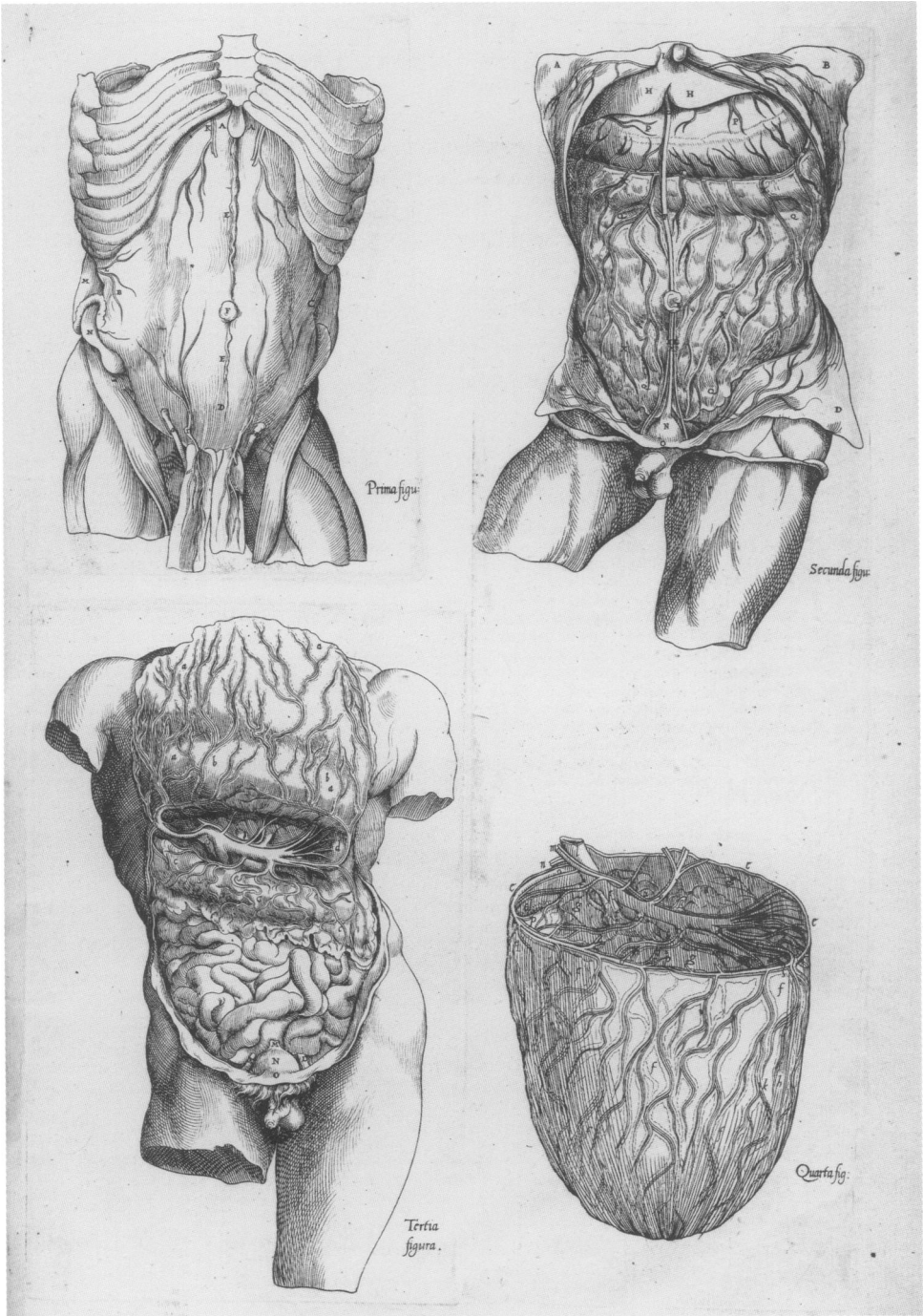


Figure 39: Thomas Geminus, *Compendiosa totius anatomie . . .*, London, J. Herford, 1545. *De organis nutritioni . . . dedicatis. Prima[-quarta] figura.* (Plate following sig. F3), engravings (Wellcome Library, London).

Combi in 1638 (Cat. 51).⁴⁰ Unlike the fugitive sheets described up until now, those of da Sabbio-Pederzani betray, in some of their iconography and in parts of the text, the influence of Vesalius's *Tabulae*, and thus of a more established scientific tradition.

Finally, in 1613, there appeared, in two similar but slightly different editions, a group of three fugitive sheets with superimposed flaps, engraved on copper, which was to have an immense publishing success in the seventeenth and eighteenth centuries: the *Visio Prima* shows the male and female figures together, while the *Secunda* and *Tertia* represent respectively the man and the woman (Cat. 47 and 48). Some indications in the first sheet do, however, make it possible to identify the authors: a portrait with the caption "I. R. inventor" and "L. K. sculptor" on the bottom left, "Stephan Michelspacher, excudit" on the bottom right. The first designates Johann Remmelin, doctor, anatomist and mathematician from Ulm; the second, Lucas Kilian, artist and copper engraver from Augsburg; the third, a printer active both in Ulm and in Augsburg. The *Catoptrum Microcosmicum*—this is the name of the work in its first edition—was apparently first issued without any text or captions related to the letters that appear in the figures. All editions of these sheets appeared with the sole name of Michelspacher, without any mention of the author apart from the initials: a quarto companion volume contains the *Elucidarius, tabulis synopticis, Microcosmici laminis incisi aeneis . . .* dated 1614 with Remmelin's name in an anagram at the end, and the text *Pinax microcosmographicus* dated 1615.⁴¹ The engravings and the two texts were, finally, published together for the first time and with the full name of the author, Johann Remmelin, in 1619 in Augsburg, by David Franck, although the name Michelspacher continues to appear on the first plate (Fig. 41). In his letter to the reader, Remmelin explains that the figures had been published previously without his knowledge, and that he had designed these images solely for personal use. It was only on the insistence of friends and colleagues who had seen and used them in the 1613 edition that he had been persuaded to reprint them, this time in his name and with the necessary corrections, so that they would be available to whoever needed to consult them.⁴² Copies and adaptations of the images of the *Catoptrum* were then published many times well into the middle of the eighteenth century. They were published usually as a folio volume containing the engravings and the texts in Latin as

⁴⁰ The library of the College of Physicians in Philadelphia has a copy of the 1587 edition. On this, see W. B. McDaniel, 'Two anatomical fugitive sheets', *Transactions and Studies of the College of Physicians of Philadelphia*, 1939, 4 ser., 6 (4): 341–3. On these Venetian editions, see W. B. McDaniel, 'More about "Eve"', *College of Physicians of Philadelphia. Fugitive Leaves from the Library*, 1962, n.s. 56: 167–8. The female figure in Sebastiano Combi's edition is reproduced in Le R. Crummer, 'Early anatomical fugitive sheets', p. 188. For a comparison of da Sabbio's and Sylvester's editions, see L. H. Wells's article, 'The "Sabbio" and "Sylvester" families'.

⁴¹ There are copies of seven different editions at the library of the College of Physicians in Philadelphia: 1613, 1614, 1615, 1639, 1661, 1702, 1744. Other editions, from 1619, 1632, 1660 (two different editions—one from Augsburg, the other from Frankfurt/Main) and 1667 are at the Wellcome Library. See W. Pfeilsticker, 'Johannes Rümelin', *Sudhoffs Archiv für Geschichte der Medizin*, 1929, 22: 174–88 and 382–92, and W. B. McDaniel, 'The affair of the "1613" printing of Johann Rümelin's *Catoptron*', *Transactions and Studies of the College of Physicians of Philadelphia*, 1938, 4 ser., 6 (1): 60–72. More recently, and for a complete—although not exhaustive—bibliography of Remmelin's work and editions, see K. F. Russell, *A bibliography of Johann Remmelin the anatomist*, East St. Kilda (Austr.), 1991.

⁴² K. F. Russell, *A bibliography*, pp. 1–4.



Figure 41: Johann Remmelin, *Catoptrum microcosmicum* . . . , Augsburg, D. Franck, 1619. Title-page (Wellcome Library, London).

Anatomical Fugitive Sheets

well as in various translations, in Germany, Holland, France, Sweden, Italy.⁴³ There are also extracts: the *Anottatione anotomica delle due cavità, cioè spirituale, et naturale, con le parti della generatione della donna. Estratte del Catoptro Microcosmico di Giovanni Ramellino Svevo Anotomico tradotte dalla lingua latina nella volgare* published as a broadsheet in Milan (1666) (Cat. 56), as well as a pair of French sheets.⁴⁴ Also partly inspired in their anatomical content and method by R Emmelin are the four engravings known as *The Four Seasons*, now in the Trent Collection at Duke University. These sheets with superimposed flaps, probably etched in Germany or Flanders around 1680, each display a different season and various associated scientific, philosophical and moral matters (Cat. 57).⁴⁵

⁴³ For an account of the editions of the *Catoptrum* and for a comparison between them, see K. F. Russell, *A bibliography*, in particular pp. 20–31 and Appendix 4, ‘Detailed description of editions’.

⁴⁴ The Italian sheet has been described by U. Calamida, ‘Tavole anatomiche volanti a piani sovrapposti del Secolo XVII’, *Atti del III Congresso Nazionale della Società Italiana di Storia delle Scienze Mediche e Naturali (Venezia 1925)*, (Siena, 1926), pp. 133–9. Crummer (1923) p. 208 described and reproduced (fig. 8 on p. 199) a later edition, Venice, 1683, in the Biblioteca Marciana, Venice. A pair of seventeenth-century French sheets entitled *Abregé de l’anatomie de la femme* and *Abregé de l’anatomie du corps humain* is in the Waller collection at the University of Uppsala (Waller 7881–2). Each consists of an engraved plate and two leaves of letterpress text, without imprint or date. A female sheet, possibly identical, is in the British Library, bound with a copy of R Emmelin’s *Catoptrum microcosmicum*, 1639 (Tab.583.f.45). The Hardin Library for the Health Sciences of the University of Iowa has a similar undated male sheet entitled *Anatomie du corps humain*, Paris, Gerard Jollain (Eimas 457). An undated bloodletting sheet, entitled *Κατοπτρον. Speculum venarum, et arteriarum. Le miroir des veines, et arteres*, Paris, Jollain, has recently been acquired by the Wellcome Library and may be related: it has a figure resembling that in the Moneta sheets (Cat. 54–55) but a shorter text in Latin and French. It has not been possible to include these sheets in the Catalogue.

⁴⁵ On these engravings, see H. F. J. Horstmanshoff, ‘The mysteries of the Four Seasons. The Hippocratic tradition in the 17th Century. An interim report’, in R. Wittern and P. Pellegrin, *Hippokratische Medizin und antike Philosophie: Verhandlungen des VIII. Internationalen Hippokrates-Kolloquiums in Kloster Banz/Staffelstein vom 23.–28. Sept. 1993* (Hildesheim, Zürich and New York, 1996), pp. 545–59.