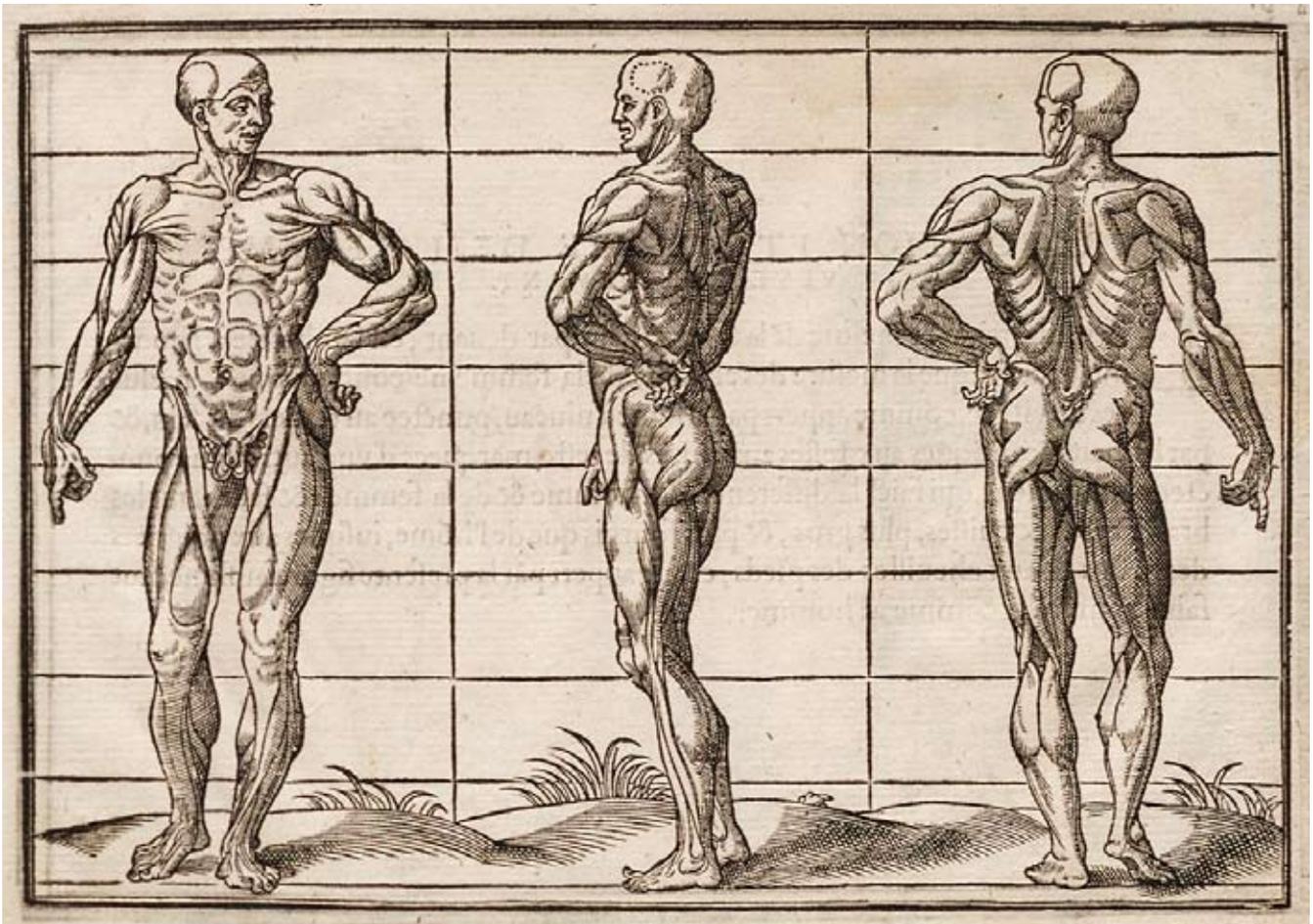


*The Body Inside and Out:
Anatomical Literature and Art Theory*

National Gallery of Art

July 24, 2010 – January 23, 2011





Sir Charles Bell, 1774–1842, *Essays on the Anatomy of Expression in Painting*, London, 1806, engraving, David K.E. Bruce Fund (no. 17)

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During the Renaissance, a new focus on the science of anatomy came to light. Artists and physicians worked together and formed partnerships: Leonardo and Marcantonio della Torre, Michaelangelo and Realdo Columbo, and perhaps most famously, Titian and Andreas Vesalius. The artist's ability to accurately render the anatomist's findings—and then for these images to be reproduced and dispersed to a scattered audience through the relatively recent innovation of print—was instrumental in ushering in a new age of observational science.

The humanist movement introduced greater realms of possibility in the arts and the sciences, including the study of anatomy. This new focus on the human body also had important implications for

the study of art. Many artists witnessed or participated in dissections to gain a better understanding of the proportions and systems of the body. Detailed treatises on human proportion and beauty were published by artists and scholars such as Albrecht Dürer and Juan de Arfe y Villafañe; drawing and painting manuals soon included chapters on proportion and anatomy as well. Eventually medical works such as Vesalius' *De Humani Corporis Fabrica* were adapted specifically for use by artists.

THE ART OF DISSECTION



1 Crispijn van de Passe I, c. 1565–1637, *Academia, sive, Speculum Vitae Scolasticae*, Utrecht, 1612, engraving and letterpress, David K.E. Bruce Fund

The first recorded public dissection occurred in 1315 in Bologna. By the seventeenth century universities across Europe were building anatomical theaters such as this one at Leiden University, where medical students and artists alike could observe anatomists dissecting cadavers (usually those of executed criminals).

2 François-Michel Disdier, 1708–1781, *Exposition exacte, ou, Tableaux anatomiques en tailles-douces des différentes parties du corps humain*, Paris, 1758, engraving, David K.E. Bruce Fund

Disdier, a professor of surgery as well as a drawing master at the Royal Academy of Painting, wrote this treatise for both physicians and artists. Though it would have been unusual for an artist of his stature to work on a medical book, François Boucher designed the title page shown here, depicting an anatomy lesson in progress.

3 Giulio Cesare Casseri, c. 1552–1616, *Tabulae Anatomicae LXXIIX, Omnes Nouae Nec ante Hac Visae*, Frankfurt, 1632, engraving and letterpress, David K.E. Bruce Fund

These engravings, after the drawings of Titian follower Odoardo Fialetti, were presumably designed to accompany Adriaan van de Spiegel's *De Humani Corporis Fabrica* of 1627, an update to physician Andreas Vesalius' work. Many early anatomy books depict cadavers peeling back their own skin and tissue to reveal the body's inner workings.

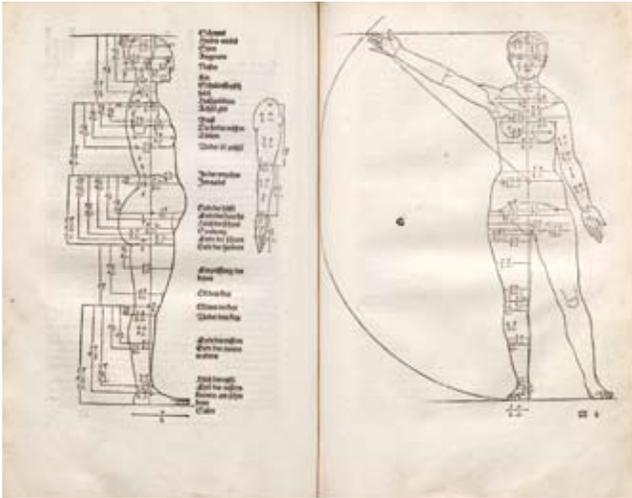


4 Charles Antoine Jombert, 1712–1784, *Nouvelle méthode pour apprendre à dessiner sans maître*, Paris, 1740, engraving and letterpress, David K.E. Bruce Fund

The engraving shown here harks back to the initial letters adorned with symbolic figures from Vesalius' work, depicting putti involved in many of the activities of the dissection room. At the same time that part of a body is measured on the left, another cadaver is prepared on the right. Surgeons' tools appear in the lower right corner.



PROPORTION AS PRECURSOR



5 Albrecht Dürer, 1471–1528, *Hjerin(n) sind begriffen vier Bücher von menschlicher Proportion*, Nuremberg, 1528, woodcut and letterpress, Gift of Robert Erburu

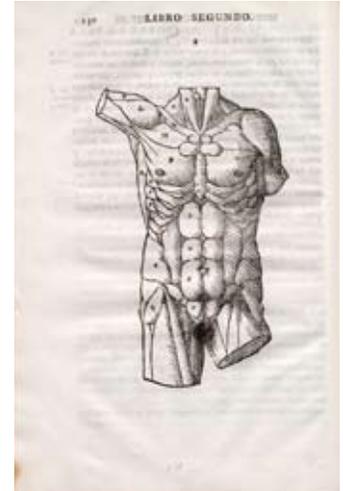
Dürer was the first to publish work discussing problems of comparative and differential anthropometry (the study of human body measurements). He proposed using a mathematical basis for proportion, whose principles could be applied to any figure, regardless of shape or size. His advances in woodcut illustration were also critical for later publications like Vesalius' *De Humani Corporis Fabrica*.

6 Giovanni Paolo Lomazzo, 1538–1600, *A Tracte Containing the Artes of Curious Paintings, Carvings, and Buildings*, Oxford, 1598, etching and letterpress, Gift of The Circle of the National Gallery of Art

In 1584 Lomazzo, a Milanese painter remembered mostly for his art theory, published his *Trattato dell'arte della pittura diviso in sette libri*. In addition to human proportion, it includes a chapter on the proportion of horses, shown here in the 1598 English translation of books one through five.

7 Juan de Arfe y Villafañe, 1535–1603, *Varia commensuración para la escultura y arquitectura*, Madrid, 1773, woodcut and letterpress, David K.E. Bruce Fund

Arfe's work on proportion was first published in 1585 and issued in many editions over the next two centuries. From the woodcuts here it is obvious that the artist was familiar with Dürer's figures, but Arfe's illustrations are more true to life, and the bones and muscles are analyzed as well as the outer body.

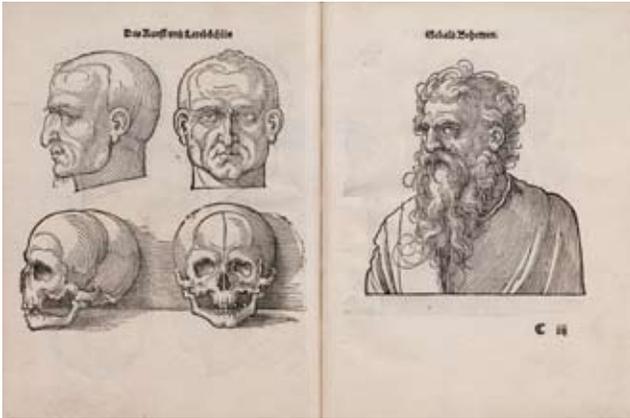


8 Crispijn van de Passe II, d. 1670, *Licht der teken en schilderkonst*, Amsterdam, 1643, engraving and letterpress, David K.E. Bruce Fund

Most early drawing manuals focused on proportion rather than anatomy. Gradually, anatomical illustrations were added, such as the myological horse studies shown here.



THE ARTIST'S MANUAL AND ANATOMY

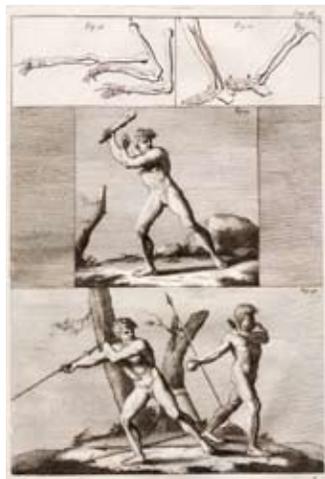


9 Hans Sebald Beham, 1500–1550, *Das Kunst und Lere Buechlin*, Frankfurt, 1552, woodcut and letterpress, David K.E. Bruce Fund

Appearing in this first German model book for artists, conceived in 1528 but with publication initially prevented by Dürer's widow, Beham's designs were widely copied and counterfeited in various forms. Few survive, however, because they were used quite heavily by artists in search of anatomical information that was not yet abundant at the time.

10 Leonardo da Vinci, 1452–1519, *Trattato della pittura*, Bologna, 1786, engraving and letterpress, David K.E. Bruce Fund

Leonardo studied anatomy more deeply than perhaps any other artist of his time. His planned work on the subject does not survive, but many concepts found their way into his treatise on painting, which circulated as a manuscript until 1651 when it was finally compiled for printing in Paris by Rafaelle du Fresne with illustrations after drawings by Nicholas Poussin.



11 Jehan Cousin, c. 1522–c. 1593, *Livre de pourtraittre de maistre lean Cousin peintre et geometrien tres-excellent*, Paris, 1608, woodcut and letterpress, A.W. Mellon New Century Fund

This celebrated drawing book by one of the most famous French painters of the sixteenth century was used by draftsmen and artist of all kinds. It went through twenty-four editions between the late sixteenth and early nineteenth century, focusing for the first time on combining proportional diagrams and anatomical pictures roughly copied from Vesalius.

12 Willem Goeree, 1635–1711, *Natuurlyk en schilderkonstig ontwerp der menschkunde: leerende niet alleen de kennis van de gestalte, proportie, schoonheyd, muskelen, bewegingen, actien, passien, en welstand der menschbeelden*, Amsterdam, 1704, engraving and letterpress, David K.E. Bruce Fund

For his masterwork on anatomy Vesalius directed artists from the school of Titian in making woodcuts of such high quality that it changed the way that anatomical treatises were illustrated. These illustrations were reissued and copied for over two centuries in books on medicine and art alike, including this painting manual.

13 Francesco Carradori, 1747–1825, *Istruzione elementare per gli studiosi della scultura*, Florence, 1802, engraving and letterpress, A.W. Mellon New Century Fund

Neoclassical sculptor and a professor at the Florentine Academy, Francesco Carradori begins this illustrated treatise with a chapter on human anatomy before moving into a discussion of the materials and methods of sculpture.

ANATOMY ADAPTED FOR THE ARTS

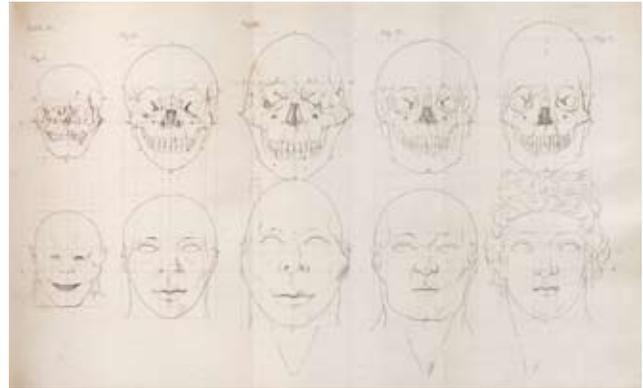
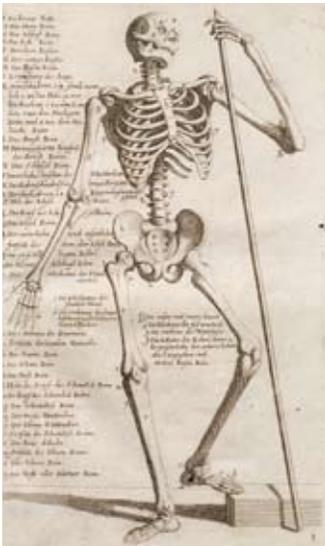
14 Roger de Piles, 1635–1709, *Abregé d'anatomie, accommodé aux arts de peinture et de sculpture*, Paris, 1668, engraving and letterpress, David K.E. Bruce Fund



This is the second (and arguably most influential) anatomy atlas for artists—and the first work of Roger de Piles, a minor painter and major art theorist of the seventeenth century. The engravings by François Tortebat (d. 1690) are considered by many to be the most beautiful reproductions of Vesalius' *De Humani Corporis Fabrica* ever made.

15 Carlo Cesi, 1626–1686, *L'anatomia dei pittori del Signore Carlo Cesio*, Nuremberg, 1759, engraving and letterpress, David K.E. Bruce Fund

Johann Daniel Preissler (1666–1737) was appointed the first director of the Nuremberg Academy of Fine Arts in 1704; in 1706, to aid his students, he produced a German translation of the seventeenth-century Italian painter Carlo Cesi's sixteen plates on anatomy, focusing on the skeletal and muscular systems as required by artists.



16 Petrus Camper, 1722–1789, *The Works of the Late Professor Camper, on the Connexion between the Science of Anatomy and the Arts of Drawing, Painting, Statuary*, London, 1821, engraving, David K.E. Bruce Fund

Camper was a physician, anatomist, and naturalist who studied medicine at Leiden University and lectured on artistic anatomy at the Athenaeum in Amsterdam. This work, first published in 1791, deals with the differences in features between people of different countries and ages with outline engravings after Camper's own drawings.

17 Sir Charles Bell, 1774–1842, *Essays on the Anatomy of Expression in Painting*, London, 1806, engraving and letterpress, David K.E. Bruce Fund

Bell believed that the artist's knowledge of anatomy was of utmost importance. In this work, with engravings based on his own drawings, Bell describes the skull and facial musculature of both humans and animals, and how it relates to the expression of emotion.

Checklist of the exhibition *The Body Inside and Out: Anatomical Literature and Art Theory*, National Gallery of Art, July 24, 2010–January 23, 2011.

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The Gallery Web site features highlights from the exhibition and links to exhibition-related activities at www.nga.gov/anatomy.

GENERAL INFORMATION Hours: Monday–Saturday, 10:00 am–5:00 pm, Sunday, 11:00 am–6:00 pm. Gallery Web site: www.nga.gov. For information about accessibility to galleries and public areas, assistive-listening devices, sign-language interpretation, and other services and programs, inquire at the Information Desks, consult the Web site, or call 202.842.6690 (TDD line 202.842.6176).

Admission to the National Gallery of Art and all of its programs is free of charge, except as noted.

FRONT COVER Jehan Cousin, c. 1522–c. 1593, *Livre de pourtraitte de maistre Jean Cousin peintre et geometrien tres-excellent*, Paris, 1608, woodcut, A.W. Mellon New Century Fund

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