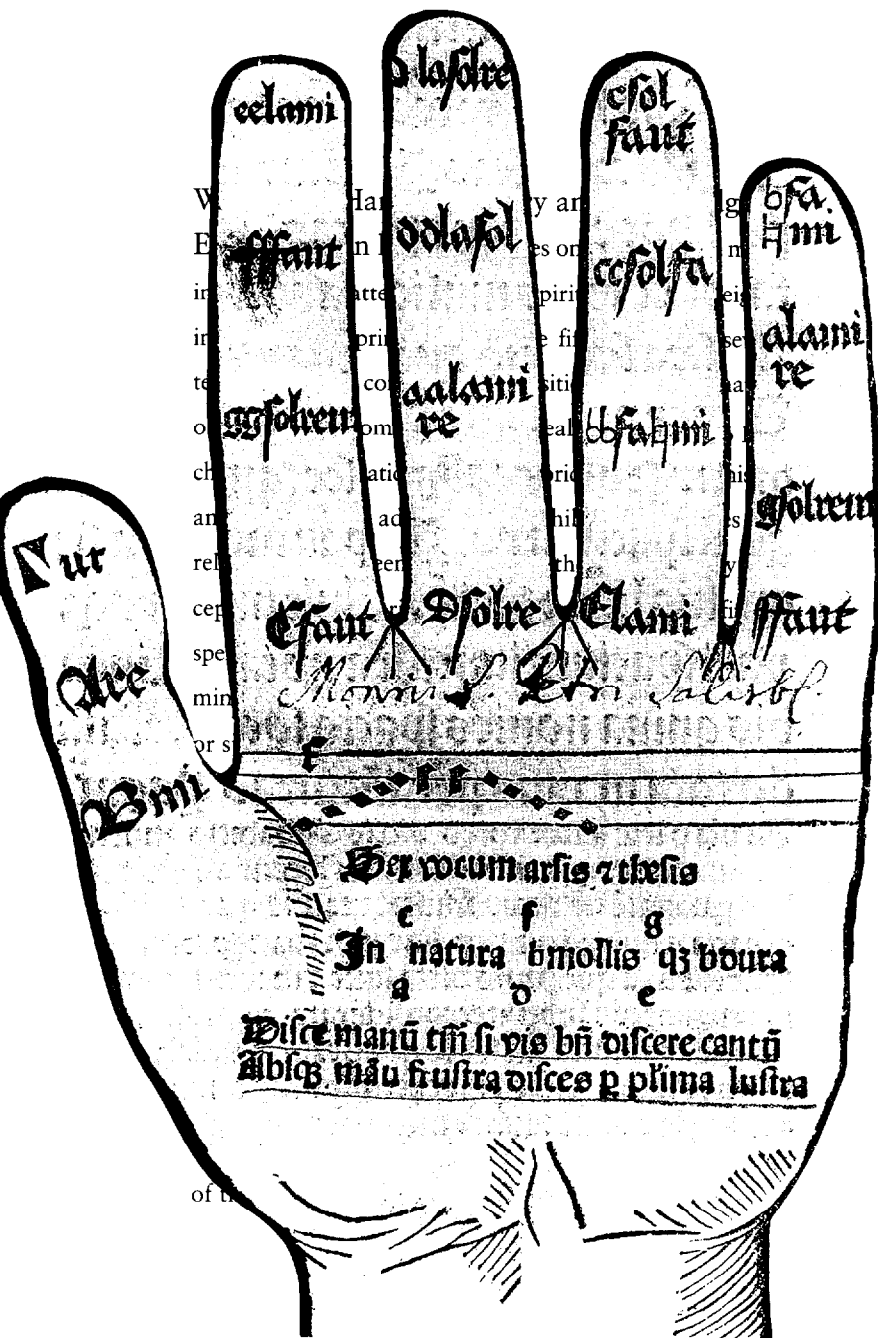


Writing on Hands:
Memory and Knowledge
in Early Modern Europe

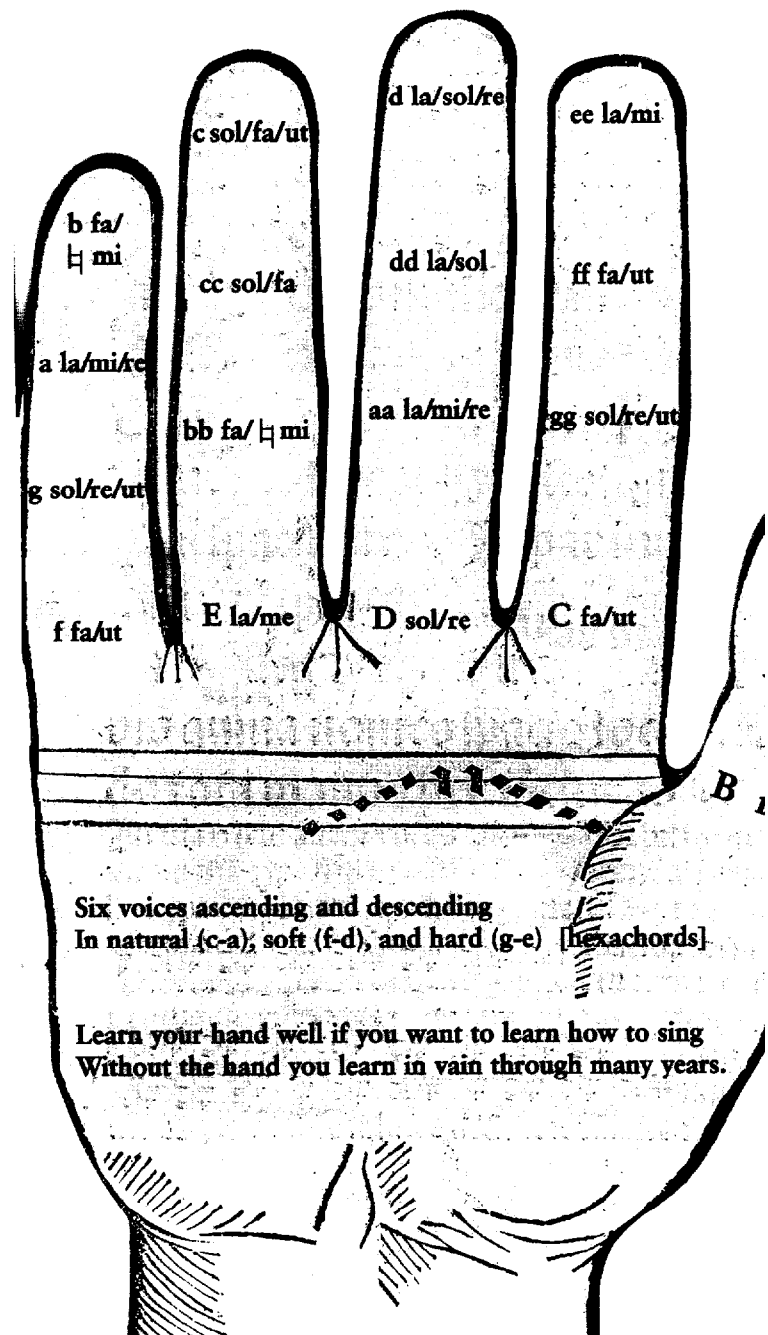
"..the hand is the instrument of instruments."
Aristotle, De Anima, 3.8



Writing on Hands: Memory and Knowledge in Early Modern Europe

“..the hand is the instrument of instruments.”
Aristotle, De Anima, 3.8

Writing on Hands: Memory and Knowledge in Early Modern Europe focuses on the hand as a meeting place of matter, mind, and spirit. More than eighty images, dating primarily from the fifteenth to the seventeenth centuries, concern the acquisition and dissemination of knowledge from such diverse realms as anatomy, psychology, mathematics, music, rhetoric, religion, palmistry, and alchemy. In addition, the exhibition addresses the relationship between the hand and the brain, sensory perception, the rhetoric of gesture, early forms of finger-spelling for the deaf, morality, and spirituality. On view are miniatures, prints, and drawings that are inscribed with, or surrounded by, natural marks, such as lines or creases, or artificial ones, including letters, numbers, words, or symbols. In each the inscribed hand serves as a visual prompt to the intellect or the memory of the viewer. Indeed, this exhibition reintroduces early modern conceptual frameworks for learning, remembering, and recalling practical and abstract concepts by means of the hand. Claire Richter Sherman, curator of *Writing on Hands*, states that “throughout the exhibition, images of the hand play a vital role in interpreting the search for achieving knowledge of the self and interpreting universal human experience.”



A Chiromantic Hand Anonymous, woodcut, 1557. From Girolamo Cardano (1501-1576), *De rerum varietate libri XVII* (Basel: Heinrich Petri, 1557), p. 560. The Folger Shakespeare Library, Washington, D.C. [Section V, Cat. 66]

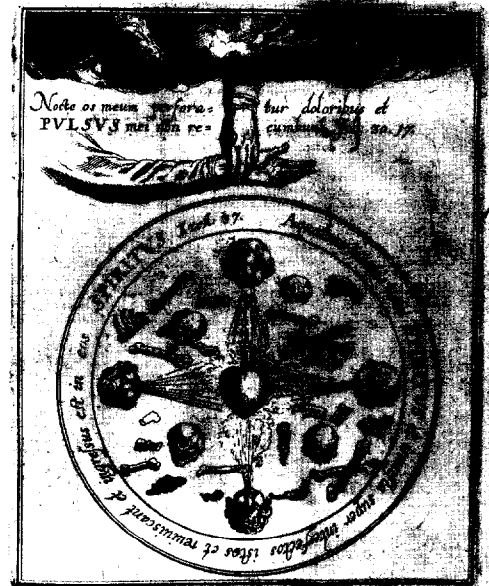
The *Chiromantic Hand* explores the notion of the hand being connected to the body and soul by physical characteristics, leading from Girolamo Cardano (1501-1576) back to the Greek physician, Rufus of Ephesus. Cardano connected the Greek terms for the parts of the hand to their Latin translations, such as *stethos* (ball of thumb) and *hypothenar* (the ridge of muscle beneath the little finger), to the body and soul, as read in the palm. His belief in chiromancy, palm reading, was so complete that he claimed to have predicted his own death. Cardano wrote over two hundred works in his lifetime, many of which concern chiromancy. The lines, spots, colors, and creases of the hand are all related in some measure to the planets, stars, and numbers. At the end of the sixteenth century, chiromancy was often condemned by the Inquisition as heresy because of its close association with divination.



God Taking the Pulse of Man Anonymous, engraving, 1629-1631. From Robert Fludd (1574-1637), *Pulsus; seu, Nova et arcana pulsuum historia*. In volume 9 (*Integrum morborum mysterium*), of *Medicina catholica; seu, Mysticum artis medicandi sacrarium* (Frankfurt am Main: William Fitzer, 1629-1631), frontispiece of part 3, section 3. Library of the College of Physicians of Philadelphia [Section VI, Cat. 83]

Robert Fludd's (1574-1637) conception of the pulse brought together the physical and metaphysical worlds. His belief in a geocentric universe corresponded to his theory of the workings of the pulse. In accordance with his microcosmic/macrocosmic view, Fludd thought that the tabernacle of God existed in the center of the sun which, concomitantly, circled the Earth in the same manner that the human heart nourishes life by pumping blood through the body. The sun, in turn, controlled the four winds which infuse our body with the life Breath of God, as stated in Ezekiel 37:7-10: "Come, spirit, from the four winds, and breathe over those dead men, and let them come back to life. And the spirit entered into them." In this way, Fludd believed that the spirit entered us through the Breath of God, here depicted as the four winds. Fludd's revolutionary theories purported that the pulse traveled throughout the body to various pulsepoints in a circular flow, reflecting the shape of Godly perfection.

P V L S V S
SEU
 NOVA ET ARCANAE
P V L S V V M
HISTORIA, ESACRO
FONTE RADICALITER
EXTRACTA, NEQ NON MEDJ-
CORVM ETHNICORVM DICTIS
 & auctoritate comprobata.
HOC EST,
PORTIONIS TERTIAE PARTITIA,
DE PVL SVVM SCIENTIA.
AUTHORE ROBERTO FLVDD
 Artigero, & in Medicina Doctore Barchinensi



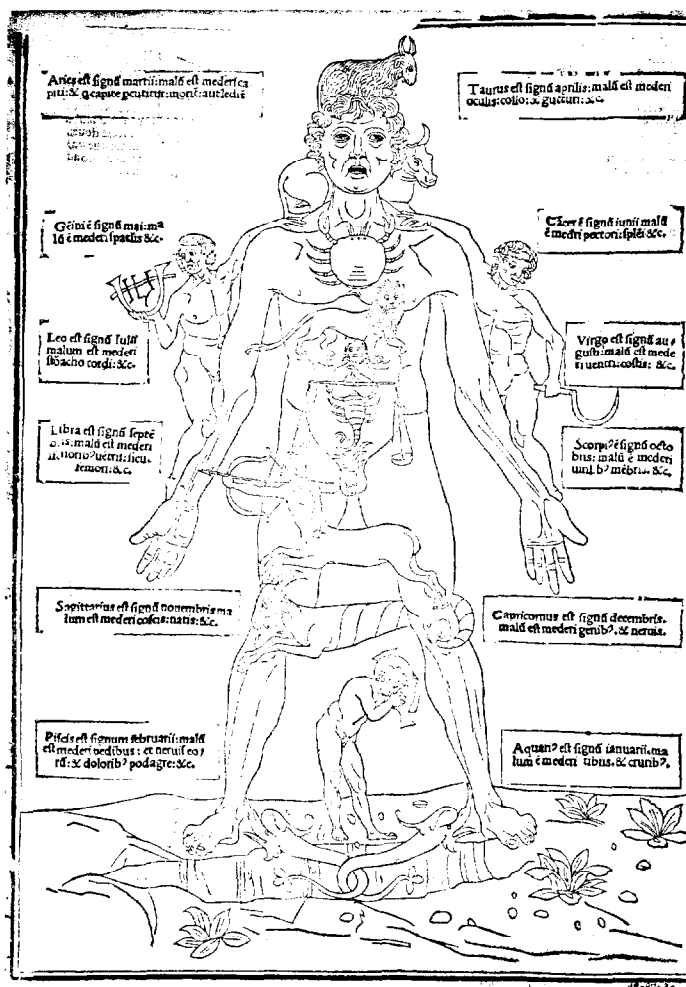
Diego de Astor the Elder (c. 1585-1590-c. 1650) in a *Manual Alphabet for the Deaf*, engraving, 1620. From Juan Pablo Bonet (1579-1633), *Reduccion de las letras, y arte para enseñar a ablar los mudos* (Madrid: Francisco Abarco de Angulo, 1620), sixth of eight plates (n.p.). The Folger Shakespeare Library, Washington, D.C. [Section IV, Cat. 53]

Juan Pablo Bonet (1579-1633) was a Spanish scholar, man of letters, and author. One of his most ambitious achievements was the development of a handbook of manual hand signs and their corresponding letters and sounds which he created for the deaf children of nobles at the Spanish court. In his book, *Adaption of the Letters and the Art of Teaching the Mute to Speak* (1620), Bonet illustrated hands manually signing the letters O, P, and Q. The figures of the hands demonstrate, therefore, the intelligence of the individual by allowing that person both to communicate and to prove his or her existence. Variations of the successful methods Bonet developed for deaf communication are used to this day.



Anonymous, Italian, woodcut, 1522. From Johannes de Ketham (Johannes von Kirsheim?) (fl. fifteenth century), *Fasciculus medicinarum* (Venice: Cesare Arrivabene, 1522), fol. 7. Philadelphia Museum of Art; SmithKline Beecham (formerly SmithKline Beckman) Corporation Fund for the Ars Medica Collection, 1949-97-3e [Section V, Cat. 57]

The *Zodiac Man* from Johannes de Ketham's *Medical Treatise* embodies the early modern dichotomy of man as a microcosm and as a reflection of the macrocosm (the universe). In this system the parts and functions of the body were thought to be governed by celestial entities, here represented quite literally by the signs of the zodiac. Thus it was common for physicians and barber-surgeons to consult an image of the Zodiac Man before initiating a medical procedure. Each month as the heavenly bodies changed their positions in the firmament, a different area of the body, moving from Aries at the head to Pisces at the feet, was not to be given medical attention. For example, woe betide the persons who have their shoulders, arms, and hands treated while Gemini is in the ascendant; similarly, one should not have eyes, neck, or throat treated...or even gargle...while Taurus is in the ascendant.



Portrait of Andreas Vesalius Anonymous, Venetian School; attributed to Jan Stephen van Calcar (c. 1499-1550), woodcut, 1542. From Andreas Vesalius (1514-1564), *De humani corporis fabrica libri septem* (Basel: Johann Oporinus, 1543). Philadelphia Museum of Art: SmithKline Beecham (formerly SmithKline Beckman) Corporation Fund for the Ars Medica Collection, 1949-47-41B [Section I, Cat. 5]

Writing on Hands is divided into six major themes that concern the learning, ordering, and recollection of abstract concepts related to human experience and culture.

Section I: Reading the Writing on Hands presents the hand as a metaphor for the whole person; it is the site for creative manual and intellectual skills, as well as for knowledge and memory (“Mentor, Metaphor, and Map,” Cat. 1-4; “Identity, Intelligence, and Creativity,” Cat. 5-10).

Section II: Handiwork of the Creator shows changing views of the anatomy and nomenclature (naming of the parts) of the hand as well as the connections between the brain, hand, memory, and senses (“The Noblest Creation,” Cat. 11-16; “The Instrument of Instruments,” Cat. 17-25).

Section III: Messengers of the World examines the use of the hand in mnemonic (memory) theory: here, the parts of the hand serve as sites of memory onto which images or ideas are applied in ordered sequences (“The Sense of Touch,” Cat. 26-33; “Inscribing Memory,” Cat. 34-39).

Section IV: Knowledge on Hand introduces viewers to two pre-modern applications of the hand: the first as a kind of instrument for calculation, including the reckoning of significant dates in the liturgical year; the second as a means of teaching solmization (sight singing) and music theory. The final subsection treats hand and body gestures in rhetorical expression and fingerspelling for the deaf (“Manipulating Time,” Cat. 40-45; “Steps to Singing,” Cat. 46-50; “Companion to Eloquence,” Cat. 51-56).

Section V: The Whole World in the Hand represents the hand as a microcosm of the universe; reciprocally, the hand links the physical and the spiritual aspects of the body back to the universe. Chiromancy, now called palm reading, was then a serious discipline that enabled one to read the character and fate of individuals. Similarly, early modern texts devote much attention to alchemy, the quest to achieve material and spiritual purification of base matter as, for example, turning simple metals into gold (“The Body as Microcosm,” Cat. 57-62; “Signs upon the Hand,” Cat. 63-68; “The Hand of the Philosopher,” Cat. 69-73).

Section VI: Guiding Hands figures the hand as the site of memory and learning of spiritual exercises. It concludes with a subsection on political and ethical maxims, in which the hand mediates between verbal and visual representations (“Defenders of Faith,” Cat. 74-78; “Guardians of Morals,” Cat. 79-83).

The subsequent text highlights one or two images from each of the major thematic units and provides an introduction to understanding and interpreting the exhibited materials.

Please visit our website: www.writingonhands.org

Andreas Vesalius (1514-1564) played an important role in the study of anatomy and medicine. Although the prevailing opinion at the time held that the manual labor of dissection should be carried out by barber-surgeons, Vesalius, who was trained at the universities of Paris and Louvain and completed his medical degree at Padua, felt that direct involvement in the process of dissection was essential to education and medical practice. He published the results of his first-hand study of anatomy and physiognomy in the seminal treatise, *De humani corporis fabrica libri septem* (*Seven Books on the Structure of the Human Body*; Basel, 1543). This book advanced the understanding and identification of human anatomy and signaled the complementary nature of image and text in communicating information to readers of scientific treatises. In this portrait, taken from the frontispiece of the *Fabrica*, Vesalius is shown in the act of dissecting the forearm and hand of a cadaver of heroic proportions, which marks a bold advance in medical thought: it demonstrates his intimate knowledge of and skill in the subject of anatomy.



Bones of the Interior of the Right Hand and Left Foot (detail) Attributed to Amico Aspertini (c. 1474-1552), woodcut, 1521. From Jacopo Berengario da Carpi, *Carpi commentaria cum amplissimis additionibus super anatomia Mundini*, (Bologna: Girolamo Benedetti, 1521), fol. 522. History of Medicine Division, National Library of Medicine, National Institutes of Health, Bethesda, Maryland [Section II, Cat. 18]

Not only were lines, creases, and colors of the hands important to scientists, such as Berengario da Carpi (c. 1460-1530), but also the anatomy of the bones. The right hand and left foot, depicted in woodcuts by Amico Aspertini (1474-1552) and based on the first-hand knowledge of Berengario, illustrate the same complexity of bones. The similar proportional relationships between the two approach the standards of modern anatomical knowledge. Aspertini's type of modeling was very important to sixteenth-century artists and scholars who conceived the anatomy of bones as essential to seeing, understanding, and depicting the human form.

The last bone of the middle finger.

The last bone of the ring finger.

medullaris
annularis
ulnaris

2^o os aut
cularis.

The second bone of the little finger.

quatuor
offi b' per
dialis.

One of the four bones of the metacarpus.

Vnū ex
minus.

The smallest bone of the forearm.

Focile
minus.



First bone of the index finger.

Primū os
indicis.

First bone of the thumb.

Primū os
policis.

Vnū ex
otto offi
b' rafette

One of the eight bones of the wrist.

Focile
maius.

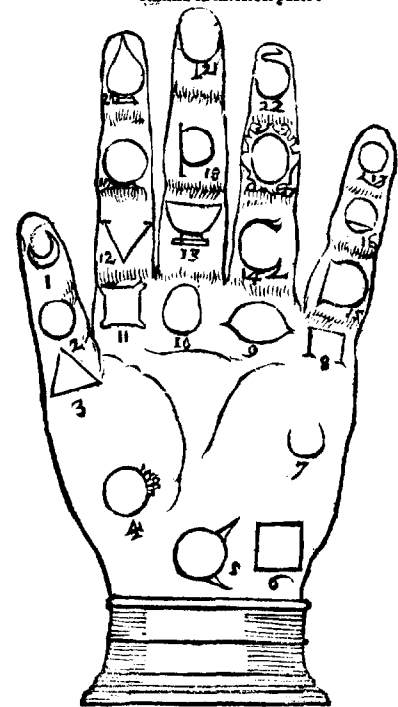
The large bone of the forearm.

Habes in hac figura numerū: for nā: & sūū of su manus & pedis. In manu sunt extremitates duoru focilū bra chii: & otto offa rafette: & quatuor pedis: & quindcīm digitorum.

A Hand with Memory Symbols Anonymous, woodcut, 1602. From Girolamo Marafioti (Hieronymus Marafiotus) (sixteenth-seventeenth century), *De arte reminiscētie per loca, & imagines, ac per notas, & figuras in manibus positas* (Venice: Giovanni Battista Bertoni, 1602), fol. 9. The Folger Shakespeare Library, Washington, D.C. [Section III, Cat. 39]

Girolamo Marafioti (sixteenth-seventeenth century) was a Franciscan historian of his native Calabria. In his short treatise on the *Art of Memory* (1602) he substituted a series of four hands for the traditional architectural system of places. Marafioti's method includes a total of ninety-two places divided between the palm and exterior sides of a pair of left and right hands. By using every part of the hand, including the joints of the fingers and other areas on the palms, Marafioti assigned each side of the hand twenty-three individual places, which correspond to the number of letters in the Latin alphabet. Marafioti realized that the reader could use the hands as a ready reference tool to recall an ordered sequence of associations necessary for retrieving information while speaking or preaching.

REMINISCENTIAE.
Sinistra in interiori parte.



B

Policus

Cover image, detail: *Guidonian Hand* Anonymous, woodcut, 1488. From Hugo Spechtshart of Reutlingen, or Hugo von Reutlingen (c. 1285-c. 1360), *Flores musicae omnis cantus Gregoriani* (Strasbourg: Johann Prüss, 1488), p. 19. The Walters Art Gallery, Baltimore, Maryland [Section IV, Cat. 47]

Hugo Spechtshart of Reutlingen was a fourteenth-century magister, or teacher, who taught Latin, logic, dialectic, grammar, and music, among other subjects. The *Flores musicae* (*Musical Flowers*, pub. 1488) is a didactic poem that includes information on the theory, practice, and history of music. This image shows the Guidonian hand—named for its supposed inventor, Guido of Arezzo (c. 1000-c. 1050)—the prevailing method of teaching sight singing to beginners well into the seventeenth century. The pupils learned to associate parts of the hand and fingers with musical notes which they could then sing back to the teacher as he pointed to those areas. In addition, students gained experience with musical intervals and the patterns of chant used for liturgical services. Hugo's version of the Guidonian Hand includes not only the musical notes—ut, re, mi, fa, sol, la, etc.—but also the parts of the hexachord (six-note system) and an exhortatory poem (translated on the verso of the cover).

Bibliographic notes

Although compiled by the staff of The Trout Gallery with the help of interns Carrie Berger and Matthew Coleman, this brochure depends upon the catalogue and entries written by the scholars who contributed to *Writing on Hands: Memory and Knowledge in Early Modern Europe* (exh. cat. Carlisle, PA: The Trout Gallery, 2000), including Claire Richter Sherman, curator and principal author, Brian P. Copenhaver, Martin Kemp, Sachiko Kusakawa, and Susan Forscher Weiss. We encourage those who are interested to read the more extended discussions provided by the catalogue authors. For further information we recommend the following selected bibliography:

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Exhibition dates and times:

The Trout Gallery, Dickinson College

Carlisle, Pennsylvania

8 September 2000 through 25 November 2000

Gallery Hours:

Tuesday through Saturday, 10:00 a.m. to 4:00 p.m.

For more information, or for catalogues, call 717-245-1344

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The Folger Shakespeare Library

Washington, D.C.

13 December 2000 through 4 March 2001

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