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# Aspects of Early Keyboard Technique: Hand and Finger Positions, as Seen in Early Treatises and Iconographical Documents

## *Part 1*

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STRIVING FOR AUTHENTICITY, today's performers of early keyboard music have turned to the study of early fingerings. Often their findings have allowed them to reproduce early phrasings with more ease, and more faithfully, than by using modern techniques. Sources for such a study have consisted in the early keyboard treatises, and a few annotated manuscripts and early editions. It must, however, be kept in mind that these treatises and editions were, for the most part, written for beginners, and took great care to underline the greater freedom permitted to more advanced performers.

There is yet another important aspect of early keyboard technique that has often been neglected, or misunderstood: hand and finger positions. This element not only greatly influences the degree of virtuosity attainable, but also has a fundamental impact on the quality of the sound produced by a harpsichord, an organ, or, particularly, a clavichord. Two sources of documentation are available: prefaces to early editions and pedagogical treatises, and iconographical documents. While these latter must be interpreted with caution, often having been influenced by aesthetic conventions, they nonetheless represent an invaluable resource.

In compiling as thoroughly as possible this present theoretical and iconographical material, it is hoped that early keyboard performers will have access to a complete view of the various trends in hand and finger positions prevalent from the sixteenth to eighteenth centuries.

According to Hans Hickmann,<sup>1</sup> the earliest keyboard technique must have been that of musicians playing little portative organs such as can be seen on iconographical documents from the Middle Ages. Performers

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1. Hickmann, 155–73. (See Bibliography.)

held the instrument on their left arm, which also worked the small bellows, and played with the right hand only. The first treatises dealing with keyboard technique, those of Juan Bermudo<sup>2</sup> (1555), Tomás de Santa María (1565), and Girolamo Diruta (1597), mark the beginning of a more advanced conception, while naturally retaining some elements from the technique of portative playing.

The first treatise dealing specifically with hand and finger positions is the *Libro Llamado Arte de Tañer Fantasía, assi para tecla como para Vihuela* of Tomás de Santa María:<sup>3</sup>

On the manner of properly posing the hands. Chapter 13.

The second condition, to hold the hands properly, consists of three things. First, the hands have to be crooked, like the paws of a cat, with no hump between the hand and the fingers, so that the roots of the fingers are kept very low, allowing the fingers to remain higher than the hand and to be kept bent like a bow and able to give a stronger blow. The more curved the fingers are kept, the stronger they will hit the keys, and then the notes will sound louder, more perfectly, and with more spirit. . . .

Secondly, hold the hands compact, done by holding the four fingers of both hands, which are the second, third, fourth, and fifth, close together. Especially join the second finger to the third, which is better done with the right hand than with the left, for this is very helpful in playing with suppleness and softness. Also, the thumb has to be kept very low and much lower than the four other fingers, but it has to be bent backwards, in such a way that its anterior half be under the palm, and the little finger, which is the fifth, must be more contracted than all others, so that it reaches almost the palm. . . .

Thirdly, one must position the hands in such a way that three fingers of each hand, i.e. the second, third, and fourth, always remain on the keys, as well when they have to strike the keys as when not; and, moreover, the second finger, especially in the right hand, must be a little higher than the three others, i.e. the third, fourth, and fifth. . . .

For a good position, and to play well, it is necessary for the inner side of the elbows to remain close to the body, yet without any tension. However, in order to descend long scales of eighth- and sixteenth-notes with the left hand, it is necessary to move the left elbow away from the body, and likewise to descend long scales of eighth- and sixteenth-notes with the right hand, it is necessary to move the right elbow away from the body. . . .

The third requisite, properly striking the keys, consists of six elements. First, one must strike the keys with the ball of the finger so that the nail never touches the keys. This can be done by lowering the wrists and stretching the

2. Juan Bermudo, *Declaración de Instrumentos Musicales* (1555).

3. Tomás de Santa María, *Libro Llamado Arte de Tañer Fantasía* . . . (Valladolid, 1565), fol. 37–38.

fingers forward, whereby the notes sound fully, softly, and sweetly. . . . Moreover, in this way one plays accurately because the fingers are properly positioned on the keys and cannot slip or slide. . . .

The fourth condition is never to strike the keys from too high a position. The fingers must remain close to the keys and, once a key has been played, the finger should be raised very little. Moreover, the fingers must fall on the keys perpendicularly and be lifted in the same way and to the same place, from where they will again be prepared to play. . . . Thus, to properly strike the keys one must not raise the palms, but only the fingers which must hit the keys.

Del modo de poner bien las manos. Capítulo . xiiij.

La segunda condición, que es poner bien las manos, consiste en tres cosas. La primera es, que las manos se pongan engarauatadas, como manos de gato, de tal manera que entre la mano y los dedos, en ninguna manera aya Corcoba alguna, mas antes el nascimiento de los dedos ha de estar muy hundido, de tal manera que los dedos estén más altos que la mano puestos en arco, y assi los dedos quedan más flechados para herir mayor golpe, porque assi como el arco quanto más flechado está, tanto hiera mayor golpe, Assi tambien los dedos, quanto más flechados están, tanto hieren mayor golpe en las teclas, y entonces suenan las bozes mas rezias y más enteras, y con mayor espíritu. . . .

La segunda cosa, es traer las manos muy cogidas, lo qual se haze allegando los quatro dedos de ambas manos, que son segundo, tercero, quarto, y quinto, unos a otros, especialmente pegando el dedo segundo al tercero, lo qual se puede hazer mejor con la mano derecha que con la yzquierda, y esto haze mucho al caso para tañer con suavidad y dulçura. Assi mesmo ha de andar el dedo Pulgar muy caydo, y muy mas baxo que los otros quatro, pero ha de andar doblegado para dentro, de suerte que el medio dedo dela coyuntura adelante, ande de baxo de la palma, y el dedo pequeño que es el quinto, ha de andar encogido más que todos los otros, de tal manera que casi llegue a la palma. . . .

La tercera cosa es, que de tal manera se pongan las manos, que los tres dedos de cada mano que son segundo, tercero, y quarto, anden siempre sobre las teclas, asi cuando fuere menester herir las, como quando no, y de mas desto, el dedo segundo, specialmente el de la mano derecha, ha de andar un poquito más leuantado, o más alto que los otros tres, que son tercero, quarto, y quinto. . . .

Para la buena postura de los manos, y aun para tañer bien, es necesario que los braços de los cobdos a dentro anden llegados al cuerpo, pero sin ninguna fuerça, aunque para subir carreras largas de Corcheas y Semicorcheas con la mano yzquierda, es necesario apartar el cobdo ysquierdo del cuerpo, y assi mesmo para baxar carreras largas de Corcheas y Semicorcheas, con la mano derecha es tambien necesario apartar el cobdo derecho del cuerpo.

Del modo de herir las teclas. Capitulo . xv.

La tercera condición, que es herir bien las teclas, consiste en seys cosas. La primera es herir las teclas con las yemas de los dedos, de tal manera que las Uñas no alleguen ni toquen con mucho a las teclas, lo qual se hara baxando las Muñecas, y estendido los dedos del medio dedo adelate, porque hiriendo desta manera, suenan las bozes enteras, dulces, y suaves. . . . Y de mas desto se tañe con limpieza, porque como los dedos hazen asiento en las teclas, no pueden deslizar ni huyr a ninguna parte. . . . La quarta cosa, es no herir las teclas de alto, para lo cual es necesario traer los dedos cerca de las teclas,



y despues que cada dedo aya herido la tecla, levantarle muy poco, y de mas desto han de herir los dedos cayendo derechos, y en el mesmo derecho leuantarse, de suerte que bueluan a ponerse en el mesmo lugar y disposición que antes estavan. . . . Assi mesmo para herir bien las teclas, es necessario no leuantar las palmas, sino solos los dedos, los quales han de herir las teclas, estando se quedas las palmas.

Hans Hickmann suggested that Santa María's idea of holding the wrists and roots of the fingers very low evolved from portative organ technique. With the instrument originally held by the performer on his left arm, its keyboard was in a rather elevated position, almost perpendicular to the player, making it more comfortable to play with the wrist in a low position. This is seen in many iconographical documents, both with the portative organ (figs. 1–5) and the early clavichord (fig. 6). This position also seems to have been adopted when the instrument was set on a table, and on the first positives to have been built (figs. 7–9). However, three other documents (figs. 10–12) show that this low wrist position was not necessary when the portative was held lower, on the performer's knees.

By holding the wrist and the roots of the fingers in a low position, the fingers are consequently in a rather bent position, "crooked like the paws of a cat," as Santa María describes it. This can be clearly verified in figures 1–4 and 7–9, but already much less in figures 5 and 6, where the wrists are being held somewhat higher, and not at all in figures 10–12, where the instrument is being held on the knees, thus much lower.

Santa María's advice is directed more specifically to the touch on the clavichord (which he calls "monacordio," the term most generally used in Latin countries until the eighteenth century). However, for more than three centuries the clavichord technique was considered the basis for that of all other keyboard instruments by nearly all music pedagogues. Moreover, iconographical sources show no differences in hand and finger positions at the various keyboard instruments.

The position described by Santa María can be observed in several iconographical documents of his time from the Low Countries and the Iberian Peninsula, two regions closely interrelated both politically and culturally (figs. 13–15). In figures 16–18, the wrists can be observed already held somewhat higher, resulting in a less crooked finger position. It is interesting to note that on the Vermeyen engravings the player is clearly using the thumbs, following Santa María's advice on fingering. He is also carefully playing on the front part of the keys, which is of the greatest importance on the clavichord, where the keys are very short and



FIGURE 1. Antón Sánchez de Segovia, Angel Musician (1262) (portative), Chapel of Saint Martin Old Cathedral, Salamanca (Spain).



FIGURE 2. Anonymous (15th century), "Scenes from the Life of Christ and the Virgin Mary" (portative), Portal, Cathedral of Guadalupe (Spain).



FIGURE 3. Master of the Bartholomian Altar (c.1470–1510), Saint Cecilia (portative), Cologne, Wallraf Richartz Museum.



FIGURE 4. School of Jan van Eyck, "La Fuente de la Gracia" (1511) (portative), Madrid, Prado.



FIGURE 5. Anonymous (c.1442), Psalter of King Alfonso V of Aragón (positive), London, British Library.



FIGURE 6. Anonymous, "Manuscript of Otto von Passau" (1448) (clavichord), Coburg, Landesbibliothek.



FIGURE 7. Hubert and Jan van Eyck, "Angel Musicians" (1432) (positive), Ghent Cathedral.



FIGURE 8. Israel van Meckenem (1450–1503), "An Organist and his Wife" (portative), Nuremberg, Germanisches Nationalmuseum.



FIGURE 9. Hugo van der Goes, "Sir Edward Bonkil Kneeling in Front of an Organ" (c.1480) (positive), Edinburgh, Holyrood Palace.



FIGURE 10. Anonymous (15th century), "Angel Musician" (portative), Altar, St. George Church, Nördlingen, Germany.

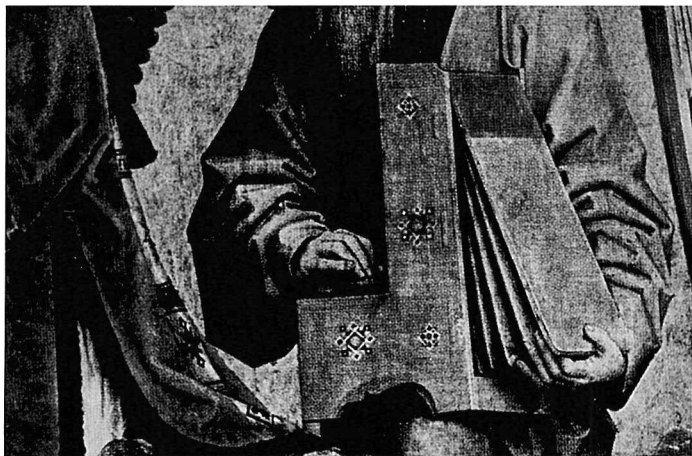


FIGURE 11. Hans Memling (1430/5–1494), “Angel Musician” (portative), Antwerp, Museum of Fine Arts.



FIGURE 12. Hans Memling (1430/5–1494), “Angel Musician” (portative), Bruges, Sint-Jans-Hospital.



FIGURE 13. Gaspar Vaz or Fernández Nasco, "Virgin with Child on Throne" (c.1535–1540) (clavichord), Portugal, St. João de Tarouca.

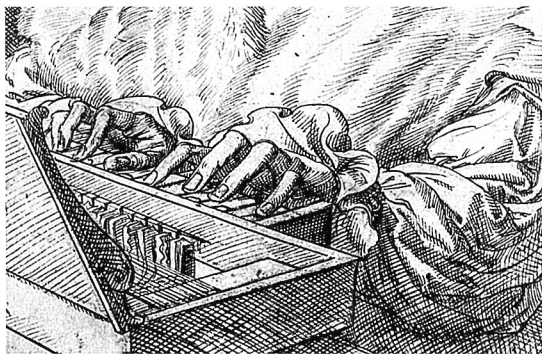


FIGURE 14. Jan Cornelisz Vermeyen (c.1500–1559), "The Clavichord Player," Berlin, Staatliches Museum der Stiftung Preussischer Kulturbesitz.



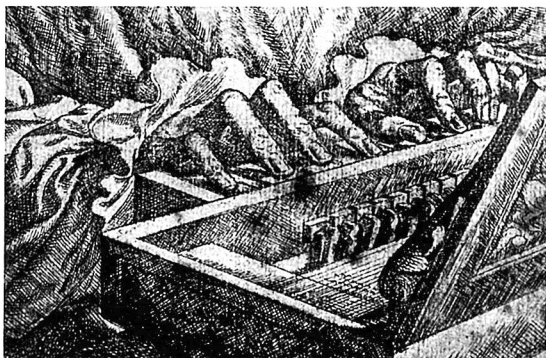


FIGURE 15. After Jan Cornelisz Vermeyen (c.1500–1559), “The Clavichord Player,” Hamburg, Kunsthalle.



FIGURE 16. Garcia Fernandes (16th century), “Assumption of the Virgin” (positive), Parish Church, Sardoal, Portugal.



FIGURE 17. Master of Santa Auta (16th century, Portuguese), "Arrival of Relics of St. Auta to the Church of Madre de Deus" (positive), Lisbon, Museo Nacional.



FIGURE 18. Anonymous (16th century), "Virgem em Gloria" (organ), Evora (Portugal), Museu Regional.



FIGURE 19. Arnolt Schlick, *Spiegel der Orgelmacher und Organisten* (1511), title page (positive).

the balance pins immediately behind the nameboard, allowing very little leverage. All the fingers are kept on the keys, ready to strike. Finally, in nearly all these documents, the musicians are playing with the balls of their fingers.

The famous blind organist Arnolt Schlick (1460–after 1521) published a work in 1511 (in Mainz), on organ construction and tuning, *Spiegel der Orgelmacher und Organisten*.<sup>4</sup> While not a pedagogical work on keyboard technique, it does contain a passage pertinent to hand and finger position, and an engraving (fig. 19). Contrary to the Iberian and Dutch sources seen above (figs. 13–15), this German engraving, from a few decades earlier, shows an organist holding his elbow, wrist, and fingers in a straight, practically horizontal line. This is corroborated by a paragraph found in Chapter Three:

If there are two manuals, the top one is at the correct height for the organist when he sits on the bench, if this manual is at the same height as his stomach and belt. I think this is suitable, etc., for if one must place his hands higher than the elbows it becomes harder and more difficult than if [their height] is the same or lower.

4. Arnolt Schlick, *Spiegel der Orgelmacher und Organisten* (Mainz, 1511).

Wen zwey claur sein / und das oberst dem organisten so er uff dem stül sitzt / rechter höch also dz das gedacht claur seiner weich un̄ gürtel gleich in der höh ist. acht ich woll geschickt sein rc. dann wo einer die hendt vbersich halten müss höher dan ym die Elnbogen sein kömpt es yn hartter vnd schwerer an / dann so es dem selbigen glich / oder niederer ist rc.<sup>5</sup>

From a later paragraph one can deduce that thumbs were being used, at least in playing octaves:

The keys must also be the proper length, for if they are too short one will find when playing two or three parts with one hand, especially using the semitones, that the board over the clavier [i.e., the nameboard] is too close and a great hindrance. Thus it is necessary that the accidentals and natural keys be at a proper distance from this board. These lengths are given here. The shortest is the length for the accidentals and the longest the size for the other keys, beginning at the nameboard, etc.

Item die claus rechter leng / dann wo die zü kürzt sein. vn̄ zwo oder drey stym mit einer hendt nemlich vff den semitonien greiff / ist das bridt vber dem claur zü noe / vnnnd hindert ein sere. Hierumb nott ist das die semitonien vnd ander claus naturales jr recht leng habenn für das bridt hervß. Welliche leng beyde hiebey gezeichnet sein. Die kürztst der semitonien moß. vnd die lengst der andern schlüssel moß vor dem brit hervß rc.<sup>6</sup>

Logically it could only be when using the thumbs that one might accidentally touch the nameboard of an instrument with short keys.

The last sixteenth-century treatise we will consider here is *Il Transilvano* by Girolamo Diruta.<sup>7</sup> Born around 1550, Diruta studied in Venice with Zarlino, Costanzo Porta, and Claudio Merulo; he became organist of the Duomo of Chioggia in 1593, and in 1609 of the Duomo of Gubbio. His treatise, written in the form of an imaginary dialogue between himself and “Transilvanus,” probably Istvan Jósika, ambassador of Sigismund, sovereign of the little state of Transylvania, is the first text in Italian dealing extensively with keyboard technique and interpretation. Taking into account the artistic value and fame that both he and his professors enjoyed, this treatise can be considered a true reflection of Italian keyboard technique at the end of the sixteenth century.

In the first part of *Il Transilvano*, published in 1593, Diruta gives the usual descriptions of the various keyboard instruments (declaring the organ “King of all instruments”), musical notation, key signatures, mutations, etc.:

5. *Ibid.*, 49.

6. *Ibid.*, 39.

7. Girolamo Diruta, *Il Transilvano* (Venice, 1593, 1609).

How to play the organ with seriousness and grace.

Dir. . . . First, . . . the organist must sit in front of the middle of the keyboard. Secondly, he should not make gestures or movements, but hold the body and head straight and gracious. Thirdly, he must allow the arm to guide the hand, the hand remaining always in a straight line with the arm, neither higher nor lower than this latter (as will happen if the wrist is held too high), and thus the hand will be even with the arm. What I say for one hand is valid for the other. Fourthly, the fingers must remain equal on the keys, while, however, being somewhat arched: moreover, the hand must be light and supple on the keyboard, for otherwise the fingers would not move with agility and speed. And finally, the fingers must depress the keys and not hit them, raising the fingers as much as the key rises. . . .

How the arm must guide the hand.

Dir. This may be, or even "is," the most important of all. If you have failed to point out to students their bad hand position habits they probably seem crippled, for the fingers with which they touch the keys cannot be seen, and the others are hidden. They hold their arms so low, that is, below the keyboard, and their hands hang from the keys, all because the hand is not guided by the arm as it should be. Therefore, it is no wonder that such people, apart from the fatigue they suffer in playing, don't do anything worthwhile. If only I could depict for you a hand which would give the impression of lightness, you would understand how it has to be guided by the arm, how the hand cups itself, and how the fingers arch themselves.

How to cup the hand and arch the fingers.

Know that, in order to cup the hand, one must slightly pull back the fingers, and thus in the same time the hand will be cupped and the fingers arched, & so is it that the hand must be placed on the keyboard.

How to hold the hand supple and light.

To explain to you how to hold the hand light and supple on the keyboard, I will give you an example. When one gives a slap in anger, one uses great strength. But when one wants to fondle, and charm, as we do when caressing a child, one does not use any strength.

Why players of dances are not able to play the organ.

Dir. . . . If it happens by chance that these players of dances play on an organ they are never, or at least very rarely, able to play musically, for they are unable to refrain from beating on the keys (nothing worse can be heard). Likewise, organists will never play dances well on plucked instruments because it is done in a different way, as I have already said.

How to play the organ, and dances on plucked instruments.

Dir. . . . but the organist who wants to play dances must observe these rules with the exception of jumping and beating with the fingers, which he is allowed for two reasons. First, because plucked keyboard instruments need to be beaten, because the jacks and plectra work better this way. Secondly, in order to give grace to the dances. Thus, the organist who wants to play dances is allowed to beat with the fingers like any other player: but the player of dances who wants to play music on the organ is not allowed to beat with the fingers.

Regola per sonar Organi regolatamente con grauità, e leggiadria.

Dir. . . . Il primo . . . è, che l'Organista deue accomodarsi con la persona in modo, che stia per mezzo la tastura. Il secondo, che non facci atti, ò mouimenti con la persona, ma stia col corpo, e con la testa dritto, e gratioso. Terzo deue farsi, che il braccio guidi la mano, e che la mano stia sempre dritta, uerso il braccio, e che non sia piu alta, nè piu bassa, di quello, il che sarà quando il collo della mano si terrà alquanto alto, perche cosi la mano si pareggerà col braccio, e quel, ch'io dico a'una, intendo dell'altra mano ancora. Quarto, che le dita stiano pari sopra li tasti, ma però inarcate alquanto: Oltre di ciò, che la mano stia sopra la tastatura leggiera, e molle, perche altrimenti le dita non si potrebbero mouere con agilità, e prontezza. E finalmente, che le dita premano il tasto, e non lo battano, e leuando le dita quanto s'alza il tasto. . . .

Come il braccio deue guidar la mano.

Dir. Questo forse, e senza forse è il piu importante di tutti gli altri, e se hauete mai posto mente à questi che hanno mal habituata la mano, par che siano stroppiati, poi che non si vede loro se non quelle dita, con quali toccano i tasti, e gli altri nascondano, tenendo anco il braccio tanto basso, sì, che stà sotto alla tastatura, è le mani par, che stiano appese à i tasti, è tutto ciò auuien loro, per che la mano non è guidata dal braccio, come si deue. Onde non è meraviglia se questi tali, oltre la fatica che pateno nel sonare, non fanno cosa che sty bene. Ma s'io vi potessi dipingere una mano, che facesse questo effetto di leggiero intendereste, come debba esser guidata dal braccio, & ancora come se incoppi la mano, & se inarchino le dita.

Modo d'incorporar la mano, & inarcare le dita.

. . . Onde sappiate, che per incoppare la mano è di mestiero di ritirare alquanto le dita, e cosi in un istesso tempo la mano si verrà ad incoppare e le dita ad inarcare, & cosi deuesi appresentar la mano, sopra la tastura.

Modo di portar la mano molle, e leggiera.

E per dirui, come douete tener la mano leggiera, e molle sopra la tastura, vi darò un essemplio. Quando si dà una guanciata in collera, se gli adopra gran forza. Ma quando se uol far carezze, e vezzi, non si adopra forza, ma si tiene la mano leggiera, in quella guisa che sogliamo accarezze un fanciullo.

Perche causa li Sonatori da Balli non riescono nel sonar Organi.

. . . E se auuien per auentura, che questi Sonatori da Balli si pongono à sonare cose Musicale; ne gli Organi, non potendosi contenere da quel batter di tasti, (non si può sentir peggio) e di qui nasce, che il Sonatore da balli, ò no mai, ò di rado, sonerà bene cose musicali ne gl'Organi, & all'incontro gli Organisti mai soneranno balli negl'istrumenti da penna bene; perche la maniera è differente, como vi ho detto.

Modo di sonar Organi, è balli sopra istrumenti da penna.

Dir. . . . ma l'Organista volendo sonare di balli, bisogna, che osservi la Regola sì, eccettuando però al saltare, & battere con le dita, che ciò gli è concesso per due ragioni. Prima, perche gl'Istrumenti da penna vogliono esser battuti per cagione de i saltarelli, e delle pene, à ciò meglio giuochino. Seconda, per dar gratia a'balli in modo tale, che l'Organista volendo sonar balli gli è lecito il batter con le dita, cosi ad ogn'altro sonatore: ma il sonatore da balli volendo sonar musica nell'Organo, non gli è lecito batter con le dita.<sup>8</sup>

Diruta was the first to stress the importance of total relaxation of the arm and hand. He insists several times that the hand must be supple ("molle") and light. No strength must be used. To be relaxed, the hand

8. Ibid., 5–6.

must have a natural, somewhat cupped position, with the fingers slightly arched (which is, in fact, the only position in which the muscles of the fingers are totally relaxed). The wrist must hold the hand in a straight line with the arm (this being the most relaxed position for the muscles of the wrist). Only in this way will it be possible to play with agility and speed (“con agilità e prontezza”).

Diruta's reflections, which might seem no more than simple logic to us today, actually represented an important step forward in the understanding of keyboard technique. Santa María's rather archaic posture, with a low wrist and fingers strongly arched (“like a bow”), was abandoned in favor of lightness and relaxation. Diruta speaks violently against the low wrist and crooked finger position, saying that it is impossible to play well and without fatigue in such a posture.

Apart from this difference Diruta insists, like Santa María, on the importance of keeping the fingers on the keys; raising them only very slightly after having played a note: “as much as the key rises” (“quanto s'inalza il tasto”).

Diruta is also the first to describe clearly the technical difference between performing on the organ or a plucked keyboard instrument. When playing on a harpsichord, one is allowed to hit the keys with the fingers (“batter con le dita”), that is, to raise the fingers higher and shorten the note values, thus playing in a detached manner. However, this would be extremely detrimental on an organ, where the touch must be legato. On an organ, where the sound stops as soon as a key is released, quickly raising the fingers shortens the note's value by half or more. To the contrary, on plucked keyboard instruments, the resonance of the instrument tends to connect the notes even if the keys are released a bit early. Moreover, this technique of “hitting” the keys with the fingers is only justified in playing dances, a musical genre which, according to the Council of Trent, was not to be performed on the organ.

Several Italian iconographical documents from the first decades of the sixteenth century bear witness to the use of Diruta's technique at that time. Figure 20, a “Concert” by Gorgione, finished by Titian, still shows the bent finger position, though the wrist is already being held straight. To the contrary, figures 21–29 are perfect representations of Diruta's position. In a painting by Lionello Spada (fig. 30) dating from the end of the sixteenth or beginning of the seventeenth century, the archaic position, with low wrists and crooked fingers, is still seen.



FIGURE 20. Giorgione (1475–1510) Titian (1488–1576), "Concert" (virginal).

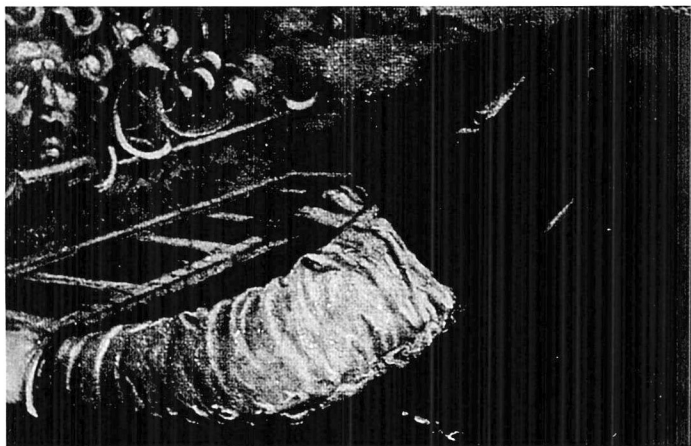


FIGURE 21. Titian (1488–1576), "Venus with Love and Music" (positive), Madrid, Prado.





FIGURE 22. Bernardino Licinio, "Concert" (1535?) (clavichord), London, Lord Chamberlain's Office.



FIGURE 23. Zacchia, "The Clavichord Player" (1561), Amsterdam, Rijksmuseum.

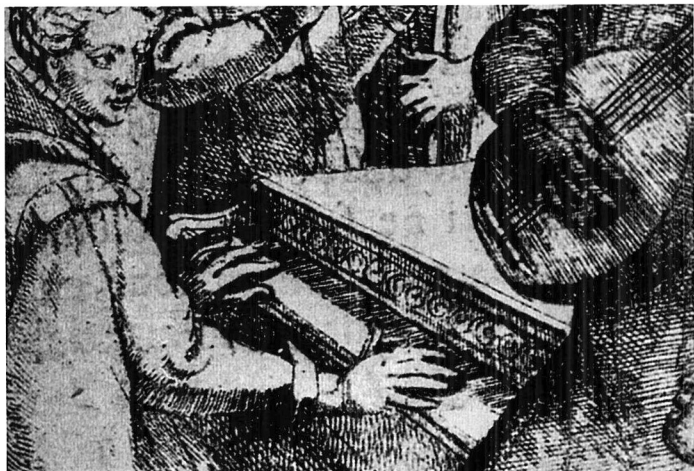


FIGURE 24. Antonio Tempesta (?) (1555–1630), “Musicians Enticing a Nightingale to Sing” (harpsichord).



FIGURE 25. Domenico Zampiere (1581–1641), “St. Cecilia” (harpsichord), Pommersfelden, Schloss Weissenstein.

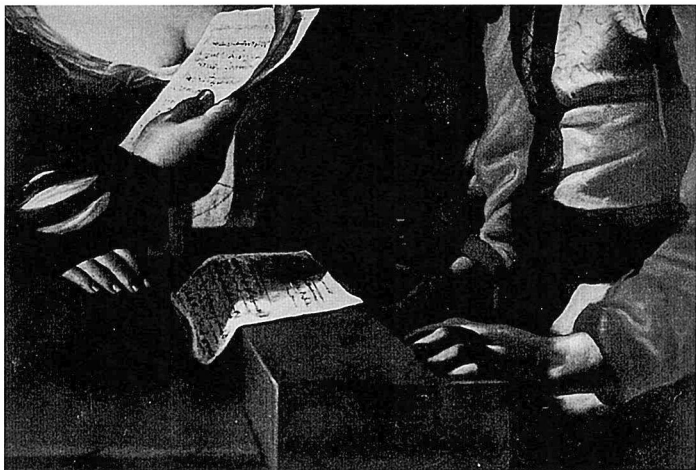


FIGURE 26. Mattia Preti (1613–1699), “Concert” (clavichord), Chicago, The Art Institute.



FIGURE 27. L. Toeput, called Pozzoserrato (1555–1630), “Concerto all'aperto” (virginal), Treviso, Museo Civico L. Bailo.



FIGURE 28. Carlo Dolci (1616–1686), “Saint Cecilia” (organ), Dresden, Staatsgalerie.



FIGURE 29. Anonymous, School of Emilia (17th century), “The Concert” (harp-sichord), Cambridge, Fogg Art Museum.

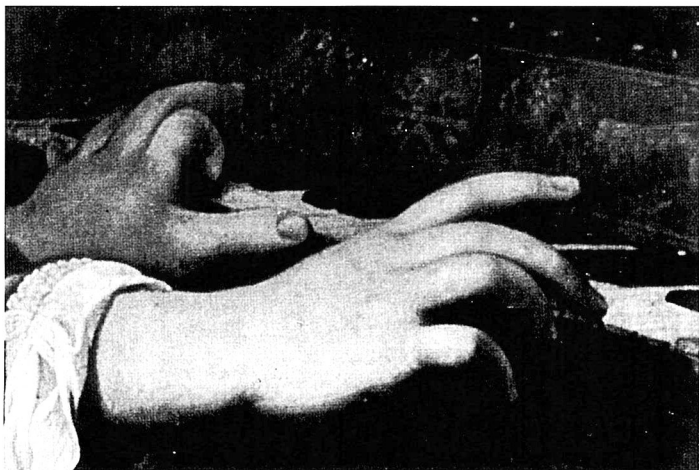


FIGURE 30. Lionello Spada (1576–1622), “Santa Cecilia” (positive), Madrid, Prado.

Several examples from the Low Countries show similar positions, with only slight modifications. The performers play with the balls of their fingers; their wrists do not form any angle, and their fingers are kept on the keys. Sitting very high, the performers in figures 31, 32, and 34 necessarily hold their wrists higher than usual. Henrick Goltzius’s engraving (fig. 36) once again represents the crooked finger position. Figures 33, 35, 37, and 38 correspond almost perfectly to Diruta’s description, as well as do three iconographical documents dating from the second half of the sixteenth century from Germany (figs. 39–41). On the title page of *Parthenia or the Maydenhead of the first musicke that was ever printed for the virginalls*, published in London in 1611, we again find the crooked finger position, probably with the left hand in the process of playing a descending scale with the fingering 2 3 2 3. The wrists, however, are held in a more levelled position than with Santa María’s technique (fig. 42).



FIGURE 31. Michel Coxie (1499–1592), "St. Cecilia" (virginal), Madrid, Prado.

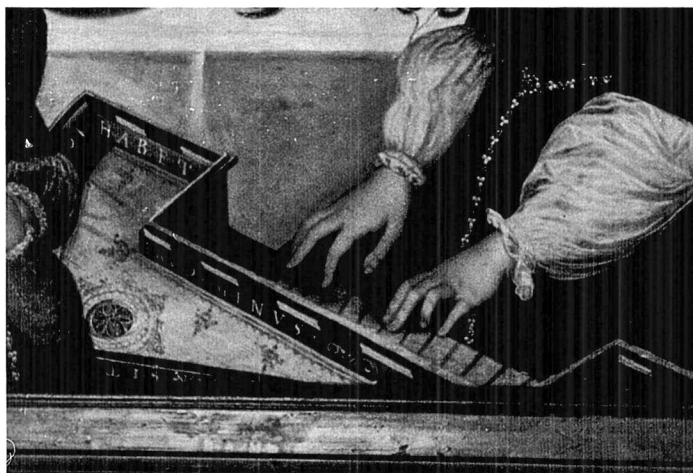


FIGURE 32. Cornelis de Zeeus (1508–1567), "Pierre de Moucheron and Family" (1563) (virginal), Amsterdam, Rijksmuseum.

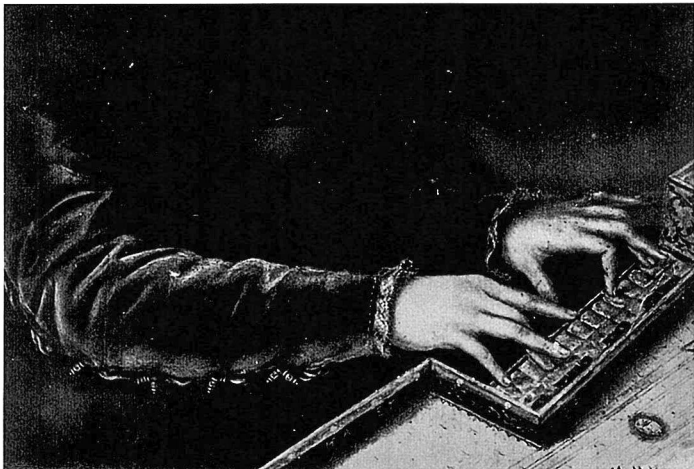


FIGURE 33. Katharina van Hemessen (1528–1587), “Madonna with Child” (1548) (virginal), Cologne, Wallraf Richartz Museum.

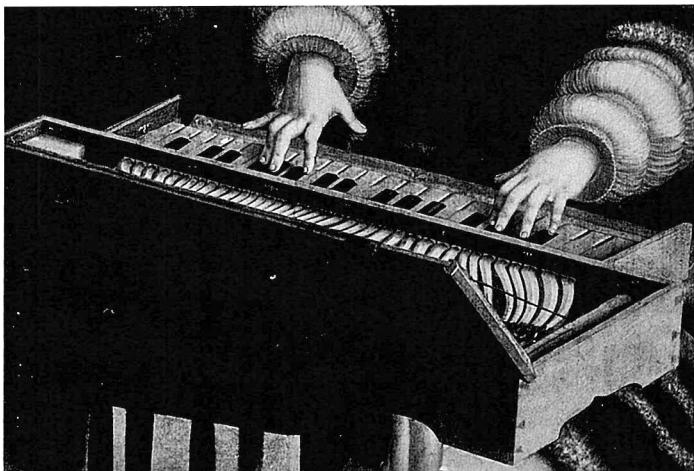


FIGURE 34. Jan Sanders van Hemessen (c.1575), “Young Woman Playing a Clavichord,” Worcester, Mass., Art Museum.



FIGURE 35. Anonymous (Flemish), "The Planets. Mercury" (16th century) (positive), Munich, Bayrisches National-Museum.



FIGURE 36. Henrick Goltzius (1558–1617), "Couple Making Music" (clavichord), Rotterdam, Museum Boymans-Van Beuningen.



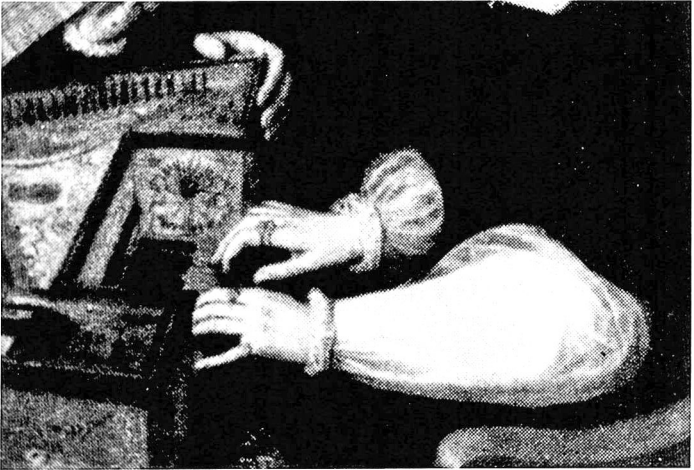


FIGURE 37. Frans Floris or Adriaen Key, "The Berchem Family" (1561) (spinet), Lier, Museum Wuyts-van-Campen.



FIGURE 38. Frans Floris (1516–1570), "Musica" (virginal), Darmstadt, Hessisches Landesmuseum.



FIGURE 39. Anonymous, E. N. Ammerbach, *Orgel oder Instrument Tabulatur* (Leipzig, 1571) (positive).



FIGURE 40. David Brentel (1588), "Lady at the Virginal," Nuremberg, Germanisches Nationalmuseum.



FIGURE 41. Anonymous (David Brentel?) (Germany, 1590), *Geneological Album* (virginal), Private: Dr. Wandersleb, Germany.



FIGURE 42. William Hole, *Parthenia*, Title page (c.1612) (virginal).

Chronologically, the next text relevant to the interpretation of keyboard music was written in Spain by Francisco Correa de Arauxo. Published in Alcalá in 1626, it is entitled *Libro de Tientos y Discursos de Música Práctica y Theorica de Organo Intitulado Facultad Organica*. While he does not go into hand and finger posture, his description of touch in the “Advertencias” says:

Item, one must inviolably maintain one rule, to not raise one finger until the next note or pause follows in the same line. This depends on the following advice.

Item, one must know how to adapt the fingers and hands, giving them the necessary ordinary or extraordinary positions already mentioned: all to avoid raising the preceding key until the next one in the same line follows, as said above.

Item, que guarde con obseruancia inviolable, el no leuantar un número hasta que se siga otro, o pausa en la misma raya, lo qual depende de la advertencia siguiente.

Item, que sepa acomodar los dedos y manos, dando las posturas necesarias, de las ordinarias, o extraordinarias ya dichas: todo a fin de no leuantar el número antecedente, hasta que le siga el subsequente en la misma raya como se ha dicho arriba.<sup>9</sup>

Clearly, Correa de Arauxo conceived of a basic touch which was “legato” in articulation, with the notes carefully juxtaposed (i.e., neither an “over-legato” nor a “détaché”).

Hernando de Cabezón, when publishing the works of his father in 1578, stressed the importance of relaxation and avoidance of unnecessary movements and heaviness:

And thanks to this, the player is not embarrassed like other musicians, nor hindered by the instrument, nor does he lose control of his speech, gesture, or movement when playing, but, to the contrary, he remains seated with calm, authority, and control, moving only the hands while playing, without fatigue or heaviness.

Y desta auctoridad comunica al que le toca, el qual no está como los demás músicos embaraçado, ni cargado con el instrumento, ni tampoco se descompone en voz, gesto o meneo mientras tañe, sino que está sentado y compuesto con sosiego, auctoridad y servicio, exercitando tan solamente las manos en el tañer, sin cansancio ni pesadumbre.<sup>10</sup>

The first French text dealing with hand and finger technique is Père Mersenne’s *De l’Harmonie Universelle*, dating from 1637. He, too, insists that relaxation and lightness of touch are two fundamental requisites for mastering the harpsichord:

9. Francisco Correa de Arauxo, *Libro de Tientos y Discursos de Música Practica . . .* (Alcalá, 1626), introd. p. 65.

10. Hernando de Cabezón, *Obras de Musica para tecla . . .* (Madrid, 1578), in *Monumentos de la Música Española* 27: 27.

Beautiful touch on the harpsichord . . . consists in holding both hands together on the keyboard in such a way that they are not forced, nor deformed, and that their harmonious movement gives as much pleasure as the sound of the strings.

But it must be noted that lightness of hand is very different from speed, for many have a very fast hand, which is, nonetheless, quite heavy, as is shown by the hardness and roughness of their playing. Now, those who have that lightness of hand can be called Absolute Masters of their hands and fingers, with which they press as little as they want on the keys, in order to sweeten the sound of the spinet, as one does on the lute.

Le beau toucher du Clavecin . . . consiste premièrement à porter tellement les deux mains ensemble sur le clavier, qu'elles ne soient nullement forcées ny contrefaites, et que leur mouvement réglé ne donne pas moins de contentement que le son des cordes.

Or il faut encore remarquer que la legereté de la main est for differente des sa vitesse, car plusieurs ont la main très-viste, qui l'ont néanmoins bien pesante, comme témoigne la dureté et la rudesse de leur jeu. Or ceux qui ont cette legereté de la main peuvent être appelés Maistres absolus de leurs mains et de leurs doigts, dont ils pesent si peu qu'ils veulent sur le marches, afin d'adoucir le son de l'EpINETTE comme on fait cely du Luth.<sup>11</sup>

Another to clearly condemn the earlier wrist and finger technique was Jean Denis. Denis lived between 1600 and 1672 and published his *Traité de l'accord de l'espINETTE* in 1643. He was an organist as well, and his comments are particularly interesting because he came from a famous dynasty of French harpsichord makers:

There are some masters who want the hand positioned in such a way that the wrist is lower than the hand, which is very bad and properly speaking a vice, because the hand no longer has any strength. Others have the wrist held higher than the hand, which is a mistake because the fingers are like straight, stiff sticks. For good hand position the wrist and hand must be at the same height, that is that the wrists should be at the same height as the large finger joints of the hand.

Il y a des Maistres qui font poser la main en telle sorte, que le poignet est plus bas que la main, ce qui est tres-mauvais & à proprement dire un vice, pource que la main n'a plus de force: d'autres font tenir le poignet plus haut que la main qui est une imperfection, pource que les doigts paroissent comme des bastons droits & roides; mais pour la bonne position de la main, il faut que le poignet & la main soit de mesme hauteur, s'entend que le poignet soit en mesme hauteur que le gros noeud des doigts de la main.<sup>12</sup>

11. Marin Mersenne, *De l'Harmonie Universelle* (Paris: Ballard, 1637), 161–162.

12. Jean Denis, *Traité de l'accord de l'espINETTE* . . . (Paris, 1643), 36.

To summarize, Denis affirms that, if the wrist be held lower than the hand, the hand loses all its strength, the muscles being unable to function freely. If the wrist is too high the fingers have to be straight, and therefore very stiff. Only when the wrist and knuckles are lined up does the hand function freely.

In the Preface to the *Livre d'Orgue* of Guillaume Gabriel Nivers, published in 1665, can be found another description of keyboard technique, reiterating once more the importance of playing "with ease," that is, comfortably:

In order to play agreeably, it must be done easily; in order to play easily, it must be done comfortably; to do this, place the fingers on the keyboard gracefully, with ease and equality, curving principally the longest fingers a little in order to make them equal to the shorter ones.

Pour toucher agreeablement, il le faut faire facilement; pour toucher facilement, il le faut faire commodément; et pour cet effet disposer les doigts sur le clavier de bonne grace, avec convenance et egalité en courbant un peu les doigts principalement les plus longs pour les rendre égaux aux petits.<sup>13</sup>

Thus, Nivers recommends slightly curving the fingers to make them all more or less of the same length.

The last seventeenth-century treatise to be considered here was written in 1684 by Lorenzo Penna, who advocates a very high position of the hands, with the fingers extended:

Neither the right nor the left hand must be low with the fingers high, but, to the contrary, the hands must be kept high, and the fingers extended so that they form a beautiful hand.

Tanto la mano sinistra, quanto la destra non stiano à basso, e le dita ad alto, ad alto mà stiano, e le Mani, e le Dita distese, che formino bella mano.<sup>14</sup>

This posture can be seen in several seventeenth-century paintings from the Low Countries and France (figs. 43–46): the wrists are held slightly higher than the hand, but with moderation, and the fingers are naturally and elegantly stretched, with a slight curve, seeming totally relaxed. The keys are clearly struck with the balls of the fingers, especially on figures 43, 45, and 46. The "St. Cecilia" painting by Michel

13. Guillaume Gabriel Nivers, *Livre d'Orgue* (Paris: R. Ballard, 1665), iii.

14. Lorenzo Penna, *Li Primi Albori Musicali* (Bologna: Monti, 1684), 197.



FIGURE 43. After Peter Paul Rubens (1577–1640), “St. Cecilia” (clavichord), New York, Metropolitan Museum.



FIGURE 44. Gerrit van Honthorst, “St. Cecilia” (Dutch, 17th century) (organ), Kassel, Kunstsammlungen.



FIGURE 45. Jacob Ochterveldt (Dutch, c.1635–1710), “The Music Lesson” (virginal), Birmingham Museum.



FIGURE 46. Nicholas Poussin (1593/4–1665), “Saint Cecilia” (organ), Madrid, Prado.



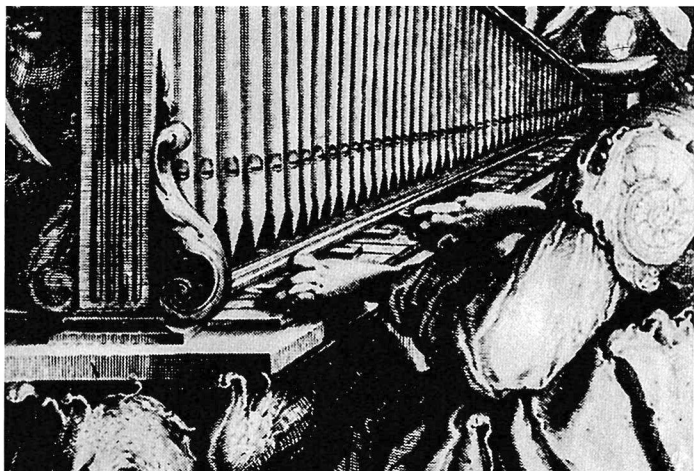


FIGURE 47. Zacharias Dolendo, after Jacques de Gheyn (Dutch, 1565–1629), “Angel Musicians” (positive), Germany.



FIGURE 48. Cornelis de Vos (Dutch, 1584?–1651?), “Family Portrait” (harpsichord), Braunschweig, Herzog Anton Ulrich-Museum.

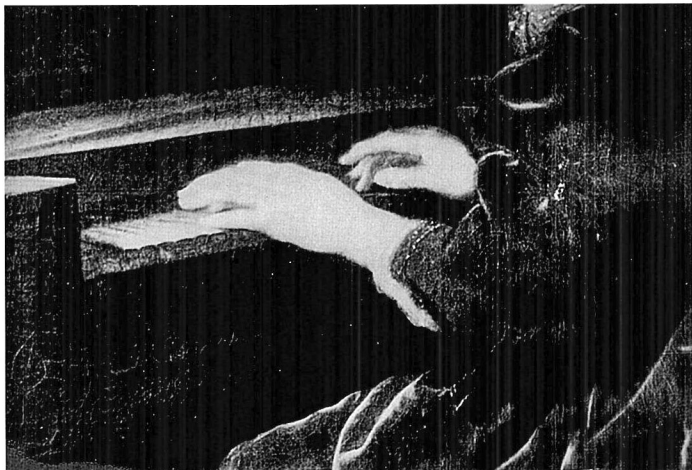


FIGURE 49. Solomon Konink (Dutch, 1609–1656), “Saint Cecilia” (virginal), Pommersfelden, Schloss Weissenstein.

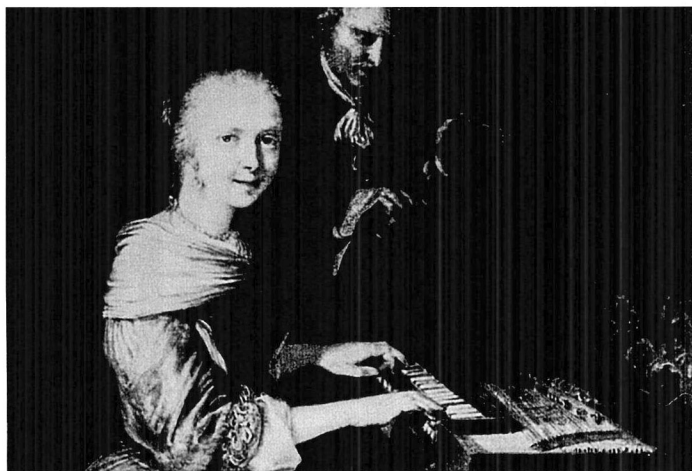


FIGURE 50. Gerrit Dou (Dutch, 1613–1675), “The Music Lesson” (clavichord), Dresden, Staatliche Kunstsammlungen.



FIGURE 51. Gerrit Dou (Dutch, 1613–1675), “Woman Playing the Clavichord,” London, Dulwich College Picture Gallery.



FIGURE 52. Jan Barentz Muycckens, “Double Portrait at the Clavichord” (Dutch, 1648), The Hague, Gemeentemuseum.



FIGURE 53. Jean Steen, "The Music Teacher" (Dutch, 1671) (harpsichord), London, National Gallery.



FIGURE 54. Boizot (1744–1800) after G. Metsu (1629–1667), "Dutch Woman at the Virginal," The Hague, Gemeentemuseum.



FIGURE 55. Antonis Van Dick (Dutch, 1599–1641), “Genovese Lady with Daughter” (virginal), Brussels, Musées Royaux.

Coxie seen previously (fig. 31), which dates from the sixteenth century, also demonstrates this position but with a much higher wrist, perhaps because the instrument is on a low table.

In several other Dutch paintings from the seventeenth century (figs. 47–54) the same finger position is invariably shown, always slightly curved. The height of the wrist varies a bit, but remains also very natural and supple. The only exception is a painting by Antonis Van Dick representing a Genovese lady at the virginal (fig. 55) still playing with her wrists low and fingers in the earlier, crooked position.

\* \* \*

Part 2 of this article will present and evaluate sources from the eighteenth century.

*Belmont, Massachusetts*

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