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

Part 2

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THE EIGHTEENTH CENTURY saw a proliferation of pedagogical treatises on keyboard technique, especially in France and Germany. Hand and finger positions are discussed in most of them. By the second half of the seventeenth century the clavichord had fallen into disuse in France, and, consequently, French treatises deal specifically with harpsichord technique; composers such as Couperin, Rameau, Corrette, and Duphy developed a style of music marvelously exploiting the technical possibilities of the plucked keyboard instruments. Thus, keyboard music, which until then had been basically written indiscriminately for the family of keyboard instruments, became much more idiomatic to the harpsichord and, in turn, French theorists wrote their manuals more specifically for plucked keyboard instruments.

To the contrary, in Germany the clavichord continued to play an essential role and reached its apogee in the second half of the eighteenth century, while the fortepiano was slowly gaining in importance. Therefore, the German pedagogical treatises are generally written for the "Clavier," that is, for harpsichord, fortepiano, or clavichord indiscriminately, or specifically for the clavichord. As most of these eighteenth-century treatises fail to make a distinction in hand and finger positions for the various instruments, they will be considered here in simple chronological order.

In 1700 Jacques Boyvin published his *Second livre d'orgue*, in which he said:

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Note that, when playing rapidly, the faster one goes, the more one must raise the fingers to bring out the harmony and brilliance; but for all this, the hand must be raised as little as possible and always held in its position.

Remarquez que dans la vitesse, plus on va vite, et plus il faut lever les doigts afin de dégager l'harmonie et de donner du brillant; mais pour tout cela il ne faut lever la main que le moins qu'on peut, et la tenir dans sa situation.¹⁵

For the first time, mention can be found here of a "brilliant" touch and higher finger movement. The hand, however, remains perfectly stable.

Monsieur de Saint-Lambert published his *Principes du clavecin* in 1702. In the chapter "On Finger Position," he says:

Nothing is freer in Harpsichord playing than the position of the hand, for which one looks only for his own ease and gracefulness. . . .

One's ease is the first rule to follow; gracefulness is the second. This latter consists in holding the hands straight on the keyboard; that is, leaning neither inward nor outward. The fingers must be bent and lined up equally, measured by the thumb's length. The wrist has to be at the height of the elbow, which depends on the seat chosen. Never raise the fingers too high in playing, and never push too strongly on the keys.

Il n'y a rien de plus libre dans le Jeu du Clavecin que la position des doigts. Chacun ne recherche en cela que sa commodité & la bonne grace. . . .

La commodité de celuy qui jouë est la première regle qu'il doit suivre; la bonne grace est la seconde. Celle-cy consiste à tenir ses mains droites sur le Clavier; c'est-à-dire, ne penchant ny en dedans ny en dehors. Les doigts courbez & tous rangez au même niveau, pris sur la longueur du pûce. Le poignet à la hauteur du coude; ce qui dépend du siège qu'on prend. Ne levant point les doigts trop haut en jouant, & n'apuyant point aussi trop fort sur les Touches.¹⁶

Thus, Saint-Lambert advocates a level position of the elbow, wrist, and hand. The fingers must be lined up to the length of the thumb. Though this varies greatly between individuals, it still requires a rather bent position of the fingers. The idea of lining up the fingers on the keys, as if they were all of equal length, was already mentioned by Nivers, who had apparently taken it from Diruta; it will be encountered in several other eighteenth-century treatises. However, Saint-Lambert did

15. Jacques Boyvin, *Second Livre d'orgue* (Paris, 1700; repr. as *Les Archives des maîtres d'orgue*, vol. 6, edited by André Pirro and Alexandre Guilmant, Paris, 1905; repr. 1972). Eng. trans. by the author.

16. Michel de Saint-Lambert, *Les Principes du clavecin, contenant une explication exacte de tout ce qui concerne la tablature et le clavier* (Paris, 1702; repr. ed., Geneva: Minkoff Reprint, 1972; excerpts in Craig L. George Lister, "Traditions of Keyboard Technique from 1650–1750," Ph.D. diss., University of North Carolina, 1979; pub. by Ann Arbor: UMI Press, 1983), 128–29. Eng. trans. by the author.

take great care to point out above all that the performer was to feel fully comfortable and be graceful, and that each individual was entirely free to reach this goal in the way best suited to him.

In 1704 Johann Baptist Samber published his *Manuductio ad organum* in Salzburg.¹⁷ Despite the Latin title, this organ method was written in German and intended for beginners and young people. Samber still advocated the earlier types of fingering without the thumb and recommended a slightly curved position of the fingers with relaxed arms and shoulders. He specified that the keys should be struck by the balls of the fingers.

In respect to the body, one should accustom oneself to sitting quite straight (and not round-shouldered) at the middle of the keyboard, with arms and hands free from the body and the fingers neither too bent nor too straight. These latter should be raised well enough to touch and play the keys securely with the balls of the fingers. The beginner should be careful in ascending and descending runs not to let any fingers hang below the keyboard or stick up in the air, but, to the contrary, keep them right on the keyboard.

Was anbelangt den Leib solle man sich gewöhnen/schön Auffrecht nicht Buglecht mitten zu dem Clavier zu sitzen/die Händ und Arm frey von dem Leib/die Finger weder zu gerad noch zu krumb zu halten/auch solche wohl auffheben/mit deme/dass die Claves mit denen Ballen der Fingern wohl hinein berührt und geschlagen werden. Item solle der Anfänger wohl acht geben/damit er in Auff- und Ablauffen keinen Finger nicht über die Clavier hinab hengen lasse/noch auch in die Höhe spreusse/sondern allzeit schön ob den Clavier halte.¹⁸

François Couperin in *L'Art de toucher le clavecin*, summarized his teaching of such pupils as Anne de Bourbon, the Count of Toulouse, and the Princess of Monaco.¹⁹ It is possible that he himself had studied with the organist Lebègue and with Nivers. Couperin speaks at length about posture and hand position but does not specify how the fingers should be held:

To be seated at the right height the bottom of the elbows, wrists, and fingers must be at the same level, and therefore one must use a chair which allows this rule to be respected. . . .

17. Johann Baptist Samber, *Manuductio da organum* (Salzburg, 1704); excerpt in Lister, "Traditions," 93–95.

18. Samber, *Manuductio*, 91; trans. rev. from Lister by the author.

19. François Couperin, *L'Art de toucher le clavecin* (Paris, 1717; facs. ed., New York: Broude Brothers, 1969; new ed. with Eng. trans. by Margery Halford, Sherman Oaks, CA: Alfred Publishing Co., 1974); excerpt in Lister, "Traditions," 139–41.

The only remedy that I have found for one who holds the wrist too high in playing is to have someone hold a little folding stick, which can be passed over the defective wrist and simultaneously under the other one. . . .

Sweetness of Touch also depends on holding the fingers as close as possible to the keys. It is logical that (apart from the actual experience) a hand falling from on high gives a dryer stroke than if it were striking from a close position and that the plectrum draws a dryer sound from the string.

Pour être assis d'une bonne hauteur, il faut que le dessous des coudes, des poignets; et des doigts soit de niveau: ainsy on doit prendre une chaise qui s'accorde à cette règle.

Sy une personne a un poignet trop hault en jouant, le seul remède que j'aye trouvé, est de faire tenir une petite baguette-pliant par quelqu'un; laquelle sera passée par dessus le poignet défectueux; et en même-tems par dessous l'autre poignet.

. . . La Douceur du Toucher dépend encore de tenir ses doigts le plus près des touches qu'il est possible. Il est sensé de croire, (L'expérience à part) qu'une main qui tombe de hault donne un coup plus sec, que sy elle touchoit de près; et que la plume tire un son plus dur de la corde.²⁰

Thus Couperin advises holding oneself in a horizontal line with the elbows, wrists, and fingers. He is much more precise than his predecessors as to the distance one should sit from the keyboard and gives an approximation of about twenty-three centimeters, a reasonable distance, which would vary depending on the height of the performer. He is the first to mention a footstool for children to keep their legs from hanging down, making their balance precarious. Surprisingly, Couperin recommended turning the body slightly to the right, toward the audience, probably from a purely aesthetic concern and not for any technical reasons. To the contrary, he pointed out that the knees must not be held too tightly together and demonstrated his awareness of the importance of being entirely relaxed when playing.

The folding ruler device that Couperin invented for correcting pupils who held their wrists too high would, of course, only be effective if the teacher were sitting, stick in hand, throughout the pupil's practice time. Couperin does indeed mention in the same chapter that children should never be left alone when practicing, since, not yet able to concentrate fully enough, they will rapidly acquire bad habits. (He even admits to locking and taking away the key of his instrument when he is absent!)²¹ Finally, Couperin insists that a beautiful touch can only be obtained by keeping the fingers as close as possible to the keys.

* * *

20. Couperin, *L'Art*, 3–7. Eng. trans. by the author.

21. *Ibid.*, 7–8.

Six years after Couperin, Frey Pablo Nassarre published his *Escuela música segun la practica moderna*.²² He stated that his treatise represented the labor of fifty years of work, making it representative of the musical ideas prevalent in Spain after approximately 1675. Nassarre was blind from birth and spent most of his career as organist of the Real Convento de San Francisco in Saragossa. He was an excellent composer and author of the most important source of information concerning performance practice in Spanish music of the second half of the seventeenth century. In a chapter on the duties of chapel masters and other music teachers, he says:

The first rule which must be given them (beginners) concerns the position of the body, which must be in the middle of the keyboard. They must hold themselves straight, without any other movement with the head or any other part of the body except the hands. The second rule concerns the manner of placing the hands on the instrument. The fingers must be slightly arched, not so much as to make them strike with the nails, nor so little as to make them strike with the inner part of the ball of the finger. They must strike with the extremity of the ball; giving good hand position habits to beginners is a prerequisite to producing good organists.

The third rule is to teach them the notes on the keyboard, so they are able rapidly to find the sign corresponding to each key.

The fourth rule is to teach them how to change fingers when they change keys, raising one when the other strikes.

La primera regla que se les ha de dar es, la planta de el cuerpo; el qual ha de ser de modo, que caida en medio de el teclado. Lo ha de tener recto, sin hazer movimiento alguno con cabeza, ni ningun otro miembro, mas que con las manos. La segunda regla ha de ser el modo de plantar las manos en el Instrumento. Este ha de ser, assentando los dedos un poco arqueados; no tanto, que el herir sea con la uña, ni tampoco que sea con la parte inferior de la yema. Ha de ser pues el herir con la extremidad de elle; y importa tanto el buen habito a los principios en la postura de las manos, como el salir buenos Organistas.

La tercera regla ha de ser enseñarles la mano por el teclado, de modo, que sepan con prontitud el signo que corresponde a cada tecla.

La quarta regla que se ha de enseñar es, que assi como muden de tecla, muden de dedo; levantando uno quando hiere otro.²³

Nassarre thus recommends a very natural, slightly curved position of the fingers, allowing them to strike the keys with their fleshy part. He goes on to describe a perfect legato touch, achieved by having one finger play a note at the moment another leaves the preceding one.

22. Fr. Pablo Nassarre, *Escuela música segun la practica moderna*, part 2 (Saragossa, 1723–24; facs. ed., Saragossa: Institución “Fernando el Católico,” 1980).

23. *Ibid.*, 2: fol. 438. Eng. trans. by the author.

In the year preceding Nasserre's treatise, Rameau published his *Traité de l'harmonie*,²⁴ followed two years later by his *Pièces de clavecin*,²⁵ four years before his death, he finally published his *Code de musique pratique*.²⁶ He was undoubtedly the most prolific French theoretician of the eighteenth century. Rameau's keen curiosity led him to analyze his own marvelous music in order to find theoretical explanations. His remarks on keyboard technique show the same spirit, and he went into much more detail than his predecessors. Mention of hand and finger technique can already be found in his *Traité de l'harmonie*. A more detailed study on hand and finger technique can be found in the preface to the *Pièces de clavecin*. Entitled "De la mécanique des doigts sur le clavessin," it includes this advice:

First, it is necessary to sit at the harpsichord with the elbows higher than the level of the keyboard, so that the hands can drop onto the keyboard, merely by the natural movement of the wrist joint.

The elbows have to be higher than the level of the keyboard, so that the hand can drop as of itself onto it. . . .

This natural position of the elbows, combined with the correct placement of the 1st and 5th, gives the exact distance at which a person, whatever his size, should place himself from the harpsichord, leaving nothing more than to adjust the bench.

When the thumb and little finger, in other words, the 1st and the 5th, rest on the edge of the keys, the other fingers must also curve, so that they, too, may rest on the edge of the keys. . . .

The wrist joint must always be supple. This suppleness, which is then transmitted to the fingers, gives them all the ease of movement and all the lightness necessary. . . .

Each finger must have its own particular movement, independent of the others, so that even when the hand has to be moved to a certain part of the keyboard, the finger to be used must drop onto the key by its own movement.

The fingers must fall onto the keys without hitting them. Moreover, they must glide, so to speak, from one key to the other successively, which will give some idea of how gently one must proceed when beginning to learn. . . .

24. Jean Philippe Rameau, *Traité de l'harmonie, réduite à ses principes naturels* (Paris, 1722; facs. ed. and Eng. trans. by Philip Gossett, New York: Dover Publications, 1971); excerpt in Lister, "Traditions," 149–50.

25. Jean Philippe Rameau, *Pièces de clavecin avec une méthode sur la mécanique des doigts* (Paris, 1724; facs. ed., New York: Broude Brothers, 1967; ed. with Ger. and Eng. trans. by Erwin R. Jacobi, Kassel: Bärenreiter, 1958).

26. Jean Philippe Rameau, *Code de musique pratique* (Paris, 1760; facs. ed., New York: Broude Brothers, 1965; facs. ed. by Erwin R. Jacobi, Rome: American Institute of Musicology, 1969).



FIGURE 56. Anonymous (1724). Harpsichord in a detail from the title page of Handel's *Julius Caesar: An Opera*. Courtesy of the British Library, London.



FIGURE 57. Martin Engelbrecht (1684–1756). Harpsichord in a detail from *Clavier, Theorbe, Harpfenet, und Cithare*. Courtesy of the Germanisches Nationalmuseum, Nuremberg.



FIGURE 58. J. E. Ridinger (1698–1767). Detail from *Die Orgel ein Begriff aller Music-Kunst*. Courtesy of the Gemeentemuseum, The Hague.



FIGURE 59. Anonymous, Spain (ca. 1750). Harpsichord in a detail from *Pablo Minguet y Irol, Reglas*. . . . Courtesy of Minkoff Reprint, Geneva.

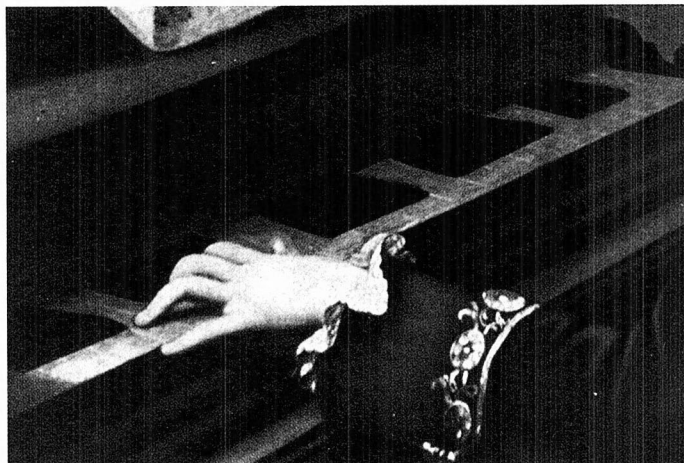


FIGURE 60. T. Heibling (18th century). Detail from *Boy Resembling Mozart*, said to be Count Firmian, at the fortepiano. Courtesy of the Mozart-Museum (Mozart Geburtshaus), Internationale Stiftung Mozarteum, Salzburg.



FIGURE 61. Johann Heinrich Tischbein (1751–1829). Detail from *Self-Portrait with Lady at the Clavichord*. Courtesy of the Staatliches Museum Preußischer Kulturbesitz, Berlin.



FIGURE 62. Supraporte (18th century). Detail of a clavichord from *Lady at the Spinette*. Courtesy of the Bärenreiter-Verlag Bildarchiv, Kassel.



FIGURE 63. I. N. de la Croce (1780–81). Detail of Nannerl and Wolfgang at the fortepiano from *The Mozart Family*. Courtesy of the Mozart-Museum (Mozart Geburtshaus), Internationale Stiftung Mozarteum, Salzburg.



FIGURE 64. Emmanuel Handmann (1718–81). Detail of a lady at the clavichord from *The Music Lesson* (1769). Courtesy of the Kunstmuseum, Basel.

Il faut d'abord s'asseoir auprès du Clavessin, de façon que les coudes soient plus élevés que le niveau de clavier, & que la main puisse y tomber par le seul mouvement naturel de la jointure du poignet.

C'est afin que la main tombe comme d'elle-même sur le clavier, qu'il faut d'abord avoir les coudes audessus de son niveau. . . . Cette situation naturelle des Coudes, jointe à la juste portée du 1. & du 5. donne le point fixe où toute personne, de quelque taille qu'elle soit, doit se placer auprès du Clavessin; & il ne s'agit plus que d'y proportionner le siège.

Le 1. et le 5. se trouvant sur le bord des touches, engagent à courber les autres doigts, pour qu'ils puissent se trouver également sur le bord des touches. . . .

La jointure du poignet doit toujours être souple: sette souplesse qui se répand pour lors sur les doigts, leur donne toute la liberté & toute la legereté nécessaire. . . .

Il faut que chaque doigt ait son mouvement particulier & indépendant de tout autre: de sorte que quand même on est obligé de transporter la main à un certain endroit du clavier, il faut encore que le doigt dont on se sert pour lors, tombe sur la touche par son seul mouvement.

Il faut que les doigts tombent sur les touches, & non pas qu'ils les frappent; il faut de plus qu'ils coulent, pour ainsi dire, de l'un à l'autre en se succédant: ce qui doit vous prévenir sur las douceur avec laquelle vous devez vous y prendre en commençant.²⁷

Rameau returned to the subject of hand and finger position in his last treatise, the *Code de musique pratique*. In addition to points already made in the *Pièces de clavecin*, he adds:

27. Rameau, *Pièces de clavecin*, 4–5. Eng. trans. from the edition by Jacobi, 17.

One must imagine the fingers attached to the hand like springs attached to a handle by hinges which leave them complete liberty. . . . Given this, place the five fingers on five consecutive keys of the keyboard, so that the thumb lies on it. . . .

As the hand opens, the fingers lose their roundness; but, when they are left to act on their own, they themselves determine how the hand should adjust to the smaller or greater intervals that they reach, and all works with ease; even the finger 5 adjusts in turn by advancing more or less on the key.

Il faut regarder les doigts attachés à la main, comme des ressorts attachés à une manche par des charnières qui leur laissent une entière liberté; d'où il suit que la main doit être, pour ainsi dire, morte. . . . Cela étant, placez les cinq doigts sur cinq touches consécutives du clavier, où le pouce s'avance sur la sienne. . . .

A mesure que la main s'ouvre, les doigts perdent de leur rondeur; mais quand on les laisse agir de leur propre mouvement, ils déterminent pour lors la main à s'y prêter dans les intervalles plus ou moins grands qu'ils embrassent, et tout marche à l'aise, le 5 même s'y prête à son tour, en s'avancant moins sur la touche.²⁸

In his first text Rameau stresses that all finger movements should stem from the knuckles and should not involve any further motion of the hand. In order to produce the perfect legato, that movement should be as slight as possible, the fingers remaining in close contact with the keys and perfectly synchronized. In the preface to the *Pièces de clavecin* is found one of Rameau's most original pedagogical ideas: placing young beginners on a rather high seat to help them develop and become conscious of their hands' natural weight on the keyboard. With totally supple wrists the fingers will simply rest on the keys and support the hands' weight, while the elbows will hang to the side in a totally relaxed position.

Rameau takes great care to specify that the arching of the fingers should never be exaggerated. The wrist must remain supple at all times, allowing the fingers to work with complete freedom. In playing a key the movement must originate exclusively from the knuckles, even if a displacement of the hand is needed, as for large jumps. In any case, all movements must be minimized, superfluous motion being detrimental to the sound quality. Rameau affirms that the fingers must fall on the keys by their natural weight, never hitting them.

This technique was again described in Rameau's *Code* of 1760 but with a slightly different wording, which, unfortunately, has created some confusion among modern readers. The terms "ressorts" (springs) led many to believe that the author wished a very abrupt, almost violent, movement of the finger, much like a spring being suddenly released.

28. Rameau, *Code*, 11. Eng. trans. by the author.

Further reading of this paragraph should have in fact immediately dissipated this misconception.

* * *

The rather bent finger position espoused by Nivers, Saint-Lambert, and to a certain extent, Rameau, was also advocated by the Danish organist and theorist Carl August Thielo in his *Tanker og regler fra Grunden af om Musikken*.

When learning to play on the keyboard the beginner must bend his fingers immediately and must hold them more curved than extended.

Above all, make sure that the thumb is held very near the index finger; indeed, the thumb in playing moves mostly under that finger.

The thumbs must be markedly curved inwards in order to be used in playing, and one must not (as the old keyboard masters taught) play so much with the fourth finger but rather employ the thumb.

Den Laerende mad venne sine Fingere strat udi Begyndelsen af Claver-Spillene, at holde dem meere krumme end lige udstrakte.

For alting merk, at Tommel-Fingern den holdes vel naer til Pege-Fingern, ja udi Spillen meest under samme.

Tommel-Fingern maa vel vennes til at bruges Spillen, og ikke (som somme af de Antique Claveer-Meestre laerer) at spille med de 4rd Fingre foruden Tommel-Fingern.²⁹

Two treatises were published in 1749, one in Germany by P. C. Hartong³⁰ and the other in France by Michel Corrette.³¹ Hartong recommends having the elbows somewhat higher than the hands (Rameau's position for beginners), the upper arms slanted toward the keyboard and the fingers slightly curved. Corrette simply reiterated what he felt was valuable from his French predecessors: the body turned a little to the right, toward the audience (from Couperin), while, however, specifying that the organist should turn slightly to the left; the three middle fingers curved in order to form a straight line with the thumb and the fifth finger (from Saint-Lambert); and the elbows and wrists at the level of the keyboard (from Denis).

29. Carl August Thielo, *Tanker og regler fra Grunden af om Musikken* (Copenhagen, 1746, 25–27); quoted in Lister, "Traditions," 200.

30. P. C. Hartong, *Dess musici theoretico-practici . . . enthaltend eine methodische Clavier-Anweisung . . .* (Nuremberg, 1749); quoted in Lister, "Traditions," 205–62.

31. Michel Corrette, *Les Amusements du Parnasse: Méthode courte et facile pour apprendre à toucher le clavecin*, vol. 1 (Paris, 1716; 2d ed. rev. 1749; repr. 1751); 2d ed. quoted in Lister, "Traditions," 176–78.

Before looking at treatises from the second half of the eighteenth century, three iconographical documents from the first half of the eighteenth century should be examined. In figures 56 to 58 the players' fingers are seen slightly bent, in a very natural, relaxed position. The balls of the fingers are in contact with the keys, and the wrists are held slightly higher than either the keyboard or elbows.

The second half of the eighteenth century is dominated by the German treatises of Marpurg, Carl Philipp Emanuel Bach, and Türk. Friedrich Wilhelm Marpurg came from a wealthy German family. He travelled extensively and lived for a time in Paris, where he met Rameau. He subsequently became one of the most enthusiastic promoters of Rameau's ideas in Germany. In 1750–51 he published his *Die Kunst das Clavier zu spielen* in Berlin, followed by *Anleitung zu Clavierspielen*, which was also published in French and Dutch.³² In spite of the French title *Principes du clavecin*, these works were for the most part dedicated to the clavichord, which at the time was considered the key to all other keyboard instruments. In his first treatise, Marpurg's remarks on hand and finger positions are almost a literal translation from Couperin's *L'Art de toucher le clavecin*. The only new element is that of placing a piece of lead on the pupil's hands to control any excessive movement. Similar advice is given in his *Anleitung zum Clavierspielen*.

In 1753 and 1762 Carl Philipp Emanuel Bach, the most illustrious clavichord player of all time, published his treatise *Versuch über die wahre Art das Clavier zu spielen*.³³ His description of hand and finger technique varies little from those of Couperin and Rameau. He recommends elbows slightly higher than the keyboard and stresses the importance of total relaxation, any stiffness being detrimental to speed and agility. Bach condemns those who use the old fingering systems, counseling that regular use of the thumbs is indispensable.

32. Friedrich Wilhelm Marpurg, *Die Kunst das Clavier zu spielen*, 2 vols. (Berlin 1751); *Anleitung zum Clavierspielen* (Berlin, 1755; facs. of the 2d ed., 1765, New York: Broude Brothers, 1969; Fr. trans. as *Principes du clavecin*, Berlin, 1756; facs. ed., Bologna: Forni Editore, 1971; facs. repr., Geneva: Minkoff Reprint, 1973–74; Dutch trans. as *Aanleiding tot het clavierspeelen*, Amsterdam, 1760). [See also Elizabeth L. Hays, "F. W. Marpurg's *Anleitung zum Clavierspielen* (Berlin, 1755) and *Principes du clavecin* (Berlin, 1756): Translation and Commentary" (Ph.D. diss., Stanford University, 1976). Ed.]

33. Carl Philipp Emanuel Bach, *Versuch über die wahr Art das Clavier zu spielen* (Berlin, 1753; facs. ed., Lothar Hoffmann-Erbrecht, Leipzig and Wiesbaden: Breitkopf & Härtel, 1957; repr. 1986; Eng. trans., William J. Mitchell, New York: W. W. Norton, Inc., 1949).

The third treatise from eighteenth-century Germany, along with C. P. E. Bach's work, forms the basis of our modern keyboard technique; it is the *Klavierschule* of Daniel Gottlob Türk.³⁴ After stressing the importance of using all fingers equally, thumbs included, Türk gives the following rules about hand and finger position:

1. The three longer (middle) fingers must always be curved a little, but the thumb and the little finger must be held out straight (extended), so that because of the shortness of the latter, the hands and arms need not sometimes be moved forward and then immediately backward. . . .

2. The thumb must always be held over the keyboard; therefore, it should never hang down or be pressed against the edge of the clavichord, for both of these mistakes, among other things, would cause unavoidable gaps in the music (incorrect articulation of the musical thought) before the thumb could be placed in its correct position. . . .

3. The fingers must not be held too closely together, but rather a little apart from each other, so that whenever possible, any stretches can be executed nicely and with continuity, without motion of the hands, because playing should be done only with the fingers. For large skips, however, small movements of the hands and arms are unavoidable.

4. The hands must always be (almost) the same distance above the keyboard; therefore it is not correct to lift them up too high when playing staccato or leave them almost lying on the keys when playing sustained (slurred) passages, for this will easily cause incorrect unevenness in execution.

1. Die drey längern (mittlern) Finger müßen immer etwas eingebogen, der Daumen und kleine aber gerade vorwärts (ausgestreckt) gehalten werden, damit man, wegen der Kürze dieser letzteren, nicht die Hände and Arme bald vorwärts schieben, bald wieder zurück ziehen muß.

2. Der Daumen muß immer über der Tastatur befindlich seyn, folglich darf er nie herab hangen, oder an das Leistchen gestemmt werden, weil durch die genannten beyden Fehler unter andern unvermeidliche Lücken (fehlerhafte Trennungen der Gedanken) entstehen würde, ehe der Daumen auf seinem Platze wäre.

3. Die Finger müssen nicht zu nahe beysammen, sondern immer lieber ein wenig von einander entfernt liegen, damit man die vorkommenden Spannungen, wo möglich, ohne Bewegung der Hände nett und zusammenhängend heraus bringen könne; denn blos mit den Fingern soll man spielen. Nur bey großen Sprungen ist eine kleine Bewegung der Hände und Arme unvermeidlich.

4. Die Hände müssen immer (ziemlich) gleich hoch über dem Griffbreite seyn; es ist daher unrecht, wenn man sie z. B. bey abgestossenen Tönen zu merklich in die Höhe hebt, oder bey gezogenen (geschleisten) Stellen fast auf den Tasten liegen läßt, weil leicht eine fehlerhafte Ungleichheit im Vortrage daraus entsieht.³⁵

34. Daniel Gottlob Türk, *Clavierschule, oder Anweisung zum Clavierspielen für Lehrer und Lernende* (Leipzig and Halle, 1789; facs. ed., Kassel: Bärenreiter, 1962; Eng. trans. by Raymond H. Hagg as *School of Clavier Playing*, Lincoln: University of Nebraska Press, 1982).

35. Türk, *Clavierschule*, 24–26. Eng. trans., Hagg, *School*, 31–33.

Türk recommends a distance of ten to fourteen inches between the body and the keyboard; Couperin required nine inches and Marpurg six to ten. It is natural that, with the extension of keyboards from four octaves in the second half of the seventeenth century to five, and sometimes more, in the late eighteenth century, it became necessary to sit somewhat farther from the instrument to give the arms more freedom of movement. He specifies a rather high elbow position ("several inches higher than the hands") but does not specify, like Rameau, that this position can be modified, once the student has trained his hands. One divergence from earlier theorists is Türk's advice to hold the fingers a little apart from each other to allow the execution of extensions without hand motion. While he advocates only a very slight curving of the fingers, he warns that if the fingers are totally extended, they will be subjected to detrimental tension.

* * *

A few texts of lesser importance for this particular study should be briefly mentioned here. In 1765 the Frenchman Jacques Duphly wrote his "Exercise Book for Lord Fitzwilliam." In a paragraph entitled "Du doigté" he said:

The movement of the fingers stems from the roots, that is, from the joint attaching them to the hand. The fingers must be curved naturally, and each of them must have its own independent movement. The fingers must fall on the keys and not hit them. Moreover, they must flow from one to another in succession; that is, one must leave one key only after having begun another. This pertains particularly to French playing.

Le mouvement des doigts se prend à leur racine: c'est-à-dire, à la jointure qui les attache à la main. Il faut que les doigts soient courbés naturellement, et que chaque doigt ait un mouvement propre et indépendant des autres doigts. Il faut que les doigts tombent sur les touches & non qu'ils les frappent, et de plus qu'ils coulent de l'une à l'autre en se succédant; c'est-à-dire, qu'il ne faut pas quitter une touche qu'après en avoir pris une autre. Ceci regarde particulièrement le jeu François.³⁶

Duphly simply copied Rameau's text (page four of the preface to *Pièces de clavecin*), adding a few of his own ideas. Especially noteworthy is Duphly's statement that a legato style of playing is more typical of French interpretation.

36. Jacques Duphly, "Exercise Book for Lord Fitzwilliam," 1765, Fitzwilliam Museum. Eng. trans. revised by the author from Lister, "Traditions," 24. [See also the Eng. trans. by Christopher Hogwood in *French Music and the Fitzwilliam* (Cambridge: Fitzwilliam Museum, 1975). Ed.]

Jean Jacques Rousseau's *Dictionnaire de musique* contains an entry on fingering:³⁷

The general principles which can be given are: (1) Place the two hands on the keyboard in such a way that you have a completely unhindered position, for which one must usually exclude the right hand thumb, because the two thumbs posed on the keyboard, particularly on the white keys, would put the arms in a strained and awkward position. Take care as well that the elbows be a little higher than the level of the keyboard, so that the hand falls of its own accord onto the keys; for the height of the seat is important. (2) Keep the wrist more or less at the height of the keyboard; that is, at the level of the elbow, fingers spread out to the width of the keys and slightly curved on them, ready to fall on different keys. . . .

Les préceptes généraux qu'on peut donner sont, 1. de placer les deux mains sur le Clavier de maniere qu'on n'ait rien de gêné dans l'attitude: ce qui oblige d'exclure communément le pouce de la main droite, parce que les deux pouces posés sur le Clavier & principalement sur les touches blanches donneroient aux Bras une situation contrainte & de mauvaise grace. Il faut observer aussi que les coudes soient un peu plus élevés que le niveau de Clavier, afin que la main tombe comme d'elle-même sur les touches: ce qui dépend de la hauteur du siège. 2. De tenir le poignet à-peu-près à la hauteur du Clavier: c'est-à-dire, au niveau du coude, les doigts écartés de la largeur des touches et un peu recourbés sur elles pour être prêts à tomber sur des touches différentes. . . .³⁸

Rousseau remained conservative in his finger position, still avoiding having one of the thumbs on the keyboard. There is also an obvious contradiction in his description of the elbow position: he first says that the elbows should be somewhat higher than the keyboard, but then goes on to say that the wrist should be more or less at the height of the keyboard, that is, at the level of the elbow. He, like Duphly, continues by simply repeating Rameau's text.

Three German treatises of lesser importance, but with some directions on hand and finger technique, should be mentioned here. In 1782 Johann Samuel Petri advocated an arm position with the elbows and palms in a straight, horizontal line.³⁹ Johann Christian Bach wrote a treatise in collaboration with Francesco-Pasquale Ricci. *Méthode ou recueil*

37. Jean Jacques Rousseau, *Dictionnaire de musique* (Paris, 1768; facs. ed., Hildesheim: Georges Olms, 1969).

38. Rousseau, *Dictionnaire*; excerpt in Lister, "Traditions," 168–69.

39. Johann Samuel Petri, *Anleitung zur praktischen Musik vor neuangehende Sängler und Instrumentenspieler* (Lauban, 1767; 2d ed. enl., Giebing über Prien am Chiemsee: Emil Katzbichler, 1967).

de connaissances élémentaires pour le forte-piano ou clavecin mentions the fortepiano in the title. It contains the following instructions:

1. Be seated at the proper height, so that the elbows and the wrist be a little higher than the level of the keyboard, and so that the hand falls as if of its own accord on the keys.

2. The two hands must lie totally unhindered on the keyboard; to do so one must usually exclude one of the thumbs while the other fingers are spaced at the distance of the key widths and slightly curved over them, each finger having its own movement, independent from the others. . . .

I will add here a few observations that should be known to all good organists.

As the sounds of the organ are sustained, & the style is very different, the articulation must be more slurred, & less jumpy.

One must raise the whole hand as little as possible.

The fingers must fall on the keys & not strike them &, moreover, must flow from one to another in succession.

1. D'être assis à la hauteur, que les coudes & le poignet soient un peu plus élevés que le niveau du clavier, afin que la main tombe comme d'elle-même sur les touches.

2. Les deux mains sur le clavier de manière qu'on n'ait rien de gêné dans l'habitude: ce qui oblige d'exclure communément un des pouces; les autres doigts écartés de la largeur des touches & un peu recourbés sur elles, & chaque doigt ayant son mouvement propre, indépendant des autres. . . .

J'ajouterai donc ici quelques observations, qu'aucun bon Organiste ne doit ignorer.

Comme les sons de l'Orgue sont soutenus, & que le goût est très différent, la marche en doit être plus liée, & moins sautillante.

On doit lever la main entière le moins qu'il se peut.

Il faut que les doigts tombent sur les touches & non qu'ils les frappent, &, de plus, qu'ils coulent de l'une à l'autre en se succédant.⁴⁰

Bach, like Petri, excludes one thumb from the keyboard. This conservative position is rather surprising in a treatise dealing with the fortepiano as well.

Finally we have Georg Friedrich Wolf's *Unterricht im Klavierspielen*; the following can be found in chapter 7:

§1. (On finger position) . . . Ease and good posture are the two elements from which all rules must be deduced.

§2.1. (Preliminary remarks) The forearm must be a little lower than the keyboard and the hand lower than the elbow.

§3.2. The hand must be held round, and if this is done, none can complain of the thumb and little finger being too short.

40. Johann Christian Bach and Francesco-Pasquale Ricci, *Méthode ou recueil de connaissances élémentaires pour le forte-piano ou clavecin* (Paris, 1786; facs. ed., Geneva: Minkoff Reprint, 1974), 11. Eng. trans. by the author.

§4.3. The nerves must not be tensed: this stiffness or tension is totally opposed to playing, because the hands must move lightly and quickly, especially when one must quickly stretch and bring back the hand, which is necessary at every instant.

Remark: Beginners usually play with the fingers stiff and stretched; this makes the whole hand stiff, so that they will never learn to play well; only for jumps and stretches must the fingers be held a bit stiff; otherwise they must be loose.

§5.4. One must try to have good articulation in all fingers; neither the little finger nor the thumb must be excluded from playing.

§6.5. The elbows must be held close to the body and must not swing, and the hands must be turned outwards.

§8.7. When the thumb is not needed, it must be kept suspended, that is, at the same height and depth as the other fingers. But it must not be left hanging down, nor bent in and placed under the other fingers, nor leaning on the little board under the keys; to the contrary, it must be held as close as possible to the other fingers, because otherwise it cannot fulfil its function.

§1. (Von der Fingersetzung überhaupt) . . . Bequemlichkeit und guter Anstand sind die beiden Stücke, woraus alle Regeln abgeleitet werden müssen.

§2.1. (Vorläufige Bemerkungen) Der Vordertheil des Armes mus etwas wenigens nach dem Griffbette herunterhängen, folglich die Hand tiefer als der Elbogen liegen.

§3.2. Die Hand mus rund gemacht werden, und geschieht dies, so hat sich Niemand über die Kürze des Daumens und kleinen Fingers zu beklagen.

§4.3. Die Nerven müssen nicht gespannt werden: diese Steife oder Spannung ist der ganzen Spielart zuwider, denn die Hände müssen sich leicht und schnell bewegen, besonders wenn man die Hände geschwind ausdehnen und zusammenziehen sol, welches doch alle Augenblicke nöthig ist.

Aufmerk. Alle Anfänger pflegen mit steiffen und ausgestreckter Fingern zu spielen; dies macht die ganze Hand steif, so daß sie nie werden fertig spielen lernen; nur bei Springen und Spannungen muß man die Finger etwas steif halten, ausserdem aber müssen sie schlaf sein.

§5.4. Man bestrebe sich alle Finger gleich gelenk zu machen; weder der kleine Finger noch der Daumen müssen im Spielen ausgeschlossen werden.

§6.5. Den Ellenbogen halte man am Leibe, und nicht aschwebend, und die Hände drehe man auswärts.

§8.7. Wenn man den Daumen nicht braucht, so halte man ihn in der Schweben, d.h. mit den übrigen Fingern in gleicher Höhe und Tiefe. Man lasse ihn aber nicht herunterhängen, noch viel weniger beuge man ihn ein, und stecke ihn unter die übrigen Fingern, oder stütze ihn gar auf das unter den Tasten befindliche Leistechen; sondern halte ihn so nahe als möglich an die übrigen Finger, denn sonst ist es nicht möglich, daß es seine Dienste thun kan.⁴¹

Here, for the first time, directions are given for the position of the thumb when it is not in use, and this in the context of a technique including complete use of all fingers.

41. Georg Friedrich Wolf, *Kurzer aber deutlicher Unterricht im Klavierspielen*, part 1, 3d rev. and enl. ed. (Halle, 1789), 52–54. Eng. trans. by the author.

The last treatise to be considered in this study was printed by an anonymous author. In a chapter entitled "Rules for Fingering," the author makes a surprising comment, demanding rather stiff arms and wrists:⁴²

1. Let the elbows be parallel with the keys of the Harpsichord when playing. . . .

4. When a finger is once put down upon a key, do not move it till another is chosen and ready to be put down upon the next key.

5. To give brilliancy to the Fingers when they play, keep the Arms and Wrists rather stiff, except moving them to the right or left part of the keys of the Harpsichord, as the Lesson may require; but they must not be lifted up and down at the motion of the Fingers, and the part of the arms above the elbows must be kept nearly close to the sides of the Body.

The various positions recommended in the treatises written after 1750 show a general trend toward very relaxed posture, reasonably curved fingers, and wrist height close to the level of the keyboard. This can also be observed in iconographical documents from the second half of the eighteenth century. Figure 59, an engraving found in a Spanish treatise on playing the guitar, clavichord, organ, harp, and psaltery, shows the three middle fingers well aligned with the elbow a little higher than the keyboard; the rather sharp angle of the fingers causes them to touch the keys with their tips, rather than with their fleshy part. Figure 61 shows a perfect example of a totally relaxed posture, with the elbows, wrists, and knuckles forming a horizontal line, in accord with Marpurg's description; the elbows are a little closer to the keyboard than the shoulders, giving a slant to the upper arms. In figure 62 the fingers are in a slightly crooked position.

* * *

Hand and finger technique went through a long evolution between 1400 and 1800. The first manner, some elements of which perhaps stemmed from the old portative organ playing, was carefully described by Tomás de Santa María (low wrist, crooked fingers with low knuckles, playing with the balls of the fingers). As early as 1597 Diruta advised a different posture based on relaxation, a very light hand, and naturally arched fingers. From that point on, most treatises followed Diruta's fundamental ideas with minor variations. The two most commonly

42. *New Instructions for Playing the Harpsichord, Piano-Forte, or Spinnet* (London, ca. 1798; facs. ed., New York: Broude Brothers, 1967).

fluctuating elements in the eighteenth century were: the height of the wrist, which varied within reasonable limits, a relaxed hand, and the degree to which the fingers were curved (which directly influenced which part of the finger was in contact with the key). In respect to the latter it should be noted that the most commonly found instruction was for the ball, or fleshy part of the finger, to be used. It is principally in attempting to equalize the fingers' lengths on the keyboard that this rule was occasionally modified.

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