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Johann George Tromlitz's
Unterricht die Flöte zu Spielen:
A Translation and
Comparative Study

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Linda Bishop Hartig

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Dale Bonge

Major professor

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JOHANN GEORGE TROMLITZ'S
UNTERRICHT DIE FLÖTE ZU SPIELEN:
A TRANSLATION AND
COMPARATIVE STUDY

By

Linda Bishop Hartig

A DISSERTATION

Submitted to
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ABSTRACT

JOHANN GEORGE TROMLITZ'S UNTERRICHT DIE FLÖTE ZU SPIELEN: A TRANSLATION AND COMPARATIVE STUDY

By

Linda Bishop Hartig

Johann George Tromlitz (1726-1805), a flutist of some renown in Leipzig, is noted for his innovative work on the design of the flute, and for his contribution to the literature concerning performance practice with his Unterricht die Flöte zu spielen (Instruction on Playing the Flute), written in 1791. Modeled after J. J. Quantz's Versuch einer Anweisung die Flöte zu spielen (1752), Tromlitz's Unterricht presents a pre-classical look at both performance practice and the design of the flute itself.

This translation of the Unterricht has been annotated with reference to the treatises of Jacques Hotteterre, Michel Corrette, J. J. Quantz, Leopold Mozart, and C. P. E. Bach in an attempt to present a comparative study of performance practices. Mention is also made of the relationships of Antoine Mahaut, A. B. Fürstenau, and Theobald Boehm to the matter at hand.

Tromlitz attempts to present an instruction book for learning to play the flute without the aid of a teacher. Toward that end, he is very thorough, sometimes to the point of redundancy, but his explanations are very clear, and his examples of performance practice are certainly worthy of note.

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Another person to whom I owe a great debt of gratitude is Professor Alexander Murray, who first acquainted me with Tromlitz, and who has supplied me with innumerable materials relevant to the study of Tromlitz's treatise.

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INTRODUCTION

Johann George Tromlitz lived at a time when the flute was undergoing a transformation from the Baroque (one-keyed) flute of Quantz to the keyed flute of Fürstenau and Boehm. Born in 1726 in Gera, Tromlitz was twenty-six years old when Quantz published his famous Essay on Playing the Flute in 1752. Since he used Quantz's Essay as a model, and since he argued with Quantz's statements about the design of the flute, its screw cork, and its register, one can safely say that even in his youth Tromlitz was occupied with the construction of the flute. When his Unterricht die Flöte zu spielen (Instruction on Playing the Flute) appeared in 1791, he had already spent over forty years working with the flute, learning to play it with more precision, and redesigning it to fit the needs of contemporary music, and he is quick to remind his readers of his vast experience.

Tromlitz's significance as a flutist, composer, innovator in design, and pedagogue is unclear. Some authors attribute to him the greatest significance, while others, for example Charles Burney, ignore him entirely. In view of the fact that very little is known about Tromlitz, the statements of Ernst Ludwig Gerber in his Historisch-biographischen

Lexicon der Tonkünstler (Leipzig, 1791-92) are all the more valuable. Gerber was personally acquainted with Tromlitz, so his characterization of Tromlitz and the value of Tromlitz's flute playing may therefore be considered authentic.

Tromlitz's fame as a flutist in Leipzig came as a result of his association with the Grossen Konzert, a music society founded in 1743, which Tromlitz joined in 1754. This orchestra performed regularly in the hall of the hotel called Zu den drei Schwanen. According to Gerber, who played in the orchestra as a student, all the leading musicians, including Tromlitz, had a university education. Gerber wrote that Tromlitz played with as much fire as dexterity, and that he had a strong and acute tone.¹ Indeed, Tromlitz's obituary states that he was best suited to the then customary bravura and concert handling of the flute. It calls him a virtuoso of outstanding dexterity, clarity and precision, and certainty of tone in performance.² These comments seem so positive and without reservation, that Richard Rockstro's statement, "Although he frequently

¹ Fritz Demmler, Johann George Tromlitz: Ein Beitrag zur Entwicklung der Flöte und des Flötenspiels (published dissertation: Free University, Berlin, 1961), p. 28.

² Anonymous, "Nachricht über das Ableben von Tromlitz," in Allgemeine musikalische Zeitung, VII (1805), 337.

played solos in public, he achieved but moderate success, as he always played at a disadvantage owing to his excessive nervousness,"³ seems questionable.

In 1776 Tromlitz resigned from the Grossen Konzert, and did not perform publicly after that. Unfortunately, he did not give a reason for his retirement from performance. The blind flutist Dulon (for whom Tromlitz held the greatest respect--see chapter nine) reported in 1786, however, that he played duets with Tromlitz at the weekly recitals Tromlitz held in his home during the winter, and that he recognized Tromlitz as a fine flutist.⁴

Although Tromlitz is best known for his work with the design of the flute and as a pedagogue, he also thought of himself as a composer in the galant style. His extant compositions consist of "Trois Concerts a Flute Traversiere Solo, Deux Violons, Taille et Basse," Opus 1 (Amsterdam: Hummel, 1776), now owned by the Library of Congress in Washington, D. C.; "Drei Sonaten für das Fortepiano und die Flöte, als erste Fortsetzung," (Eigenverlag), found now in the Sächsisch Landes-Bibliothek, Dresden; and Trè Sonate per il Pianoforte e Flauto traverso obbligato overro Clavicembalo e Violino obbligato can Basse," published by

³Richard Shepherd Rockstro, A Treatise on the Construction, the History and the Practice of the Flute (London: Musica Rara, 1928), p. 550.

⁴Fritz Demmler, Johann George Tromlitz: Ein Beitrag zur Entwicklung der Flöte und des Flötenspiels (published dissertation: Free University, Berlin, 1961), p. 30.

Tromlitz, and now found in the Staatsbibliothek, Berlin. Other works now presumed lost, but which are referred to in writings by or about Tromlitz, include concertos, duets, a trio sonata for flute, violin and bass, sonatas, partitas for unaccompanied flute, and songs for piano.⁵

Perhaps Tromlitz's greatest significance lies in his contribution to the development of the modern flute. Here, however, Tromlitz is an enigma. He is definitely forward-looking in his work with the keyed flute, but he remains old-fashioned in his insistence on not using enharmonic fingerings--that is, his ear is not attuned to equal temperament. To Tromlitz, G sharp and A flat, for example, could not be the same pitch--the A flat is a comma, or 1/9 of a tone higher. It would seem from his discussion of intervals (see chapter three) that Tromlitz objected not only to equal temperament, but also to meantone temperament, which was used almost universally in Germany before the acceptance of equal temperament (circa 1800⁶).

According to J. Murray Barbour⁷, C. P. E. Bach, as well as his father, saw equal temperament only as a "beautiful ideal," and in practice used a well-tempered (wohl-temperiert) scale--that is, a scale tempered by lowering the fifths and

⁵See Demmler, Beitrag, p. 22, for a complete listing of Tromlitz's known compositions, and an analysis of them.

⁶Article "Temperament," in Harvard Dictionary of Music (second edition, 1970), p. 836.

⁷J. Murray Barbour, "Bach and the Art of Temperament," Musical Quarterly, 30 (January, 1947): 65.

retaining perfect thirds. The well-tempered scale produced triads which were out of tune, but at least none of the triads was impossible. These out-of-tune triads were intolerable to Tromlitz, whose ear would have preferred the pure intervals of the Pythagorean system, commonly called just intonation. Further, although he was certainly an exponent of the keyed flute, Tromlitz also firmly believed that the one-keyed flute produced the purest sound, and so he constructed a one-keyed chromatic flute for himself, which he claimed played perfectly in tune, although the fingering system was quite complex.⁸

Looking toward the future, Tromlitz was distressed that only Quantz had written music for the flute in any but the customary keys of G, D, C, and E minor, or so it seemed to him, and he began adding keys to the flute so that he could play perfectly in any key. He was trying to keep up with musical developments (which had begun to demand equal temperament), and yet retain a scale with perfect intervals in all keys.

As happens with the development of any instrument, changes occur not so much because of technical material, but rather to meet the scope of musical ideas. Donald Jay Grout simplifies the changes which had taken place by the eighteenth century when he quotes Andreas Werckmeister,

⁸Johann George Tromlitz, Über die Flöte mit mehreren Klappen (Leipzig: Adam Friedrich Bohme, 1800), p. 135.

who wrote in 1691, "Music is a gift of God, to be used only in His honor," and compares that to a statement from Dr. Charles Burney, written in 1776: "Music is an innocent luxury, unnecessary, indeed, to our existence, but a great improvement and gratification of the sense of hearing."⁹ This period of "Enlightenment" affected music in many ways--harmonically, contrapuntally, structurally--but it must not be forgotten that one of the most significant effects on music during this century was more extensive involvement of the middle class as both audience and performer. No longer were musical concerts reserved for the aristocracy, the virtuosos, and the connoisseurs. This led quite naturally to a proliferation of instrument instruction manuals written largely for the amateur, and to a more expressive and subjective musical style--one which demanded that the flute be able to produce a more intense tone along with subtle shadings in tone color and dynamics. The simple fact that concerts moved from small chambers to larger recital halls made the Baroque flute inadequate.

The transverse flute, which first gained significance in the Western world during the Renaissance, was at first a cylindrical instrument which gave way in the middle of the seventeenth century to the conical Baroque flute described by Quantz. This Baroque flute usually had one

⁹Donald Jay Grout, A History of Western Music (third edition; New York: W. W. Norton, 1980), p. 448.

key for D sharp, or sometimes two keys, D sharp and E flat. It was generally unsatisfactory and often badly played due to intonation problems and an uneven quality caused by the many cross-fingerings necessary.

Although Tromlitz was fully aware of the inadequacies of the one-keyed flute, he felt that it was satisfactory enough for the amateur. He considered as virtuosos only those who could play everything correctly and cleanly in even the most remote keys. Because the design and placement of tone holes in the one-keyed flute limited it to the keys with one and two sharps, and because there were impurities even in those keys, Tromlitz became a strong exponent of the keyed flute. His book, Über die Flöte mit mehreren Klappen (About the Keyed Flute), intended as a supplement to the Instruction, is directed not to the music lover who plays on a flute with only one to four keys, but rather to the virtuoso who uses a one-keyed flute. Tromlitz felt that virtuosos would certainly use the keyed flute if they understood its worth and usage.

Fritz Demmler, writing about Tromlitz in his Beitrag zur Entwicklung der Flöte und des Flötenspiels, describes the Tromlitz flute as having a cylindrical head joint which tapers into a conical middle section, expanding again into the foot joint.¹⁰ With its greater dynamic

¹⁰Demmler, p. 36.

possibilities, this flute gave Tromlitz an instrument far more suited to the demands of contemporary music.

In the early eighteenth century, the one-keyed flute, which had previously been divided into three parts (head joint, middle joint, and foot joint), was divided once more, creating four pieces.¹¹ The middle joint then had two parts, the upper one of which could be replaced with any of several longer or shorter pieces, thus enabling the performer to play at the various pitches then in use. Because of the lack of a standard pitch, several attachments were developed to help the flutist not only to play at different pitch levels, but also to help maintain the flute's own scale while adjusting the general pitch up or down. Since these developments took place in different countries at about the same time, it is difficult to attribute the invention of any one thing to any one person. Antoine Mahaut, in his Nouvelle méthode pour apprendre en peu de tems a jouer de la flute traversiere, attributed the invention of the screw cork to Pierre Gabriel Buffardin (1690-1768), the principal flute player in Dresden, and a teacher of Quantz.¹² This movable cork in the head joint enabled the player to adjust the scale of the flute to whichever middle piece was being used. Quantz and Tromlitz both considered this screw

¹¹ Michel Corrette, whose Methode pour apprendre aisément à jouer de la flute traversiere was published in 1730, was among the first to describe the flute in four pieces.

¹² (Amsterdam: J. J. Hummel, c. 1759), trans. by Pauline E. Durichen in Divisions: A Journal for the Art and Practice of Early Musick, I, no. 1 (1980), 23.

cork indispensable. Quantz, however, was not wholly satisfied, and claimed as his invention a movable tenon at the end of the head joint.¹³ With this invention, one could adjust the pitch by lengthening or shortening the flute in the head joint instead of at other lower joints, any of which would distort the distance between the tone holes. Tromlitz strongly opposed the use of this invention, but promoted the use of the register, a small slide attached to the footjoint to lengthen or shorten the flute as the cork was moved. Quantz strongly opposed the use of the register, claiming it tuned only the low D'. Tromlitz, however, felt that the intonation of the whole flute would be jeopardized without the register.

As the eighteenth century progressed, keys were added to the flute to help alleviate the enormous difficulty in placing the tone holes precisely. The addition of keys allowed the placement of holes where the fingers could not reach them, and thus corrected not only the intonation, but also helped in balancing the quality of the scale. Tromlitz's brief history of the keyed flute tells us that the first key to be added after the D sharp was a closed G sharp.¹⁴ The English were responsible for its development, but Tromlitz claims they did not tune it correctly. The G sharp key had

¹³Paul Netti, Forgotten Musicians (New York: Philosophical Library, 1951), p. 318.

¹⁴Tromlitz, Über die Flöte mit mehreren Klappen, p. 128.

been placed on the upper middle joint, but Tromlitz designed his own flutes with the G sharp key on the lower middle joint, so that when he exchanged upper middle joints, he still needed only one G sharp key. The second key to be added was a B flat key for the first finger of the right hand. Then came the F key for the right hand third finger. Tromlitz changed the placement of this key, because it was so low that it collected water. He also added a duplicate key with an extender for the little finger of the right hand. Whether this invention can be attributed solely to Tromlitz, however, is debatable. And finally the C" key for the thumb of the left hand was added. Tromlitz evidently built some flutes with a duplicate C" key hinged for the right hand thumb, but since that thumb is used primarily to balance the instrument, the key was impractical.

Because so many keys were hard to keep airtight, Tromlitz consolidated the F and B flat keys---one key but two touch pieces. When he wrote about the keyed flute in 1800, he stated that his newest design had six keys: E flat, D sharp, F (with two touch pieces), G sharp, B flat (also with two touch pieces), and C". C" was different, however, because it stood open and was closed by pressing it, whereas the others stood closed and were opened by pressing. Therefore, the C" key did not have the same problems as the others, and there were only five keys which might leak.

Those who considered the D sharp key to be superfluous had only four keys which might cause problems.

At the turn of the century, the long foot joint for C' and C sharp' was gaining recognition, especially in England, but Tromlitz had no use for it. He felt that it ruined the tone, and served no greater purpose than to impress the listener with such a machine!

Near the close of his book about the keyed flute, Tromlitz writes that he is not a flute builder, and does not wish to be so categorized. He merely builds his own instruments as a scientific musician and flutist.

The keyed flute reached its modern form in the hands of Theobald Boehm (1794-1881). Boehm, who was trained in his father's trade as a jeweler, was skilled in handling metal, had a professional reputation as an accomplished flutist, and was a "thinker with a scientific bent," as Adam Carse describes him in Musical Wind Instruments.¹⁵ As such, he was the ideal person to reform the flute.

Boehm was the first to recognize that if the flute was to have an even timbre throughout its scale, it must have tone holes nearly uniform in size and placed correctly for good intonation. Heretofore, of course, tone holes had been placed for the convenience of the fingers. Thus, Boehm first defined his tone holes, and then set about creating

¹⁵ Adam Carse, Musical Wind Instruments (New York: Da Capo Press, 1965), p. 94.

a mechanism to control the holes. The end result was very much like the flute we play today.

It is interesting that A. B. Fürstenau, being fully aware of Boehm's first flutes, was still an exponent of the keyed flute which Tromlitz played--that is, a flute with six tone holes for the fingers, and several additional keys for specific notes. Fürstenau's argument against the Boehm flute was that it produced such an even scale as to be monotonous. He felt that the Boehm flute was for performers who wanted to play "rushing, deafening passages" (rauschende, Ohr betäubende Passagen) in large rooms rather than to play simple, beautiful, expressive melodies.¹⁶ The even scale was produced at the expense of the proper romantic character of the instrument, in Fürstenau's opinion. The Tromlitz flute suited Fürstenau perfectly. He wrote that to play the music then being written, the keys needed were the long C, the small B flat, and the G sharp on the upper middle joint, and the double F, D, C sharp, C, and B-natural keys on the lower middle joint.¹⁷

¹⁶ A. B. Fürstenau, Die Kunst des Flötenspiels (Leipzig: Breitkopf und Härtel, n. d.), p. 2.

¹⁷ Ibid.

Long study and many experiments have convinced me that just as these keys are essentially the most important, more (keys) would be as much superfluous as disadvantageous in that as much would be lost as won with too many tone holes.¹⁸

Tromlitz's attention to pedagogy may seem unduly extensive, but it must be remembered that he lived at a time when amateur interest was high, when people began to specialize, and when the flute was a particularly popular instrument. Undoubtedly he earned a large part of his income from teaching, especially after he resigned from the Grossen Konzert in 1776.

Tromlitz's introduction to his Instruction shows his seriousness about teaching. He writes at length about the qualities a good teacher must have, he tells the dedicated student how to choose a good teacher, and he advises the student to trust his teacher totally. The discussion of the attributes of a good musician, a good teacher, and a dedicated student, is not unique to Tromlitz. Quantz also devotes several pages to the "qualities of those who would dedicate themselves to music,"¹⁹ and includes a

¹⁸"Langes Studium und vielseitige Erfahrungen haben mich überzeugt, dass, so wie diese Klappen die wesentlich notwendigsten, mehrere so wohl überflüssig als auch dem Instrumente nur nachteilig sind, indem durch zu viele Löcherbohrungen dasselbe eher leidet, als gewinnt." Fürstenau, Die Kunst, p. 5.

¹⁹J. J. Quantz, Versuch einer Anweisung die Flöte traversiere zu spielen (Berlin: J. F. Boss, 1752), trans. by Edward R. Reilly as On Playing the Flute (New York: Schirmer Books, 1966), pp. 11-27.

lengthy description of a good teacher (which closely parallels Tromlitz's), advising also that the student trust his teacher completely. Other authors of such detailed method books, notably Leopold Mozart, C. P. E. Bach, and A. B. Fürstenau, do not include such discussions, although they all (Tromlitz included) write at length about proper performance.

Tromlitz appears more haughty than Quantz when he writes about teachers and students, possibly because of one J. J. H. R. Ribock, a doctor who received instruction from Tromlitz by letter for nearly seven years, free of charge according to Tromlitz.²⁰ In 1782, Ribock published his own "Bemerkungen über die Flöte," which is largely a discussion of the inner proportions of the flute. When Tromlitz discovered this, he became irate, claiming that Ribock took most of the discussion from him, but that Ribock misunderstood much of it and therefore misused it. Indeed, Ribock's book appears to be a rebuttal of Tromlitz's ideas, and Tromlitz's anger can be justified when Ribock's conclusion is read: "It would be far more tolerable to me to be slandered by (Tromlitz) than to be insulted and degraded by his approval and dirty tactics."²¹ Tromlitz took up the

²⁰ Tromlitz, Kurze Abhandlung vom Flötenspiel (Leipzig: Breitkopf, 1786), p. 16.

²¹ "Es würde mir weit erträglicher sein, von ihm verunglimpft, als durch seinen Beifall und Südelei beschimpft und verpfuscht zu werden." J. Ribock, Bemerkungen über die Flöte (Stendal, 1782), p. 58.

argument in the first chapter of his Instruction, but he was criticized for his insensitive treatment of a man who had recently died and could no longer defend himself.

Among the hundreds of instrument instruction manuals written in the eighteenth century, those written by Quantz (1752), Leopold Mozart (1756), and C. P. E. Bach (1759) are seen in the twentieth century as three of the most valuable accounts of eighteenth century performance practice. Since Quantz's was one of the first such treatises to appear, and since it received wide recognition within Germany, it would seem that Mozart and Bach realized the value such a treatise would have to players of their respective instruments. As Edward Reilly notes in the introduction to his translation of Quantz,

The Essay has long been recognized as a valuable source of information about eighteenth century performance practice, because the scope of the treatise far exceeds any other of its time, and because it incorporates material relevant to players of any instrument.²²

Tromlitz himself admits using Quantz's Essay as a model, and frequently compares his ideas to those of Quantz. Since Tromlitz wrote his Instruction in 1791, nearly forty years after Quantz's Essay appeared, many changes had taken place, especially concerning the design of the flute. While Tromlitz shows great respect for

²²Quantz, Essay, p. 34.

Quantz and his treatise, he also argues with Quantz about fingerings and articulation, and finds Quantz's book inadequate as a flute method because it requires the student to find a teacher as well (which Quantz himself admits). Tromlitz therefore wrote his Instruction with the intention of presenting it as a complete method which needed no further explanation from a teacher. It was Tromlitz's goal to provide a book for the amateur or student which would be sufficient to train a good musician (as opposed to a mechanical player) without the aid of a teacher. Toward that end he is most thorough in his explanations of every facet of playing the flute and of reading music. The chapters dealing with fingering and articulation, in particular, are much more extensive than comparable chapters by Quantz, and the chapters about essential and arbitrary ornaments are also more thorough than those of either Quantz or Mozart. Metered realizations of every ornament, not always found in the treatises of others, are used to clarify performance practices.

Although their treatises follow a similar pattern, Mozart, Bach, and Tromlitz did not attempt the scope of Quantz, but rather limited themselves to more thorough discussions of matters relevant to their respective instruments. The sections devoted to performance practice in any of these treatises indicate the various opinions of these men, and are applicable to any instrument.

Since Tromlitz's Instruction closely parallels the treatises of Quantz, Leopold Mozart, and C. P. E. Bach, the annotations furnished here will present a comparative study of these works. The flute treatises of Jacques Hotteterre, Michel Corrette, and A. B. Fürstenau are also considered because of their significance as flute method books. Corrette and Hotteterre were among the first French treatise writers, while Fürstenau represents an early nineteenth century view of the flute and flute playing, respectful of Tromlitz's ideas, and may be considered a logical continuation of Tromlitz.

PREFACE TO THE TRANSLATION

In translating Tromlitz's treatise, an attempt was made to produce as nearly literal a translation as possible without ignoring differences between English and German. Toward that end, very little attempt was made to correct Tromlitz's writing style. For example, long paragraphs are not broken into shorter parts, but rather remain as Tromlitz wrote them, although long sentences were broken in some cases for clearer understanding. However, in cases where common English usage differs from German, changes were made. For example, Tromlitz, like most Germans of his time (and even today), wrote formally in the third person. Man, which translates to the English "one," and which sounds very stilted in English, has been translated as "you," since the treatise is directed toward you, the student. Although Tromlitz does not always use the same tense throughout a paragraph, the translation attempts to avoid disagreement of tense.

As common practice dictates, the use of brackets indicates an explanatory addition to the sentence, but parentheses are used by both Tromlitz and the translator to clarify meaning. Parentheses added by the translator are indicated in a footnote.

Some terms used throughout the treatise bear mention. Tromlitz writes about "Passagen" and "Figuren," both meaning technical passagework (as opposed to a slower lyric melody), although "Figuren" may also refer to specific figures such as triplets. These terms have been translated literally as "passages" and "figures." The term "Gesang" is always used by Tromlitz to describe a lyric melody, distinct from technical passages. For lack of a one-word English equivalent, the literal translation "song" has been used. One last term (also explained in a footnote) is "Sprache," used by Tromlitz to describe articulation. The English word "language" is meant here, and it is used to describe a series of syllables which are "spoken" into the flute to articulate the musical line; therefore the term "language" has been left unchanged.

Words which are used by Tromlitz as foreign terms written in italics are unchanged. There are also a few words--types of wood, for example--for which no English equivalent could be found; they are also unchanged.

The introduction of musical examples has been changed to conform to other modern English works containing similar musical material, but the placement of the examples remains as Tromlitz wrote it.

**A DETAILED AND THOROUGH
INSTRUCTION
ON
PLAYING THE FLUTE**

**by
Johann George Tromlitz
Musician and Flutist**

Preface

A book of this kind might well seem superfluous to some, especially since the Royal Prussian Musician, Quantz, a worthy man of music and one of the first and greatest flutists of his time, published his Essay on the True Art of Flute Playing several years ago. Although his treatise contains much that is good and useful about flute playing and certainly about music, Quantz himself confesses that it is not sufficient as a tutor without a teacher who has the necessary knowledge. But where does one find such a teacher? I am absolutely convinced, and know from long experience, that such teachers are rare, and I realize that his book by itself is not sufficient for this particular instruction. One must have verbal as well as written instruction, and good verbal instruction is generally, although not always, missing. It is for this reason that this instrument is almost always poorly played.

Nevertheless, I feel the book of Quantz's is not totally insufficient, because I think one can gain many useful things from his book, even without a teacher, if the material presented therein is used appropriately.

It is true that one man cannot discover everything; however, Quantz has pioneered the way and has pointed the thinking student in the right direction.

Perhaps I will be fortunate enough to present everything necessary here with proper order and clarity. I would not

dare to set myself up against a man with so many credits if I were not convinced that my forty years of experience and observation would lead the amateur in the right direction, bringing him closer to his goals, and if I did not want to spare the student time and money, and the teacher the untold misery of correcting a student ruined by poor instruction. For some students, improvement is almost impossible, however, because the errors are so deeply rooted that the student no longer perceives them, even when he is reminded of them.

From this, you can see how important it is to have a good teacher from the beginning, or failing that, to choose a good written method, and how important it is not to trust an inferior teacher at the beginning just because he is inexpensive, and because you think a poor teacher is good enough in the beginning. That is the biggest mistake a student can make, for all the inconveniences mentioned above arise from this, and the student loses his time and money, and learns nothing. If he finally takes a good teacher, it will cost him more, and the teacher will certainly not be able to eliminate all the evils, and often the work will still be spoiled.

Since such good teachers who play from the fundamental rules are not always to be found, as already said, and since, to my way of thinking, they know nothing especially about this instrument except what they have read in the Quantz book, I thought I would publish this method on which I have worked so long.

Although my own discoveries are the first I will communicate, I have, nevertheless, not omitted what others have said; the truth remains the truth, no matter who speaks it. In this book, I have concerned myself simply with truth and accuracy in handling this instrument, with a systematic order and a clear and intelligible presentation, and I have not concerned myself with a beautiful, artful, and flowery writing style. It is enough for me if I have expressed myself so that one can easily understand me.

Many people play this instrument, but only those who can judge without partiality will perceive that only a few understand how to handle this instrument properly.

Many play the flute without knowing what is involved. They know nothing of tone or pure intonation, they know nothing of the rules proper to good performance, and looking closely, they have no further intention than to play the notes in a tortured fashion with a great deal of trouble, or to grind out a slatternly song.

Since their tone is uneven and limping, or alternately bright and dull, the connection of tones cannot be other than limping, and since they do not know the means of properly connecting the tones, their performance is either sticky and ground out, or rough and wooden.

For the most part, their tone is wooden, whispering or blotchy, and with substance, screeching in the high register and inaudible in the low, or they push the tone out in such a strained fashion that the full sound is completely lost. Then they must always play without variation,

and can produce neither piano and pianissimo nor forte, which are difficult enough on this instrument, and this is all due to a lack of knowledge about the correct production of tone and [musical] expression.

If one has a better tone than usual, the evenness of the tone will always be missing, as will pure intonation, which is indispensable to a good performance. Some believe they are masters when they grind out a lame little piece or downright drool into the instrument, distort their faces, raise their shoulders up to their ears, and make other strange body movements which they call expression, and they believe they have the right to ignore other honest men from whom they could learn if their pride would allow it, and they belittle those men when speaking about them. They also believe they have the right to instruct others in their own imagined art--honest people who bring their money and time--and they themselves cannot play more than three or four notes with accuracy and clarity, and have not made the slightest beginning in their art. Full of hot air and made proud by the untimely and partial praise of someone, they think they are the greatest, although to their own detriment.

Anyone who wants to bring skill or wisdom to his playing should protect himself, as against a plague, from flattery and the partial praise of men who have the air and the tone of an artist, even though they have insufficient knowledge, who dare to judge everything, and who praise and find fault only from pettiness, for neither envy, self-interest or respect propels them. Such people, in whom neither truth

nor integrity lives, glue shut the eyes of the young, and harm both master and bungler thereby.

That there are so few masters of this instrument, although many play it, must be because of the difficulties of the instrument (and indeed this instrument has many difficulties, as some believe),¹ or perhaps more because they do not take it in hand and try diligently to understand.

Since there are so few who take the trouble to learn [to play] this instrument properly, it is no wonder that the means of overcoming these difficulties remains unknown.

Tone production on this instrument is procured by a more artful means than on almost any other instrument. The wind which produces the tone must first pass through open air before it enters the instrument, and it is easy to see that if this wind, or air stream, is to produce a good tone, it must be properly directed. If this is missing, either because of unsuitable lips, which by nature make it impossible to direct the air stream properly, or because of suitable lips which are by chance dry, puffed up, or even completely slit open, or on account of other impediments rooted in ill-conditioned lips, which cause the air stream to lose its proper course or to scatter, the tone will always be poor. Also, if the blood of the player is brought to any emotion such as fear, ambition, displeasure, or the like, the throat and lips will become dry, and this completely prevents the good tone. One who is in such a condition cannot produce

¹Translator's parenthesis.

anything worthwhile, because he will be short of breath, his fingers will be like lead, and he himself will be absent-minded.

This instrument is beset by these difficulties more than any other instrument, and although the passions have an effect on all instruments, the consequences are not so serious as with this instrument. From the reasons cited above comes the constant complaint of flutists that they have no embouchure when they play. Now this is a great evil, and if one is in the position to do everything possible with a good embouchure, he cannot do anything at all with a poor embouchure.

The listener thinks nothing of all of this; either he cannot or will not think about it--he only hears whether it sounds to his liking or not. If the flutist unfortunately has no embouchure, not everything will turn out as he wishes, and that means he can do nothing. This has certainly been handled unfairly. But, my good friend, nevermind that if one wants to find fault, he must be able to better it: if you want to judge that way, you must have enough knowledge of the matter; otherwise it is best to remain silent, for it is not enough for you to stand there in a reflective mood, your finger on your nose, or even to say, "I understand it, for I play the flute, or I was formerly a flutist." I certainly believe it, my friend! You cannot have done much, for no one has heard of you.²

²In the second part of this paragraph and at the beginning of the next, Tromlitz uses the familiar "du," intending to show disrespect.

When a master does not play to your liking, you certainly have the right to say, "it does not please me," but not as it usually happens, "he cannot do anything." Even if he does not please you, he may please a hundred others. It is indeed laughable when one steps out as a universal judge, rejecting everything that is not in accordance with his taste; and where is it written that everything must be according to the taste of one person? We speak much about nature and want to use it as a model, and yet we do not understand what nature is in this realm. You can easily see that one who plays like a master must play from nature, and that means that he must play not according to another's, but according to his own feeling, which originates in his temperament, and he will please those closest to his own temperament the most, and those farthest from his own temperament the least. More about this in the treatise about flute playing.

The master, if he wants to play like a master, must play totally according to his own feeling, without regard for any other; otherwise he would have to choose such pieces as are the most agreeable to the one in whose service he plays, but in this manner, he would never be able to show what he can do.

If he wants to show what he can do, he must play entirely according to his feeling, namely a feeling which is created through diligent studying, much listening to good singers and masters for what they offer to instrumental playing, and choosing carefully from these traits, and he must not pay attention to this or that wit who tries to irritate him.

It is just the same with composition. The good composer, if he wants to be original, must work totally according to his own feeling after he has learned to express himself by studying other good masters, and after he has learned the fundamental rules of harmonic usage, so that he only uses them and does not copy, and does not fashion himself after any other person. That is, he must work completely according to the taste of his own temperament, and he should retreat from the national taste only when his retreat is good. Failing that, his performance will always be dull, and he will never be in the position to produce anything new and whole, because his work will consist of nothing but plagiarized little pieces. How many of these things come to the fore[!] This kind of composer, who can create nothing from his own imagination, but rather must make do with the work of other masters which he literally writes out, thus deceiving unknowing listeners, and who delivers this as his own work, is nothing but a copier; thus his work can justly be omitted.

How the flute should actually be handled and what should be done with it is a matter of opinion. One will have it one way, and another, a different way. He who can do a great deal, demands a great deal, and he who can do little, demands little. Those who try nothing but the difficulties produce nothing but difficulty, and those who belong to the phlegmatic temperament and laziness, or for whom it is naturally impossible to produce skillful things, must remain with the common, and make do simply with a little song.

In my opinion, both are wrong. The first, with nothing but difficult music, will certainly arouse wonder at his skill, but will arouse no emotion. The listener would then soon become indifferent. The other, like the first, will please with his performance for a little while at the beginning, but if he continues in the same manner, the listener will become not only indifferent, but also sleepy. Both, then, are wrong and are worth nothing.

Therefore, I believe that he who would entertain pleasingly, must have both in his power. He must connect beautiful songs with difficult music which is appropriate for the instrument, and must know how to exchange them in his performance, but the musical piece must be so designed that the difficult places are not only proper to the instrument, but also belong to the main feeling of the piece and are derived from it, so that a different emotion does not enter with the difficult places; thus a little piece is set together with another little piece.

If a composer wants to write concertos and solos for an instrument, he must know the instrument very well, so that he will reach the limits of the instrument without surpassing them. Presently we have few of these composers, and not all of them know the instrument well enough, and therefore cannot venture much, but rather must stick with common things. There are also players who know the instrument better than others who do not know it, but yet they are commonly not musicians, because although they want to write down their feelings, they write without order and correctness, and then give it to a

composer who has more knowledge of composition to correct it and add the other voices. In this manner many incorrect and imperfect things arise--more often trivial things, but nothing for the student.

If the virtuoso wants to show what he can do, he must also be a musician, or strive to become one, so that he can compose and arrange his pieces completely according to his own feeling. If he can do this, he will be able to show what he can do in his playing.

Those masters who are also composers for this instrument are sadly lacking this. One who is in a position to produce something advantageous on his instrument is called a musician, but if he is really a master of his instrument and does not possess the theoretical and practical knowledge necessary for a real musician, he is nothing more than an excellent instrumentalist, or a so-called virtuoso. Although I do not deny that such a one may lay claim at times to a good and expressive performance, he will, however, never attain the whole significance and the whole range of such a one with that title. When he understands the art of composition according to the rules as well, he is then also a musician, and thus virtuoso and musician both. It seems to me that only such a one rightfully deserves this name, and is more valuable than if he were just an instrumentalist.

Each instrument has its own peculiarities, as much in songs (Gesänge) as in difficult places, and these peculiarities must not be taken away; a virtuoso must be able to handle

them. He must have the instrument so in his power that he knows and understands exactly the whole range--all of the subtleties and difficulties, which are not few on this instrument--and he must strive above all to reach the limits thereof, for otherwise he will not be able to overcome all of the difficulties, even if he spends his whole life trying. An organ grinder or simple piper cannot be counted here, although I gladly confess that an average player can also be useful.

In order to lead the student as much as possible in the right direction, I have taken the trouble above all to explain things from the beginning so clearly that once he knows and has the correct tone, he can attain the aforementioned goals without further instruction. I have concerned myself primarily with such pieces as are necessary from the first rudiments on, to practicing this instrument. I have shown how one can attain a tasteful performance, and although I have presented everything according to my style, I do not demand that you intentionally direct yourself to my express taste. Each person feels differently, and therefore performs differently. I have shown the way, according to rules and according to feeling brought into order by correct and good judgment, to good taste and correct practicing.

Since each rule has its exception, you can begin playing completely according to the rule, and then when you have the rule completely in your power, you can accustom yourself to both, namely exception and rule connected together. More about this later. You will be able to play a piece in a

firmly-established order every time if you observe carefully everything that is proper to it.

The language which is so necessary and proper to this instrument is just what the bow is to the stringed instrument, and everything depends on its correct usage.³ I have taken pains to describe and clarify this language, upon which everything depends, most clearly. To this end several examples with the language written underneath have been added, so that you can see what a tongue-thrust is. This name, however, is not proper, and causes many to articulate incorrectly because they think that since it is called tongue-thrust, it must be done by thrusting the tongue. Therefore they thrust it out as far as an inch sometimes. Not only does this look ugly, but it hinders many skills, as will be shown later.

I have also given a clear explanation of the improperly-named double tongue, which similarly is necessary, because so many do not understand this type of articulation, and thus use it incorrectly and so poorly that they displease themselves as well as others with this confusion. And so it is certainly no wonder if the whole thing is thrown out as worthless.

God be praised that [the double tongue] is still there! And it will remain there and must remain there as long as no other and better means of playing running passages smoothly and clearly becomes known. It escapes only those who cannot

³Tromlitz, like other flute treatise writers, devised a series of syllables to clarify articulation. Since they are syllables, he refers to articulation as the "language" ("Sprache") of the flute.

produce it, or it was never there for those who would not use it either because of prejudice or laziness. Time and diligence is required to learn this, and it is not learned instantly as one might wish--it took quite a long time for me, too. Since everything depends on a correct usage of the double tongue, I have tried to show all of the proper advantages through clear examples, and at the same time, I have tried to show that the double tongue is used nowhere except in fast places where the single tongue is insufficient.

I have retained from Quantz's writing that which is good, and I have indicated and illustrated through examples what I think must be changed. This man has great merit in this field, and has done a great deal for this instrument; thus what is good and useful I do not want to omit.

I have carefully and clearly described everything else proper to the correct handling of this instrument and to orderly, clear, good, and correct performance, so that not just a simple mechanical flutist is created. Since we have few, or even no perfectly sufficient printed instructions for this instrument, I hope to be of service to the amateur with this book.

However, if anyone doubts what I have said here and in the following, and feels that he is prevented from learning anything useful from this, I advise him not even to open the book, but rather to leave it to those who have more confidence in it.

It is true that if only those who are in public service have merit, I am certainly not deserving. Although he

mentioned my particular art, without my knowledge and without the sending in of a self-made commendation, in the pages about his musical journey, Herr Burney passed over me at that time.⁴ I do not appear in his book, but I believe that it is actually just as fortunate to appear as not to appear there. The latter is, to a certain extent, even better, because praise as well as reproof is suspect in a man who deals with prejudice. He came to Germany with prejudices, and thus also to Leipzig, and because he did not expect to find much here (presumably no one wanted to point him in the right direction),⁵ he stayed only two or three days and then left without anyone knowing he had been here, and without meeting anyone new. I was certainly surprised, as much then as now, that various people living here were not at all noticed by him. Therefore he writes what he is told and has it printed. There are people who would certainly like to have a big name, and if this depends on the respect of other honest men, like the deceased doctor by the name of Ribock and his base book, I will clarify it at a suitable time, so that his blind followers will see what they have.⁶

⁴ A reference to Dr. Charles Burney's visit to Leipzig, which he described in his The Present State of Music in Germany, The Netherlands and United Provinces (1776).

⁵ Translator's parenthesis.

⁶ Es gibt Leute, die gern einen grossen Namen haben wollen, und wenn es auch dabei auf anderer rechtschaffenen Männer Ehre ankommen sollte, wie an dem verstorbenen Arzte, Namens Ribock und seiner Scarteke zu ersehen, welche ich bei gelegener Zeit einmal von Wort zu Wort erklären werde, damit doch seine blinden Anhänger sehen, was sie haben.

Herr Burney had the good fortune to acquire a great name through his musical report. However, he writes more of trivial things than of the truth. For example, in the first part, page 186, he writes, "Hempson attached a sponge in the head joint of the flute, through which the wind must pass, and the tone will thereby be improved." Just try it once--only a little paper rolled together with thread, or some other tiny thing around which the wind has room to pass into the flute--and you will see how poor the tone and the delivery are, not to mention that when a sponge is stuck in the head joint, through which the wind is supposed to pass, what a splendid tone then will not be produced! In this way, a singer could certainly improve his voice if he stuck a sponge in his wind pipe and then let the air through! Further on, in the second part, page 144, he says that Quantz arranged the movable cork in the head joint, and that through the pushing and pulling of this, the flute could produce tones a half step higher or lower without changing the middle joint, and without damaging the pure intonation. It is true that Quantz developed such a movable cork for his flute,⁷ and that when it is pulled out, the flute will play a half step lower is also true; however, it is also true that the good tone and pure intonation will be lost. Herr Burney certainly cannot understand this, because he has no knowledge of the matter. People just tell him, and he writes it down as an agreed-upon truth and useful truth. If he had deigned to make his

⁷Pierre Gabriel Buffardin is credited with this invention by Antoine Mahaut. See translator's introduction, p. xii.

presence known to me, I would have shown him another better means, and I would have shown him that it is a mistake. And this mistake is still imitated today in England!--which I discovered while on a trip to France, where I examined an English-made flute. Why this is not tolerable will be discussed in the proper place.

Nothing more now. This is certainly not the place to speak about such mistakes. Therefore, I will stop and direct my readers, with their permission, to receive kindly what I would like to deliver to you. My primary wish is that those who concern themselves with instruction look at and read these pages without prejudice and without believing that they know everything already, and thereby be willing to attain a correct order and clarity in their instruction, so that they are able to teach the beginner something for his time and money, as has not happened until now, and still does not happen, and to cultivate students which bring them respect. This is said only to those who do not know it.

With this method of instruction, I have had the good fortune to draw students who play indeed like amateurs, but who could make a profession with this instrument if they had the desire, and who would indeed put many so-called virtuosos to shame. And even those who had no particular talent for music learned all they were capable of, with order.

Should someone here or there find something against my opinion and think that it must be otherwise, I ask him to tell me in a friendly manner and with good reason, that I

haved erred; I will certainly recognize it with thanks and try to improve it. One does not criticize another with vehemence and bitter expression, for no one will give in, and the good thing will suffer and never be resolved.

One man cannot know everything. I have tried to impart to the amateur on this instrument the discoveries I have made through many long years of travel and diligent studies. He who knows more may add the rest. Now I ask you to receive this, my well-meant work, with a kindly ear, and pay no attention if this one or that one speaks ill of this work. Rather, examine and test it without partiality, and I am certain you cannot refuse approval completely. Herewith I commend to favorable memory

the Author.

Introduction

1.

The false appearance of the good fortune of so-called virtuosos has seduced many to want to become virtuosos, too, without paying attention to whether they have the important and necessary attributes for it, or whether the good fortune of the virtuoso is as great as they imagine, and whether they might do better to choose something else useful for themselves.

2.

Just look at how miserable most of those are who must earn their living with music, whether they are virtuosos or not. The virtuoso, if he is really great, has an air about him as though everything goes well for him, but we judge him from the side from which we see him most often. He must perform extraordinarily well and must have good fortune if he wants an apparent prosperity on his travels. I say an apparent prosperity, for what he earns one place is consumed either there or in another place where he earns nothing. And so the time passes until he becomes old, cannot play anymore, and in miserable circumstances, leaves the world.

3.

If he is appointed to a position in a chapel, he must have great good fortune if he is to receive a salary on which he can live comfortably. The majority receives only a small salary, although often very skillful people in a lower position have a better destiny, to say nothing of those who go around

without employment, although they are honest people, have no bread, and deserve to be engaged a thousand times sooner than many already employed; yet many still want to be virtuosos, and when they have set their minds firmly toward that end, it is very difficult to point them in another direction. No expostulation helps; the thoughts must be carried out, and only a village virtuoso will be created.

4.

Some choose this way because it occurs to them or because they think that if by chance they can do a little something on an instrument and have learned to recognize 5 and 6 in the harmony, they have the greatest natural ability and consequently the greatest calling as well. This error is unfortunate for many. Some also appear, however, who do not know why they [choose music].

5.

How many are there not in school, partly from inclination and partly with the intention of being able to earn their bread at universities, who can learn music, that is, learn to play an instrument so that on occasion they occupy a place and if necessary can play along a little. Sometimes one will distinguish himself, but most have only a little playing ability and knowledge of music, usually because they lacked a good teacher and had to teach themselves.

6.

If pride and conceit do not prevent it, they should find someone who is held in high esteem to imitate. Since

they themselves lack knowledge, and subsequently lack correct judgment, they are not in a position to choose correctly, and must rely on another's opinion, which is also not the best, and thus they often arrive in the wrong place. It is indeed too bad for those who could be brought far by a proper and well-educated leader. Others retain their moral and physical bad habits from pride and conceit.

7.

Some are commanded by superiors or parents to learn music, as they call it, either because the parents are partial to this splendid mode of living, perhaps being virtuosos themselves and enjoying the good fortune of such a one, or because it is their occupation, even if they have led a miserable existence from it.

8.

That will not show whether one has the necessary attributes, namely whether he has a healthy body, lively spirit, persevering and untiring diligence, perpetual inquisitiveness, and a perpetual tendency to exceed the commonplace, for if he does not have these, he will certainly remain average, if not a total bungler. Even if a good teacher falls into his hands, one who takes the trouble to show him everything necessary thoroughly, he will still become only a mechanical instrumentalist. Even if he tries to practice his piece according to the rules and with much care and diligence, he will still be heard as having no talent. It would be even worse, however, if he chose a teacher who did not know himself what

he was doing, who played without rules, and consequently could not help the student other than to teach him to play like a bird sings.

9.

However, if he naturally has the required ability, he must not think that he need not bother anymore, and that everything will come to him in his sleep. No! He must take even more pains to work on this natural ability diligently, otherwise he will fall short, especially in that which concerns the understanding of harmony and a good performance.

10.

Conceit or self-love, and subsequently pride, make bunglers out of most. They do not try to improve--they fall immediately into the fire and they slander and insult those, above all, who dare to find fault with them and their bad habits. These are mostly young people, but there are enough older ones who have become drab in their bad habits, who, for want of good instruction, have neither knowledge of music nor skill on the instrument they play, and, except for an inner knowledge of music, everything depends on this.

11.

They are ashamed to take instruction from a skillful master, especially from such a one as they previously found fault with and despised, contrary to the conviction of everyone else. Although they try in every way to steal advantages secretly from him, they find fault with him publicly, so no one will notice that they feel their own weaknesses and wish

to learn from him. For the most part they remain true to their mistakes, and instead of becoming well-founded virtuosos, they become fanciful naturalists.

12.

There is also a type of person who lets himself be taught, to be sure, but who will not admit that he has taken instruction, and in order to make the world believe he has discovered everything for himself, he criticizes his teacher publicly, so as to be able to give himself credit for everything learned from the teacher.¹ The expert, however, pulls the mask off the imposter without any trouble. He is unashamed enough to come out, and unconcerned about displaying his trivialities, whether they appear silly or not. Such an imposter damages the whole, and everyone should be advised to protect himself from such people.

13.

However, when a talented young man who represses self-love and its ensuing pride, chooses a teacher who he is convinced possesses all of the attributes of a skillful master, and he fulfills the demands of the master precisely, he will be able to perform something great.

14.

But he should not choose a good master if, as generally happens, he has been ruined by a bungler, for it costs twice as much to remove the bad habits and mistakes, and adopt the true and good. It costs him far more in effort, time, and

¹This is very likely an allusion to Ribock, a student of Tromlitz. See Chapter One.

money to arrive on the right path, and he still will not have reached his goal. The master whom he has chosen at the beginning, however, must be not only a skillful instrumentalist, but also a musician, in order to be able to give a more complete instruction than a mere instrumentalist.

15.

A good master is one who understands the content of the music in addition to understanding his instrument, and is not just an instrumentalist; who understands everything he is doing, why he is doing it, based on correct principles, and does not let anything appear at random in his performance; who understands the proper means to a good embouchure on the flute, and the resultant good tone (for the instrument is capable of producing it), and therefore knows how to protect himself so that no hollow, wooden, uneven, dull, or screeching tone is produced which could provoke to sneering a censorious critic who judges only by his own feeling without knowledge, and degrades the instrument as though it were totally useless; who understands the correct fingering suitable for his flute, in the diatonic as well as chromatic and enharmonic scales, and has perfected it; who knows the correct language and has the power to use it in all possible situations (tongue-thrust is a terrible expression and implies horrible consequences); who is able to use this language as well in passagework as in lyric songs, in Allegro, Presto and Adagio, and knows how to produce his essential and arbitrary ornaments beautifully and clearly; who plays an easy, clear and tasteful

performance, even with the most difficult music; who has an exact knowledge of the ratios of the intervals and has produced the resulting pure intonation properly, and has trained his ear so that he can play his flute with pure intonation if it otherwise has the proper voicing, for he who possesses this rarity (for pure intonation on the flute is a rarity) has a great advantage over many flutists; who obeys the meter strictly; who knows how to play a song pleasingly and smoothly and when to bring in the essential and arbitrary ornaments in the proper places; who understands how to maintain light and shade by using forte and piano and crescendo and decrescendo, which is very difficult but not impossible on the flute, although the majority play in only one color on this instrument as though renouncing the ability to shade; who is in the position to clarify everything according to principles when teaching his students, and does not try to impart everything by ear; who does not overlook any mistake of the student's, and does not flatter him at all; who does not tire of repeating a thing as often as necessary for the student to grasp it; who knows how to choose a piece appropriate to the ability of the student; who has an easy and clear method of instruction, so that the student soon arrives on the right path and will not be stopped without need; to whom respect is more important than money; and finally, who is determined to rise ever higher in this art. Such a master will surely attract good students, but students must not let themselves be drawn to a teacher who lacks natural ability. The teacher

whose students play not only clearly and cleanly, but also in the right rhythm, will gain the greatest respect.

16.

Thus the student should choose the best teacher if it is possible. If the student himself cannot judge, he should ask advice from a skillful, knowledgeable, and unbiased man who judges with insight and without prejudice, envy, or jealousy. Once he chooses and is convinced he has a really good master, he should retain him, place his trust in him, and believe confidently that he has the best master, and he will certainly profit.

17.

Now he must not believe, however, that everything depends alone on the good master, for a good master can also have poor students, namely if the student does not properly obey the commands of the teacher. A poor master, however, can never attract good students; it is impossible for one to teach another something he himself cannot do.

18.

Nevertheless, it sometimes happens, although seldom, that a poor master has a good student, but his good qualities were certainly not brought about by his teacher, but rather were brought about by his good temper, his diligence, and the hearing of other good instrumentalists and good singers. Such a one would certainly not retain the poor master for long, for he would see very soon that he could learn nothing from him.

19.

There are men, to be sure, who have become great through untiring study and investigation, through the opportunity of hearing good masters, and through assiduous and eager emulation, without further instruction, but such men as these are rare. Nonetheless I think it would have been better if such talented men had had a skillful teacher at the beginning, for they would have come much farther in the same time that they spent with their own meditation and investigation. It is a great blessing that that which has been found in an art or science can be learned from a skillful master. One reaches the point much sooner and saves much time and effort, and can use the time saved to improve and further his art or science. However, he who has the whim to discover everything himself, especially if he can have a skillful teacher, will seldom come farther through all his efforts than his predecessors, and he might not always be able to reach them. So you must take what has already been found, and the sooner the better, in order to be able to build more to it when it is possible.

20.

Now when an avid student has a good master, in addition to trusting him completely, he must apply a special diligence and attentiveness, avoid laziness and idleness, and defer all other things. Even if he has the best opportunity to hear a good teacher, good instruction, good masters, and good works, he will still make no progress without sustained diligence, thought, consideration, and proper selection and use of what

he heard, for what is heard in music without reflection and without correct judgment is worthless and commonplace. If someone still plays, composes, and sings this way, neglecting judgment of it, he will remain in the class of a musical day-laborer.

21.

He must never, or only seldom, be satisfied with himself; he must not indulge in any of this, and perhaps think, after many exercises that give him no trouble, "I can already do it." No! you cannot do it if you do not search, and search with the greatest effort. Quantz says, "Anyone who only cares to devote himself to music haphazardly, as to a trade rather than an art, will remain a life-long bungler," and this is the truth.²

22.

Therefore, he must not leave it to chance, he must not think it will come in his sleep, he must not see this as so easy and try to avoid the necessary effort and troublesomeness. As a student, he must not play for enjoyment, either for himself or for others, before he has survived all the difficulties with much trouble and effort. And if he wants to survive them, he must not think that it is child's play to learn music or to learn to play an instrument masterfully, and have the delusion that he can learn an instrument, if not music, in four or five months. Unfortunately, the flute is considered an easier instrument to play than any other. I

²Quantz, On Playing the Flute, p. 19.

will decide nothing further here, for each instrument has its difficulties and demands its own type of player, but rather I will ask the question: If the flute is so easy to play, why are there so few virtuosos when so many play this instrument and want to be virtuosos?

23.

It certainly seems to be easy when a master comes in and plays his most difficult passages with ease and as though it is effortless. The listener thinks it is as easy as it looks, but unfortunately he cannot see everything that preceded. One only sees the motion of the fingers and perhaps the pulling back of the lips, but the tongue, the palate, the throat and the chest, which are involved, are not seen, and these are indeed things that demand extraordinary effort and work, particularly for one who strives to have the whole instrument in his power.

24.

All of the difficulties connected with this instrument are just the means to a good performance, but they are not the good performance itself; other things, which are quite difficult, also contribute, as will be shown in detail later.

25.

Moreover, the student must repeat everything his master tells him often enough that he can do it, and if this or that is not clear to him, he must have it explained anew until he understands it perfectly. He must not become impatient with the many repetitions of one and the same

reminder, but should believe all the more that the master is fulfilling his obligation, and value him all the more. He must not think that what he does not readily understand is perhaps superfluous and not useful, but rather try to penetrate the intrinsical nature of it in order to learn the truth. He must note his mistakes carefully, for when he can recognize them, he has won a great deal, because he will then try unflinching to improve them.

26.

It is not a good sign if the student must be reminded of one thing very often; either he has not the ability or he does not make the effort and does not pay attention. Such a student lags. Because he cannot learn what the master says so often, how can he learn what depends on it, and what the master cannot tell him or what is very difficult to say? He must get along with what the master proposes for him, and not demand that he start from the back with him, that is, that he should learn concerto and solo playing before he knows the fundamentals.

27.

Now if a student sees that he is progressing and advancing as he follows the master's instruction, it is a sign that he is on the right track, and that his master is good and has a good method of teaching, so he should retain and make use of him as long as he can, and take no other. Because each has his own manner of playing, the student would have to learn another way of playing if he took a new master,

and this would do him more harm than good--he would never arrive on a sure path, and would therefore err. To avoid that, he should set his trust firmly in his master with the above-named attributes, and let him teach according to his knowledge and conscience, and if it seems to go slowly at first, he will not have to worry. He will shortly learn to recognize little by little the uses and all of the advantages that one can discover, and finally he will arrive with great strides to the perfection which cannot be attained by contrary means.

28.

Above all, the budding musician or instrumentalist, especially if he wants to make a career of it, is strongly advised to make an ever greater effort. He must constantly think over what he does and what he has learned to do, and try to bring it into order through constant meditation and thought. He would also do well to learn other sciences, especially those which are related to music; he would then reach greater heights in music sooner than one who does not study and has not learned to think scientifically, for when one has first accumulated knowledge in other sciences and practiced judgment, he can then make greater progress in music than he could without this knowledge. However, since a great mechanical dexterity is required (as much for practicing an instrument as for composition),³ and a tedious rehearsal of it, one must begin with the other sciences at

³Translator's parenthesis.

the same time, and avoid altogether all of the other secondary things if he does not want to hinder himself.

29.

If one wants to perform something superior on an instrument, he should abide by his chosen instrument and not waver back and forth, nor hit upon this one or that one. Time will be wasted. Least of all should one decide to learn all the instruments--he will not learn any of them well, and would be only average at best, for to be able to play only a little on each instrument is not enough, although similar subjects are useful and even necessary, and thus have their own value. I speak here only of those who want to become excellent players of their instruments.

30.

Once one has chosen an instrument, he should stick to it steadfastly and with patience, explore everything thoroughly, and make an effort to get everything the instrument is capable of performing in his power, in order to reach the desired height and to become master of his instrument. He should disregard it if anyone says only little songs and not difficult pieces are proper for the flute. I say if one wants to be a virtuoso, he must be capable of doing anything that is possible on the instrument, so that he can more easily connect song and art without first being tortured by the mechanics of it.

31.

Why is the flutist who performs only songs, and performs them well, less pleasing than the flutist who knows how to combine great and skillful passages with the good song in an artful manner? No rational person would exceed the boundaries. I have noticed, and others have noticed it, too, that the flute must have many notes along with the good song if it is not to remain meager and dry.

32.

I have heard singers who try to establish their greatest strength in the beautiful song alone and receive much applause, but they are always inferior to those who can also do more than is necessary in passages, and can produce everything beautifully and clearly in the throat. Now since that gives the singer an advantage, why not also the instrumentalist? I say once again that to perform on an instrument, you must be able to play everything that is possible, otherwise you are only a common instrumentalist and not a virtuoso.

33.

Now he who wants to reach these limits must not be idle, but rather must work, and work quite diligently, to be sure. He must also not want to start where others leave off--this is a universal mistake. One hardly learns a little minuet when he decides he wants to go on to a concerto. An ignorant teacher will let him go on, because he thinks he will become famous if he can say his student has learned a concerto in so short a time, and that he is in a position to become a

virtuoso much more quickly than another. The virtuoso, however, is immature enough, and is indeed to be pitied that he has been taught this way by such an ignorant master. The student learns nothing with such leadership, when he believes he will learn a great deal.

34.

If I should perhaps speak too often about one type of thing, consider only that it is something about which too much cannot be said.

Chapter One

About the Flute and its Nature

1.

How the flute looked and was built in earlier times and how it is now built is well known. Previously the flute was in one piece, and thus it was not only inconvenient to carry, but was also unusable with regard to its intonation. So it was divided into three parts: a head joint, a middle piece with six holes, and a foot joint. This was quite something--it could be carried more easily, you must agree, if several longer or shorter six-holed middle sections were made. However, because of the mechanical construction, the flute still remained quite deficient, and was not to be gotten along with if the middle piece with six holes were left in one piece. This middle piece had to be divided one more time, thus creating the present form of the flute.¹

2.

Therefore, the actual reasons for this separation are not just to aid the intonation or the carrying convenience of this instrument, for this is the least of it. Although perhaps at that time this was the only intention, a far more important reason is specified. Be that as it may, whether it is by chance or for some reason, the flute is so constructed

¹ Jacques Hotteterre, in his Principes de la flute traversiere (Paris: C. Ballard, 1707), makes no mention of a jointed flute. Michel Corrette, however, in his Methode pour apprendre aisément à jouer de la flute traversiere (Paris: Boivin, c. 1739), states that the flute is built in four parts, p. 24.

that its existing division cannot be altered again without detriment if one does not want to throw his instrument away after only short use of it. Therefore it is laughable when someone who wants to be seen as intelligent speaks up, wanting to bring these six holes into one piece again. Gross lack of insight, and the fact that such a person does not understand the whole design of the flute, is recognized at once from this.

3.

If the middle joint with six holes were to remain, the following disadvantages would arise: learned ones know that after some time, whether it is used or not, even the short pieces of a flute will warp. The joints of the flute will be not only narrower, but they will also often lose their inner bore and become oval. Their length can also become distorted, losing the straight line, or they will remain straight and pull themselves more tightly together up and down.² Now everyone knows that if a flute is to remain good, it must sometimes be bored again in order to bring any distortion back into line. If one has a middle section of the first design which is quite warped, the proper bore cannot be restored, because to drill the bore straight and round again would make it not only too wide, but also the inner bore would not remain parallel to the outer roundness, and thus the proper ratios, and consequently the whole flute, would be lost. If the joint is not too warped, however,

²"...oder sie bleiben gerade, und ziehen sich oben und unten enger zusammen."

it can more easily be brought back into line. Or, if only one piece is warped, a new one can be made, but it must be made by the same person who built the flute, because not all [flute builders] use the same bore and the same measurements.

4.

If, however, it is the straight line of the piece which has warped and you want to bore it straight, what must be done? The borer might take wood off both ends but not the middle, or he might take wood from the middle but not from either end. You can readily see that this is not at all allowable, for it would create greater mistakes than arise from the first method. Such a flute cannot be bored again, but rather must remain as it is, or the warped piece must be replaced with a new one.

5.

This warping and growing crooked happens frequently, and is occasionally so severe that such a piece cannot be brought back into line. Now if it amounts to so much in a short piece, how much would it amount to in a piece that is nearly twice as long? And a long piece warps more easily than a short one. Here you see clearly why such a long piece has no place. It is not enough, then, to persuade unknowing ones to want what you yourself do not understand.

6.

If the flute warps, however, only above and below the joints, thereby losing the interior straight line, it can be

restored rather easily. Long pieces with six holes, you can assume for sure, warp more easily than shorter pieces, especially in Burbaumholz, often so severely that they can not be bored again. Therefore, these long pieces are to be rejected as unusable and worthless.

7.

The flute had only one key for a long time, as is still customary for most [players] now, which must be used for E flat and D sharp, making them the same pitch, and which is not sufficient for clear playing, because E flat and D sharp are two different tones, and are as distinct as F sharp and G flat, G sharp and A flat, B flat and A sharp, C sharp and D flat, etc.³ Also, the E flat and D sharp cannot be made distinct either by intensifying or lessening the wind, or through fingering changes, as is possible with the remaining notes. So Quantz was the first who, while he made a clear E flat from the usual key, added a D sharp key, to which B natural is the closest major third.⁴ Even if Quantz added [this key] only on account of the perfect third, it still had many advantages for clarity and playing other than the notes indicated by Quantz, as will be shown in detail in the third chapter, which deals with fingerings.⁵

³Tromlitz borders on being archaic here in his insistence on not using enharmonic tones. See the translator's introduction, p. viii.

⁴Although Corrette, in 1739, still speaks of only one key, Quantz, in On Playing the Flute, states that he added the second key (D#) in 1726, p. 31.

⁵Tromlitz means that some notes up and down the scale will be better in tune when played with the D sharp than with the E flat key. See his fingering chart, p. 118.

It is astonishing that these keys are not used universally, even among professional flutists who, nevertheless, will not be able to play cleanly. Now whether prejudice, ignorance, or indolence is at fault, I will not decide here, but rather I assert only that clarity of playing is impossible without these keys.

8.

He who has such a flute, and who wants to use it pursuant to intention, must not be satisfied simply with the existence of these keys, but rather he must also discover whether they have the proper voicing, fitting proportionately with the whole, and can be used advantageously. To this end the player must not let a common instrument maker who does not know the nature of these keys build his flute. The outward appearance can be imitated, but not the voicing, because [a common builder] has no concept of E flat and D sharp and their ratios; he does not even know which key is E flat or D sharp, which I have only come to know just a short time ago myself. To my question of how [the flute builder] can voice an instrument when he does not even know the keys, I received the answer, "He makes the one bigger than the others." "And then how much bigger?" "That I do not know." In this manner, one promises such a voicing as to deter anyone from playing the flute. Even when such an instrument builder also has a sensible flutist at hand who can tell him which voicing is not pure, [the flutist] will not always be able to help

him, because he does not know how these keys must relate to the rest of the tones. One also finds the difference between these keys as much by means of the fingering, as their use clearly indicates.

9.

Because pure playing on the flute is very difficult and thus quite rare, and because so much of it also depends on the E flat and D sharp keys as well, it would be nice if professional flutists would like to research what has been said about this. If they were convinced, as would be the case if they were not hindered by prejudice, and accepted it, and did not believe the D sharp key to be superfluous, then they would soon perceive the usefulness of it, and the ill-founded opinion that one cannot play clearly on the flute, because the nature of the instrument does not allow it, an opinion even professional musicians are not afraid to assert, would soon cease.

10.

The remaining keys mounted after the D sharp key, were not put there so much for the sake of pure intonation, although they do contribute in isolated cases to purity of playing, as to make very dull tones brighter, bringing more similarity between the lower and upper octaves. That they have much usefulness, especially in clarity of trills, is not to be denied. In Adagio and in moderately lively passages, they are of service; however, in very fast places, they are hard to use.

11.

The thumb key for B flat in the left hand seems to be the most troublesome, because in order to open this key, you must take the thumb, which is used for support, away from the flute. It is not so bad at times, however, when you have to play B flat alone on the flute. If, however, you must also play a C", using a key which is also pressed by this thumb, you must proceed very carefully. You can open the B flat key more comfortably if you arrange the flute such that when you open this key, the thumb is not taken away from the flute, but rather may bend under the key. For F, the key for the sixth finger remains the best, because such a key for the right hand thumb would be far more difficult and unsure to use than the B flat key. A good flutist does not hold his flute so that the thumb of the right hand comes to lie under the flute, but rather so that only the tip of the thumb stays on the side. This will be discussed further in its place. Continuous diligence and practice makes everything possible. When I write about the flute with several keys and their application, all of this will be further explained.⁶

⁶Johann George Tromlitz, Über die Flöte mit mehreren Klappen (Leipzig: A. F. Blome, 1800). The Tromlitz flute of 1800 had eight keys: E flat, D sharp, duplicating F keys, duplicating B flat keys, G sharp, and C". This enabled the performer to play perfectly in even the most remote keys, as asset Tromlitz considered essential for the virtuoso.

12.

The keys with leather pads must always be in the best condition; otherwise the flute is not usable. Here there is no other means than close inspection, examining all keys assiduously before playing, and keeping them in proper order. That is, you should examine to see if water or oil has gotten on the leather, so that it becomes too hard or too sticky, causing the key not to cover the hole properly. You discover this by closing all the holes of the piece where the key is with one hand, and closing one end of the piece with the other hand. Then put the other end to your mouth and pull air in. In a second you can feel if the key is letting air in. When you find that a key does not close tightly enough, you should see first if something has bent the key. This you find out by laying a cloth over the key, and with a straight hammer, pressing in firmly on the edge of the key where its hinge begins, and even hitting it once or twice. If the hinge rises after this pressing, the hammer must be held firmly on the key and pressed down as much as necessary. Now try closing the hole again to see if air can get in through the key. If this does not help, the problem is with the leather, so take the key off the flute and put a new pad in the key--one of the softest and best leather. Proceed in the following manner: cut the old leather right next to the underlying sealing wax with a knife, then hold the key, around which you have already wrapped something so that you do not burn your finger, and after you have correctly laid

out the leather which will be used, hold the smooth outer side of the key over a fire and let it get so hot that a fine sealing wax, when rubbed on the inside where the leather will be, spreads smoothly and evenly, which then happens very soon. See to it that you do not burn the sealing wax or spread it too thickly. Then press the prepared leather on the key and hold it; you must cut the excess leather away with a scissors, clean away any excess sealing wax, put the key back on the flute, and press the leather firmly into the hole with a hammer, as already said, so it will cover securely.

13.

Now this is the quickest and best method of putting leather into a key, after which it is not necessary to spend all day bending keys and playing around with the leather before bringing the key straight with the surface of the wood. Wobbly keys and leather pads smeared with goose fat are so far from good judgment and skill that this needs no extensive explanation. He who considers it proper and wants to imitate it may do so. Here I will omit great detail about flute building in case I, as I stated earlier, write about it some time; and I will likewise omit discussion of the useless cutting of wood on the inside of the head joint toward the embouchure hole, and also the inner cutting of embouchure holes.

14.

After much and long practice, I have deduced that sealing wax is without doubt the best material with which to set leather firmly into the key. But you must take fine and smoothly-flowing sealing wax that does not burn to a coal or lump easily, and if you proceed according to my given prescription, you will be able to spread it as smoothly and evenly as you wish, and as the purpose of the matter demands. All other suggestions are worthless, much as one may praise them. The simpler and more natural the matter is, the better. Testing will teach that I have said the truth. The sealing wax holds the leather evenly, smoothly, and firmly for many years, and when oil is administered to the leather, making it sticky, the leather will never stick to the hole, as would happen with other materials, because sealing wax does not let loose unless it was put in poorly. Neither water nor oil will undo it, though [leather] smeared with other fat will be undone by oil. Sealing wax has no adverse influence on leather, which can be spoiled from other sticky things, but rather sealing wax preserves it constantly dry, good, and useful. No other thing does that.

15.

It is also the same with the leather itself; if you are not satisfied merely with the best quality, but rather believe that it can be improved through various mannerisms, you will spoil it totally. What is there for the man who wrote the fine work about the flute, for the effort he made

to prepare the leather? His name is Ribock,⁷ he is no longer living, he was under the care of a doctor, and last resided in Hannover. Now with oil, now with pork fat, now with goose fat, now he lays the foil between, so that the leather should cover correctly! You can hardly disagree with his motive, but then when the fat becomes thick, as soon happens, the leather sticks to the hole and playing is at an end, or if the leather still remains hanging in the hole, it is hard to open and shifts a lot with opening, whereby the playing is spoiled. If you want to smear the leather with fat, so that water, which accumulates from blowing into the flute, should not soak into the leather, you may let only a few days pass before the leather joins with the water, and then the leather must be taken out and another leather be put in with painstaking care. Is it not laughable? And nevertheless this man ventured to say publicly that one cannot get along without his preparation. What luck then, that this insightful man appeared! especially for flute players! who would no longer be able to play the flute without this invention. It must be true that the man will have to forfeit all approval, when we can get along without his wonderful preparation. This he can soon forfeit, however, for he certainly does not have the approval of intelligent people, and he who has nothing can lose nothing.

⁷Ribock was a student of Tromlitz for seven years, but when Tromlitz discovered Ribock's publication, which is largely a rebuttal of Tromlitz's ideas, Tromlitz ceased communicating with him, claiming Ribock misunderstood, and therefore distorted many of Tromlitz's ideas.

16.

There are many great and honest men without these childish tricks as long as time marches on, and it will certainly continue as long as the flute is a flute. Ribock says also that one should lacquer the holes under the keys, so that they do not swell when they get wet, for in his opinion the keys cannot cover if the holes are swollen.⁸ True childishness! You can easily see that this lacquering makes a crust around the hole, and even when it is only a thin line, it is enough to make that note lower. And you can also see that the hole cannot remain stable, because the moisture from blowing loosens the lacquer. Thus the lacquered tone holes are worthless. To Ribock it is all the same, however, whether he takes three or four or more layers away from the wood, or if he smears several layers of lacquer on it, because he does not notice that the tone in the first case becomes higher, and in the second case, lower, although I have told him this quite clearly enough. Perhaps I will take the trouble once more to go through this wonderful work to show the world its value, and how the author has attained the possession of so much wisdom.

17.

The present division of the flute is the most convenient for proper voicing, and it is the best for later correction of the bore. Because the pitch is not the same everywhere, but occasionally stands [as much as] a half tone higher or

⁸J. J. H. R. Ribock, Bemerkungen über die Flöte (Stendal, 1782), p. 8.

lower, it is necessary that you have several longer and shorter properly-divided middle joints, so that an overall proper voicing is possible. This is not readily done now with a flute with three middle joints. If the three middle joints are too nearly the same length, it is not extensive enough; if you vary them more, so that they can be higher or lower, the pitch will not always hold true. If, for example, the middle of the three middle joints were too high, you would have to use the longest joint, but it would be too low, because it would stick out too far from the middle of the three, and consequently would be even less true. If, however, you wanted to keep the middle one, and pull the head joint out to lower the pitch, you would completely spoil not only the intonation, but also the tone. He who has such a flute, now, has no other recourse than to pull out the head joint, but by pulling the head joint, the flute would become false and impure, so nothing good could be delivered. A single such instrument can spoil the entire musical composition, even if the remaining instruments were all good and properly tuned together.

18.

You can see then that pulling the joints of the flute apart is worthless and is to be rejected entirely. Although Quantz, in his book about the flute, seems to allow it, he attaches on the head joint a movable junction that you can pull out a little, thereby lowering the general pitch

of the flute.⁹ Just think what this device does to an interior opening! making it much larger than pulling out the middle section would, and every opening made in this manner, whether it be large or small, ruins the tone. I know of no such opening, however, so small that it does not create at least a hair's breadth when putting the joints together, and which does no damage to anything. If pulling joints should become accepted, I would rather pull the middle joints than the head joint,¹⁰ because making extra length at the head is greater and much closer to the embouchure hole. Consequently, the wind is thrust much more on the pulled-out section (and can therefore lose its proper course)¹¹ than when the opening is farther away. He who knows what a detrimental effect only a small amount too much wood taken away has on the tone, will also easily comprehend that such a large opening, which actually alters nothing more than this place where the wood is taken away, must only make matters worse, and that now the wind in such a flute takes an entirely improper path, and the good tone must be damaged. Each different direction of the wind produces a different sound, better or worse, according to its direction. In brief, all pulling out of joints on the flute leads to nothing,

⁹Quantz, On Playing the Flute, p. 32. Quantz considered the movable cork to be indispensable to good intonation.

¹⁰Quantz writes in On Playing the Flute, that pulling the head joint is acceptable, but that pulling the other joints distorts the entire flute, since the distance between the holes would be greater, p. 33.

¹¹Translator's parenthesis.

because, as already stated, the tone and the purity of intervals is destroyed. The only means of avoiding this problem is to have several very close middle joints to help with it.¹²

19.

When you have many middle joints for a flute (and I mean here a flute that has neither a screw cork nor a register),¹³ the flute will play properly, even if it is built correctly, with only one middle joint; otherwise the higher and lower octaves will not be pure. By the lengthening or shortening of the proper ratios, it naturally follows that pure intonation must be lost. The ratio can be entirely correct only to one middle joint, as already stated. If you set in a longer middle joint, the tone will be lower because the holes must stand farther apart and, relative to the length of the middle joint, the embouchure hole and the inner cavity up to the cork will be farther away from the top. Because the foot joint with its holes remains where it is, [the pitch] from the bottom up is higher. If you put in a shorter middle section, the mistakes are reversed: the embouchure hole and hollow up to the cork come farther down, closer and closer to the middle joint, and consequently the upper part of the flute becomes

¹²Quantz would like to see six middle pieces, each differing from the next by no more than a comma, and all together comprising an interval a little larger than a major semitone (On Playing the Flute, p. 32).

¹³A register is a device whereby the footjoint can be lengthened or shortened depending upon which middle joint is being used.

sharp and the lower octave, where everything remains, becomes flat, and the flute will now be false again.

20.

Since there is no other way to remedy this malady than to try to keep the inner ratio of the middle joint as true and pure as possible when altering it, Quantz discovered the means of pushing the cork in the head joint up or down, according to the nature of the circumstance, by attaching a screw to it.¹⁴ This discovery was very good; one could make the flute sharper in the upper octave and match the lower octave when using a longer middle joint where the tube is too long from the cork to the footjoint, and one could make the upper notes flat by screwing in the cork. And with a short middle joint, where the upper part of the flute is too close to the lower part, making the higher octave sharp and the lower, flat, the high notes will flatten and the lower notes will match when the cork is screwed out. This useful discovery is retained and commonly used, although only a few actually understand why the screw is there and how it should be used--even the majority of the flute makers do not know it. As good as this discovery is in itself, however, it does not generally hold true and is actually useful only in the few instances where it does produce the best, most proper

¹⁴Antoine Mahaut, in his Nouvelle methode pour apprendre en peu de tems a jouer de la flute traversiere (Amsterdam: J. J. Hummel, c. 1759), trans. by Pauline E. Durichen in Divisions: A Journal for the Art and Practice of Early Musick, (vol. I, no. I), attributes the invention of the movable cork to Pierre Buffardin, a Dresden flutist and teacher of Quantz, p. 23.

ratio between the middle joint and the joints lying nearest it. In the longer and shorter middle joints, which come too far away from the proper ratio, the tone and intonation suffer. When the screw was attached, it was not certain how much the cork should be moved, and because you could not see how far you moved it and, also, you often forgot that you moved it, the cork could move little by little farther from its proper place and the flute would then become unusable. The screw cork would then lose its usefulness, for the placement of the cork determines a good or bad tone. And what is even worse, this otherwise insightful man prescribes that if the flute is flat, you should push the cork in deeper, about the thickness of the back of a knife, to bring up the pitch. The pitch will rise, it is true, but the tone quality and pure intonation will be gone again. If the flute is sharp, it is also true that you should pull the cork out the width of the back of a knife in order to make it lower, but that this is not at all allowable and spoils the whole flute, has already been said. Quantz contradicts himself here, since he said earlier that the good tone is dependent upon the correct placement of the cork, and yet he pushes the cork a knife's width in or out for the same middle joint in order to make the flute higher or lower, letting the cork be taken away from its proper place, and indeed every middle joint has, and must have, a firm and certain place for the cork. I must truly wonder how he has been able to learn this as truth! Anyone who can hear and who has a good, pure tone,

has only to try it and he will find that both [tone quality and intonation] are lost by this method.

21.

If the flute is to maintain a proper or useful ratio when changing the middle joint, the cork must not be moved at all except by this exchange of middle joints, and then, to be sure, may be only a little displaced. If you move the cork with one and the same middle joint, the above-named mistakes arise, and the flute is destroyed. When the flute is too sharp or flat, there is no alternative except to exchange the middle joint--the cork is only there, as already said, to keep the good ratio when changing middle joints. From this you can clearly see that making the flute sharper or flatter with the cork has no place. Even though we now knew when the cork should be moved, we must still know how much it must be moved for each middle joint, so that it does not happen at random. I have therefore thought about a useful means of bringing the cork to its correct place with each exchange of middle joints, without damaging either the tone or the pure intonation.

22.

To bring this about, I looked first at the ratios of the middle joints, which I marked above on the head joint, so that the cork would always be in its proper place, but it was not certain enough. You must have a measuring device in order to be able to see whether the cork stands in the right place. If you do not have a measure, it is very possible that

you will put the cork at the wrong place. You could, for example, turn the screw three or four times too many, bringing the mark on the screw always to the appointed number, but the cork still might not stand at its proper place. Therefore, because so much depends on this, I thought about another means, and found the following to be the best: I lengthened the screw at the top of the cork and let a piece that twisted off smoothly, and on which I made the proper division that was necessary to each middle joint in order to keep as nearly the right ratio as possible, rise above through the screw top. This division is set up according to the ratio of the flute, and applies also only to my flutes; however, it is found now according to my division on all flutes, whether it is appropriate to the individual flute or not. This method of moving the cork is the best, because you can see how far you are moving the cork, and thus you can never make a mistake.

23.

Now with this method you would certainly be more sure about moving the cork, but yet the malady already mentioned would remain. This displacement of the cork certainly has its severe limitations, and is only, as said above, useful for one middle joint. The voicing in the longer or shorter middle joints is not completely pure, because the foot joint stays the same length, and you must therefore push the cork farther in with each middle joint when it is beneficial to the tone and pure intonation. Take a flute, for example, with

five middle joints. If it is built correctly with the proper ratios, No. 3 will be the most proper middle joint. No. 2, if you make D' and D^m pure by means of the screw cork, will be somewhat flat on the notes lying between these octaves, but it is still usable. With No. 1, you will notice right away that if you want to play still lower, the flute becomes completely unusable. The reason for this lies with the lower parts of the flute, which are too short. With the higher and shorter middle joints, the problem is the reverse. If you take No. 4 on the flute, and adjust the cork such that the octaves D' and D^m are pure, the tones lying between will be too high, but yet this is still bearable. With No. 5, it will again be noticeable. Here, the lower parts are too long for this middle joint, and consequently the D is flat compared with the other tones. If you want to help the voicing of this middle joint by making the lower holes wider and the higher holes narrower or smaller, this would not only be a troublesome and awkward job, and not at all feasible for the common instrument maker, but this unevenness of holes would be a hinderance for the player, and you would still not reach your goal.

24.

I have done many experiments with this, and have finally found that a register on the footjoint, whereby you can make it longer or shorter according to the situation, is the best means of handling this problem. This making longer or shorter must coincide with the adjusting of the cork, and

may be done only with the exchange of the middle joint-- otherwise it is not used. He who thinks the screw cork and register are there for the purpose of making the flute sharper and flatter with the same middle joint, falls into the mistake which Quantz scribbles about this discovery. Quantz thinks, namely, that by shortening the footjoint, only the D' will be higher, and not any of the other notes.¹⁵ The view that this shortening or lengthening may not happen with middle joints of the same kind, and may never happen without moving the cork, but rather only by exchanging the middle joint, is wrong, because when you make the foot shorter with the register, you also have a shorter middle joint, and the notes are already higher without shortening the register. If the length of the foot joint stays the same when a shorter middle joint is set in, as we saw previously, the D must then necessarily be too low, as was already brought to mind above. In order that the D does not remain too low with short middle pieces, you must push in the register of the foot joint to shorten it as much as necessary. So, true as it therefore is that the foot, with the use of a short middle joint, keeps the D too low, so it must also be true that if you shorten the foot, the D will become higher and will be in the right ratio with the other tones. With the D now properly raised or lowered, the remaining

¹⁵Quantz states, "If it stood the test, the invention would have its value. But since only the D becomes higher as a result of shortening the foot, while the intonation of the following notes, such as D#, E, F, G, etc., remains unchanged for the most part and does not rise with the D in the proper proportion, it follows that the flute does indeed become a whole note higher, but also that it becomes completely false, with the exception of the notes produced with the holes of the first piece," p. 33.

pieces correctly tuned to them, and the cork in the right place, the flute is also certainly pure and good. The register and cork and all remaining parts must be adjusted together, however, so that with each raised or lowered tuning, a correct temperament is maintained in the instrument. It is therefore not enough to attach a thing which looks similar to a register, but whose division is only imitated, unless it stands in the right ratio with the rest. This is also true of the screw cork. To adjust everything correctly together, however, is no easy thing. As happens with the shorter middle joints, so it also happens, only in reverse, with the longer joint. The register without a screw for the cork is not usable, and therefore must never be moved without also moving the cork. Rather, both must help each other, and, as often said, neither may be moved with the same middle joint, but rather only with the exchange. Such an arrangement is thus not only not to be discarded, but is even much more to be advised.

25.

A flute constructed in this manner will be more useful than all others. If one has seven middle joints, he can play almost a whole tone higher or lower and the ratio will always remain good and useful with this voicing; but here, namely because of the seven middle joints, the raising and lowering [of pitch] has also reached its limits. If you want to play higher or lower, the temperament will suffer, because you will have come away from the point of proper

ratio [that is, the middlemost middle joint], and the flute will become false and unusable. You notice it already on the longest and shortest pieces of the seven middle joints--they are no longer so clear as the others, yet they are still useful. This manner of flute construction is used by many instrument makers at present to be sure, particularly if the external appearance of such an instrument is enough, because the register and screw cork are made like the rest without regard for the measurement to which they will be applied. The division is made from exactly the size I make it, without the builder knowing whether it is proper to the ratio of the flute. I have just recently seen this mistake on such a flute made from kingwood: the whole flute was impure and had a completely false section, especially on the screw cork, and still cost 18 ducats, although I would pay only 12 or 13 ducats for such equipment, but with correct sections and voicing.

26.

Although the manner of putting flutes together just described is the best, there are still other methods of which you may make use. There are flutes with one key, without register or screw cork, which can and may have only three middle joints very close in length if they are to be usable. There are flutes with one key and a screw cork; these can have one or two more middle joints, because you can help the flute to some extent with the screw cork. If you attach a register, however, and adjust everything

together properly, the flute will be more useful. There are flutes with seven middle joints, register, screw cork, and two keys, namely E with B flat or E flat, and D sharp. These are the most complete, other than the flutes with E flat, D sharp, duplicate F keys, G sharp, B flat, and C" keys. If you live in a place where the pitch is always the same, you can also get along quite well with a flute with five middle joints, leaving off the highest and lowest of the seven middle sections, and arranging everything as it is with seven middle joints, if the flute has a register, cork attachment, and E flat and D sharp keys. This whole set-up, with register and cork attachment, E flat and D sharp keys, is essential to a pure intonation. Without this arrangement, pure playing is impossible.

27.

I have already mentioned that the remaining keys are not attached so much to aid pure intonation as to help make the dull notes in the lower octave brighter and similar in quality to the other tones. I have also shown how they must be placed so that they can be used conveniently. These keys and attachments have their great usefulness, and if you take the trouble to learn to use them fluently, you will find it so. Their voicing is difficult, because they must be so tempered that F and E sharp, G sharp and A flat, and B flat and A sharp will be usable. To be sure it is the same on the piano; however, although imperfection always remains, the piano nonetheless gives the same quality of tone with each stroke

[of the keys], one after the other, neither duller nor brighter.¹⁶ With the flute it is completely different. According to the nature of the lips and the embouchure, the tone is sometimes duller, sometimes brighter. Also, you are not always in the position to produce and measure the wind with exactly the same force for each tone; a little stronger or weaker makes the tone brighter or duller. When you consider these difficulties, you will easily understand that voicing the flute is a difficult thing, and is not for just any flute maker. No other wind instrument has such difficulties, although when you miss a pure-voiced oboe or clarinet, or a clear-voiced bassoon, the [problem] is generally not so much with the instrument itself as with the deficient perception of the maker. It should be the position of a virtuoso to build the instrument himself, or at least to voice it. Then the complaint that no wind instrument is pure would cease. Perhaps another time [I shall write] more on this.¹⁷

28.

I could cite here many more of the multifarious triflings on the outside of the flute that are devised by this one or that one as new and useful, but which in reality are laughable useless discoveries, because they are inconsiderable

The German reads "höher und tiefer," but duller and brighter are implied.

See Tromlitz's article, "Über den schönen Ton auf der Flöte, und dessen wahre und achte Behandlung," in the January, 1800, issue of Allgemeine Musikalische Zeitung, 301-303 and 316-320.

things that no one uses. They will be justly omitted here, and may occupy their place where they belong, namely under misusages. The simpler a machine is, and the fewer parts it has, the more durable and useful it is.

29.

The most useful flutes, then, are those which have E flat and D sharp keys, register, and screw cork. However, all of these, if they look the same, are worth nothing if they are not made by someone who can adjust the ratios together and can correctly tune together what is the most important. If you so fancy to perform on a flute with F or E sharp, G sharp or A flat, B flat or A sharp, and C keys, you may do so, but if it is to be usable, it must be tuned correctly, or otherwise it will be useless to you. Such a flute must be so tuned that it can also be used without the keys, because, with all these keys to learn to use, you cannot do it all at once. Rather, you must accustom yourself to it little by little until you have mastered it; even so, you will only be able to reach certain limits. First you must familiarize yourself with the G sharp or A flat key. When you have that in your power, take on the A sharp key, and finally the F or E sharp key. If you have more keys on the flute, such as F for the little finger on the left hand, C", these should be learned last. These keys should be practiced slowly, and bit by bit in faster pieces.

30.

An even lower C' and C' sharp can be sounded by means of a long foot joint on the flute, but it is not to be advised, because it alters the tone and is not advantageous. I do put this foot joint on, however, when it is demanded. A foot joint just for C' sharp is less detrimental than the former, because it is not so long, and is thus sooner to be advised. Of the other flutes, such as Flute d'amour, which stands a minor third lower than customary; Terzflöten, which are also called Quartflöten, and which play a minor third higher; and Octavflöten, which play an octave higher, I will not make further mention, because they are not very practical. Besides, they are played like the customary flutes, and you can learn to play them from my book, also.

31.

These would be the present customary methods of which you can make use. Flutes are made of different woods such as Burbaum, ebony, grenadilla, Franzofenholz, and similar woods. Those made from Burbaum give a pleasing but somewhat weak tone, but they are the most durable. Those of ebony, grenadilla, etc., give a brighter, stronger sound, but they need a more solid and acute mouthpiece. The Franzofenholz produces a good sound, too, although it has, in my opinion, too little elasticity, and it is more subject to cracking than the other woods.

32.

If you have such a flute with the above-named qualities and advantages, you need not be annoyed in keeping it so. If you want to preserve it, then, you should wipe it out after each playing with a cloth wound around [the end] of a stick. This will not only keep the flute clean, but also prevent decay. If you do not do this, as often happens, and lean it after playing in a corner of the room, or in the window where the sun can shine on it, or, as I have often seen, hang it against two nails on the wall, and occasionally so near the oven that the lacquer on it is burned, such methods will always warp the instrument and destroy it. If you wipe it out after playing, and put it in its case so that no dust can gather on it, and in two, three, or four months, after playing a lot or only a little, and after the flute gets wet often, give it a little oil, you will certainly be able to keep it a long time. The best oil for this purpose is one which has neither too much nor too little body. Some use almond oil, but this has too little body and evaporates too fast. Others use flax oil, but this has too much body, and after several treatments, it creates a crust in the flute, hereby altering the bore and ruining it. The best oil is the customary Rubesaamen oil which is used by all instrument makers, although not for this reason, but rather because it costs the least. It is, however, in point of fact, the best, but you must not use it like those who believe that oil improves the sound, and apply so much that it runs around

inside. Too much oil spoils the sound and takes away the elasticity, and when the wood cannot make the proper vibrations, the tone is worthless. With a feather, you must try to put in so little oil that the flute hardly gets moist from it, for the oil is not necessary so much for a good sound as it is necessary to prevent water from soaking in. When you have put the proper oil into the flute, you should wait until it dries before playing again. Also, when you put the flute in its case after playing, without wiping it out, or when you have put oil in it and put it in its case, you should place it so that the water or oil cannot drip onto the key holes, for the leather on the keys will be ruined by that. All the oil and water ruins the leather, so that the keys do not cover properly, and consequently the instrument is made unusable.

33.

It is also important that you be careful that the thread around the joints is always secure and good, and not hanging around on the pieces, or that no more thread is on one side than the other, for then the joint would not be sound, and would not fit properly with the adjoining piece. This would change the correct bore and be detrimental to the tone. When the thread is so decayed that it breaks, it is best to remove the thread and wrap the joint again with good, waxed thread; if you leave off the wax, the thread will not stay secure. With this waxed thread, begin at the furthest end, winding the thread firmly in the grooves with

diligence, but such that the thread is wound around to its starting place before beginning in another groove, and when you come again to the place where you began to wind the thread, go on around the third circle, and so on until the overlayed lap comes around to the end of the joint. But the thread must be wrapped firmly and exactly in the grooves, because these grooves are very important in keeping the thread tight if the joint contracts, and the thread will not loosen so easily as happens with some where no grooves exist, although some think that grooves are superfluous. When you begin in this manner at the inner edge, wrap outwards, not straight around, but rather obliquely, so that by wrapping down, you can go over crosswise, and you must always try to cover the empty places and see to it that all sides of the top of the joint are similarly thick with string. Proceed in this manner until nearly enough string is on it, which you find out by putting the joints together many times. Then wrap around once or twice more, and twist the thread so it is fast, and still better than if it were all wrapped straight around. In that manner, the thread would push itself down easily when the pieces were put together, particularly if wax were on the thread, and this is worthless, especially when the joint is narrower at one end than at the other, which would be even worse. The flute does not sit well together in this manner; it is not firm, but rather bends back and forth, thereby destroying the straight line of the joint. It is best when the joint is a little bit conical,

wider at the front than the back, so you can turn the joints of the flute so that they sit not only firmly and correctly, but so that they will also be easier to put together and take apart. As insignificant as this may seem to some, much is dependent upon it, for that which arises from this proper or improper management is that which arises from proper or improper bore. If the joint is not made as I have said, the pieces will not fit securely together and will press against a side, making the inner bore incorrect. If the joint end is not properly and well wrapped, it will protrude on a side and not fit with the inner width of the other pieces, as already stated, but rather will create the just-mentioned mistake, and consequently damage the flute. If you make the joint a bit conical, however, and also wrap the end of the joint, the mistake mentioned above will not happen, and since this method does no damage to the flute either in putting it together or taking it apart, you are more certain of not damaging it.

34.

I have said above that you should watch carefully that the keys cover properly, and give neither bent keys nor dried leather as the cause of poorly-covered holes. It is so true that a weak spring under the key can cause it not to close properly. If this is the case, you do best to have the spring under the key and make a strong one; or if a stronger spring is available, lay two on top of each other, such that they are not too strong, so that you can easily conveniently use the key, especially when it is for the

little finger, which does not have as much strength as the others, and must be able to trill besides. The spring must be only so strong that the key covers properly. Anything more is too much.

35.

Now I find it necessary to remind you that when wiping out the flute, you must watch that the cork is not moved; the cork could be damaged, worn out, and even too short, and the flute would be ruined. Some put a tiny piece of wood over the end of the cork, Messing or Elfenbein, but not with the intention of placing the cork more securely; rather, they think the tone will be better. They are wrong, however-- the tone will be hard and unpleasant. I have already done this for many years, but found it useless. Had it been useful, I would certainly continue doing it.

Chapter Two

About the Posture of the Flute and About the Embouchure

1.

I do not think that you must separate these points from one another, because he who does not hold the flute properly and has an uneasy and forced stance, will certainly produce a nervous and forced tone. Affected posture and an uneasy grip of the flute influence the whole performance; everything sounds forced and nervous. If you give it enough attention just once, you will certainly find it so. A freer and unaffected stance not only makes the playing easier, but also the whole performance will be freer, more flowing, and more pleasant.

2.

You can avoid this mistake if you hold the flute completely freely, without nervousness and without constraint and pressure--that is, do not stand there crooked, bent over and compressed, seizing the flute as though you want to squeeze it to rubble; if you do this, the wind will certainly press into the flute with the same force with which you grab the flute itself; or you play so poorly and miserably that the listener is simply moved to pity. Here, tone and effect have the same status.

3.

A good and free stance is best obtained in the following manner: place yourself very straight and unaffected, your

feet rather close together, but the left foot slightly forward; hold your head straight and high, looking straight ahead, and grasp the flute so that it rests on the knuckle of the lower joint of the first finger on the left hand, with the thumb opposite, a little toward the second finger. These two fingers will determine the position of the remaining two, but be careful that when the three fingers of the left hand rest on the flute, they do not lie too closely together, but rather that they are all free, and rest in a curved position with the fleshy part of the fingers on the flute, so that they can move easily and freely on all occasions, and you can trill easily and clearly, and play passages smoothly. If you lay or press the first joint of the finger down, however, so that it lies flat or straight, as some do, the reverse arises and is faulty and unsuitable. Or, if you lay the flute too low between the thumb and first finger of the left hand, the finger stands too much on its tip, and if you now also press the joint straight down, so that it makes a straight line with the second joint, a uniformly pointed figure arises from this, whereby you can neither cover the holes properly nor play rapid passages easily and efficiently. So in this manner, the thumb comes over the flute too much, so that if you wish to accustom yourself to a flute with a [thumb] B flat key, you will be greatly hindered, because you will not be able to use the thumb key. The best position for all situations is when the flute rests, already said, on the lower knuckle of the first finger

of the left hand, and the thumb is set inward, so that the fleshy part hits the flute, and, to be sure, [the thumb] rests a little toward the second finger, but not completely between the first two fingers, so you cannot only hold the flute firmly, but also comfortably in all situations.

4.

Even if you observe all of this carefully, inconveniences will always remain in the left hand, because of its position. If you do the complete reverse, you cannot get along at all. If you set your fingers too close together, it is as if they are dependent on each other, and it is impossible to move one without moving them all--they must all move at the same time. You can see for yourself how much skill in the left hand is possible with this method. It is also good not to set the little finger of the left hand on the flute, as that hinders the free and rapid movements of the neighboring fingers, and do not stick it under the flute either, for that not only looks very bad, but also makes [the little finger] inefficient in using a G sharp key. It must therefore stand constantly over the flute, so that it is ready immediately in the event it should be used.

5.

When you have the left hand in order, set the thumb of the right hand, with the tip inward, on the flute between the fourth and fifth [holes on the flute], and lay the remaining three fingers on the flute, but such that the fourth and sixth fingers are nearly straight, and the fifth

one is curved a little, and cover the holes with the fleshy part. If you do not set the thumb on the flute with the tip a little inward, but rather seize the bottom of the flute with it, the fingers would then be too long and would have to be bent, which would result in all sorts of problems. The farthest-back joint [of the finger] would be raised too high, and could be raised higher when uncovering the holes only with great difficulty. This would greatly hinder skillful playing; if you try both ways, you will find it as I have said.

6.

From this position, namely with the right thumb placed only with the tip, you will also see that an F key for the thumb is of no use and is completely worthless, but for the sixth finger or for the little finger of the left hand, it is very good. If you want to put such a thumb key on, you must then bring the thumb under the flute, but if you must spring back and forth to the key all the time, rapid playing would be greatly hindered, for you would always have to have the thumb lying under the flute next to the key. But then the mistake mentioned above arises.

7.

You must be careful here that the fingers lie in a straight line and not to the side or aslope, for freedom of movement would then be lost. Or if you let the second joint of the first finger of the [right] hand lie firmly against the flute, so that only the first joint can move, as

sometimes happens, all skillful playing would be gone. The same mistakes occur from incorrect position of the left hand, on which alone the flute should be firmly positioned. If this is improper, the flute does not rest securely, and you then must help balance the flute with the right hand.

8.

The little finger of the right hand is also often used to support the flute, but to hold the finger that way causes it not to be at the right place when it should be used. Some put it completely under the flute, which also produces the error just mentioned. It is still worse if you leave it lying on the [E flat or D sharp] key, for the tones which should not use the little key, such as E and F, are then too high, and you play uncleanly.

9.

All of these and similar evils must be most carefully avoided if anything good is supposed to result. The little finger must always stand the proper distance over the key, so that it is right there when it should be used. This goes for the remaining fingers, too; they must never be too far removed from the flute, but also must not be held too close over the holes. The former hinders rapid and clear playing greatly, and the latter is detrimental to good and bright sound, because it would cloud the free passage of air.

10.

If you have thought over all the things mentioned here, and have made them proper through diligent practice, and

you are in the position to hold the flute in the manner described above, then lead the flute toward the mouth such that you keep both arms from the body, and the flute is in a straight line with the mouth, and not, or at least not much, hanging down to the right side; this will be prevented if you hold the right arm somewhat higher than the left. If you do the reverse, the flute does not fall into a straight line with the lips, but lies too lop-sided, and since lips and flute must be straight, the lips must adjust to the flute, and this causes a slanting position of the head, which hinders not only tone, but also playing. Such a stance looks very bad.

11.

The posture for playing, as said above, has a very great influence, so you must not look at what has been said here as insignificant trivia, for the finer, less confined, and more natural the stance, the more favorable impression the playing will make on the listener. Yes! if you can play well and expressively, you will not make as good an impression as the average player with a fine appearance. Observe and judge. Take the one with a poor posture who grimaces as well; although the grimacing is already bad enough, he falls entirely into ridicule and then is quite finished. Some people endeavor with much assiduity to make faces, because it represents expression to them. For example, raising the shoulders to the ears, arching the back, the ridiculous moving of the head, the eyes, the nose, the bending

and reeling, the bending back and forth, turning the whole body, the cringing and expanding, as though the whole player were baked out of Refina Elaflica, the pushing and pulling, so that the face of the player turns red as a cherry, etc. Similar trifles and ridiculous farce have already been discussed above. This applies not just to the flute, but also to all other instruments. I have seen pianists whose tongues roll around their mouths according to the nature of the passages, or who adjust their mouths according to the passage. If the [musical] run goes toward the right hand, they draw the mouth to this side; if it goes to the left, the mouth follows as well. Or some fidget with their mouths as though the mouth and not the fingers should play the passage, and some play each note with the head or even the whole body, believing they are great masters because they are praised and made proud by conceited ignorant ones. With the violin, there are occasionally comical faces. Some, according to the nature of the passage, draw the upper lip and the nose up to the forehead and back down, and this with the greatest speed, especially if the passages are very fast and demand great effort. The rational [musician] is advised and does not take it badly if a friend reminds him of it, but rather pays close attention to himself, and does not let himself be seduced when this one or that one sanctions it and says, "That man plays with great sensitivity."

12.

Now back to the flute. Set the flute on the lip so that the inner edge of the mouthpiece comes to rest where the red of the lower lip begins.¹ You must have a very strong lower lip if you are compelled to place the flute farther toward the middle [of the lip]. If you lay the edge entirely in the middle of the red of the lower lip, you will have a seemingly strong and heavy, but not penetrating lower range, and the higher range will be completely lacking. If you place the mouthpiece as first described, however, you will be able to have not only a piercing and full lower register, but also a fine and beautiful upper register. This is known well on a well-built flute; nothing much worthwhile can come from a badly and incorrectly-built instrument.

13.

So that you place the mouthpiece exactly correctly, first pull the lip somewhat broad and smooth, then place the flute, tilting the head a little to the left side, with the whole embouchure hole on both lips, the lower edge, as described above, on the lower lip, and the upper edge on the upper lip, and be careful that in this position the embouchure hole is at least half covered by the lower lip. Then turn the flute down, so that it comes to rest firmly on the chin. Press it firmly on the chin with the first finger of the left hand while you press with the thumb which lies opposite and between

¹Quantz, in On Playing the Flute, puts the flute to both lips in much the same fashion as Tromlitz, but turns it down so the embouchure hole hits the middle of the lower lip, p. 52.

the first and second fingers, so the flute will lie securely without further help, and you will be able to move all of the fingers of both hands freely and unhindered.

14.

Now try to blow a tone. One commonly chooses the D", because it is produced most easily. If you have placed the flute correctly and the lips have their proper position, this tone will be bright, penetrating, and ringing, and you will be able to make it strong or soft as is your pleasure. If this is not so, the position is not right and you must place it differently, or, when only the embouchure hole stands right in the middle with the opening of the mouth, try turning the flute in and out until you hear if the tone rings out brightly and is firm and solid, which is the most superior. With a beginner who has not blown at all, or only a little, one cannot yet expect that it will come so easily; it takes one who has already played for a long time to succeed. A beginner must always make trials, before he learns to produce even one tone from the flute, willing though he may be; as soon as he can, however, he does not wait longer, but rather sets his flute with covered holes to his mouth, and practices as long as he must until he finds the right spot. This does not come quickly, and he must have patience and practice diligently until he finds it. When he has it, the desired tone will appear, and he can continue and capture either the low or the high notes.

15.

When I said you should pull your lips back wide and smooth, it is not to be understood that they should be pulled so far that they cannot be pulled farther. Their position must be so constituted that it is possible to pull them wider little by little [as you play] down to low D'. Moreover, however, you must not leave it at that, but rather at the same time you pull your chin back little by little, the upper lip, in like fashion, must push a little forward over the lower lip. By pulling the lips and chin back, the embouchure opening is made larger, and more wind is brought directly into the flute by pushing out the upper lip. The tone will then be fuller and stronger in the lower register than if you do the opposite. This must be practiced often and diligently until you have the correct position of the lips for all the notes under your control. The ear gives the correct measure of how far the chin should be pulled back and the upper lip be pushed forward. There is not any other measure.

16.

When you are in this position, go stepwise from D" upward; now, by the appearance of the chin and lips, you see the reverse. Quantz says in his book that you should move the lips from the teeth little by little so you will be able to play high very easily.² There is no other way for this

²Quantz, On Playing the Flute, p. 53.

to happen than that you make the opening of your mouth round, but in this manner the high notes will not speak for me, and I believe they also will not come for Quantz. I have heard him play often, to be sure, when he played no higher than E^{'''}, and never went higher as far as I have been able to notice; however, one of his students assured me that his high register was not good. To each his own. Here I want to proceed with my method. If it suits you, use it; if it does not suit you, use the former method or another one. For me, the high register up to C^{'''} speaks well with good and healthy lips if I proceed in the following manner: from D^{''} upwards, I pull the chin little by little forward, so that the upper lip, which will be held back with this method, is pressed, so to speak, against the teeth. By pushing the chin forward, and not just the lips (for they must never be separated from the teeth),³ the embouchure hole of the flute will be more covered and consequently made smaller, and by pressing the upper lip on the lower, not only will the opening be smaller, but also the proper direction of the wind will be established. This is carried out from tone to tone only just a little--so little that it cannot be measured; the ear is the only judge. He who spends his lifetime giving instruction to multitudinous students with as many different lips, understands this very well, and is able, therefore, to judge [my method] more easily and more accurately than one who is

³Translator's parenthesis.

not in such a position. Repeat these trials mentioned above so often that your lips fall into the correct position, and then the tone, clear up to the highest note, will speak easily and beautifully. Be careful that your embouchure becomes smaller as you play higher, and that the tone is not shrill, and also that by closing the embouchure, the lips do not become too flabby, causing the octave to drop, but rather that the purity of the octave and an evenness of quality between upper and lower register is kept.

17.

I have noticed that when one practices frequently in the upper register, the lower notes then speak most easily and beautifully. By pressing the lips firmly together when playing the high notes, the lips gain a steadiness and sure position which is quite advantageous to the lower notes. For this reason I have often tried experiments, and have had beginners diligently practice the scales in the upper octaves at first, then, after a little time, the lower tones, and it has been quite successful; for some more so than for others, however, according to whether they have more or less natural ability, and according to how the lips are formed and how the teeth are arranged. Where there are physical flaws, all endeavors are for nothing, and where nature has given nothing at all, one does best simply to close the book.

18.

Because that which I have now said about stance and embouchure is worthy of attention, I will repeat it in brief.

Should it be too insignificant or too boring for some, and consequently not important enough and not worth repeating, they may skip over it. Now to the matter at hand.

19.

First, stand quite straight, but naturally and without duress, both feet together, looking straight ahead. Then take the flute in the manner described above, namely place the flute on the lowest knuckle of the first finger on the left hand, and set the thumb with the fleshy part of the tip opposite and a little toward the second finger, and set the remaining fingers evenly and without force on the flute. Now support the tip of the thumb of the right hand on the flute, but such that it takes its place between the first and second fingers of this hand, and place the remaining fingers so that they come to rest more straight than curved, to be sure. The little finger must constantly stand over the key, and not be supported on the flute; also the same for the little finger of the left hand. The flute must be held completely by the first finger and thumb of the left hand. When you have the flute correctly placed in your hands, bring it to your mouth, pull your lips wide and smooth, turn your head slightly to the left side, and turn the flute with the embouchure hole inwards, setting the embouchure hole on both lips, but such that the inner edge of the embouchure hole comes to rest on the outer edge of the lower lip, or where the red begins. In this manner at least half of the embouchure hole will be covered

by the lower lip; the upper lip will cover the other side of the embouchure hole. Now turn the flute outward so that it comes to lie on the chin, press it with the first finger of the left hand and with the thumb opposite it, so that the flute cannot move easily, keeping the head straight, with the flute in a straight line with the lips. Lift both arms up from the body, but the right one higher than the left, so that if you did the opposite, your head would not be able to tilt to the side, hindering your playing. You should see for yourself that the arms are not raised so high that they reach the shoulder, and that the head is not turned so far to the left side that the head joint of the flute rests on the shoulder. An easy, unaffected, and, for this instrument, becoming stance is what I intend. You can best keep this if you constantly practice standing, but if you usually sit for comfort's sake, you will become accustomed to the left arm supported by a table, and thus the head and the right arm hanging down to the right. Now play a D", because it speaks most easily, and play the scale upward, pushing the chin and lower lip, but not the lower lip alone, forward little by little, keeping the upper lip back, and pressing firmly on the lower lip. This change of the lips and chin is very slight, and is carried out from one tone to the next very little. The ear must decide from the preceding tone whether the position is right or wrong--it is the judge of how much you must move. When this has been practiced for awhile, take the lower octave and play from D" down to D', pulling the

chin and lower lip back little by little, and pushing the upper lip forward little by little at the same time, thereby pulling the lips always wider. Much time and effort is required to get this completely in your power. How the tone must be controlled is found in the chapter dealing with the language of this instrument, or with the use of the tongue.⁴

20.

Flutists do not have a good disposition all days, or all hours, and thus cannot always play well, as is unfortunately well known. When the tone is lacking, everything is lacking, and this depends completely on the condition of the lips. Good, healthy and supple lips will produce a good sound; hard lips, swollen and chapped, or ruined by rich and spicy foods, or lips roughened by cold and harsh air produce a bad sound, hindering good playing. You can help chapped and rough lips by making use of an ointment, putting it on your lips before going to sleep at night. Because a good ointment is not to be had everywhere, and the so-called wine-ointment does not perform the necessary service, I want to put down here a preparation which has always been very useful to me, especially while traveling, when the lips are exposed to extreme cold, or also to very hot weather. Here it is:

virgin wax	$\frac{1}{2}$ oz.
suet of deer	$\frac{1}{2}$ oz.
sweet almond oil	$\frac{1}{2}$ oz.
Geschabte Borsterapfel	$\frac{1}{2}$ oz.
currants	$\frac{1}{2}$ oz.
ox tongue root	$\frac{1}{2}$ oz.

⁴ Chapters Eight and Nine, *infra*, pp. 248ff.

Chop the ox tongue root finely, and put it in a small pewter dish with the other ingredients, and set it on coals. Stir the mixture vigorously until the meltable things dissolve. Then pour it into a cloth, strain it, and let it cool. Then it is ready. Put this on chapped lips when you go to sleep at night, and they will be good by morning.

21.

He who will best perceive what a benefit this recipe is to a flutist, is one who comes into the situation that he is obliged to play the next day, cannot postpone it, and has chapped lips, making it nearly impossible for him to play, and for which he has no help, and so he must either not play, or play poorly. The present means of helping, however, solves both problems. In such cases, avoid rich and spicy foods, and rough air. Occasionally there are instances in which the lips seem to be good, but the sound is not good, or, too, the lips are puffed up and one therefore cannot bring out a good sound; nothing helps then except patience. Sometimes you play well, and after half an hour the embouchure is gone without your knowing why. You presume, no doubt, one or the other [of the maladies named above], but surmise what helps. On other occasions you may play for several hours, and it sounds better at the end than at the beginning; here the first presumption ceases and a new one begins.

22.

In very warm weather when you sweat a lot, you commonly lose the embouchure while playing, because the flute, which

should rest firmly on the chin, cannot rest firmly and slides down because of the sweat, hindering further playing. Quantz gives a remedy: in such cases, one should reach into his powdered hair or wig, and put the powder which clings to his finger onto the place on his chin which would stop the sweat, and he would be able to continue playing unhindered.⁵ However, this is not so; the sweat cannot be stopped with that, but rather the sweat always goes its way, and now you have a smeared, slippery mess with the powder, which is more detrimental to the firm position of the flute on the chin, than the sweat alone. When I encounter this situation, I wipe off the sweat and continue playing. It is smart, on such a hot day, not to play a long, difficult, and sustained piece of music.

⁵Quantz claims this powder will stop up the pores, p. 199.

Chapter Three

About Fingering

It is commonly thought that there is little more to be said about this, for if you had one fingering, it would be enough, and everyone could make do with it; however, it is not so, although many think it is. It would seem that if all flutes were in tune with one another, and a good fingering system were established, it would certainly be allowable, but because this is not so, and each flute is tuned a little differently from others, a single fingering system for all flutes is not suitable. It is not the same as with the piano or with stringed instruments, which always keep their common fingering whether the instrument is good or bad. There is a definite and overall suitable fingering on my flutes, where the build and tuning are exactly the same; without this, it is not possible to play cleanly, even on a correctly-tuned flute.

2.

Now since one cannot be without the other, you also will not be able to play cleanly if you have a correctly-tuned flute, but no appropriate fingering for it. A universal fingering, which must suit all flutes, cannot produce a good effect. Even my fingering is not completely useful for the common flute, because it was designed just for my flute alone whereby, with the help of fingerings, you can distinguish between G flat and F sharp, G sharp and A flat, B flat and

A sharp, C sharp and D flat, and the like, but you must not rely just on a well-tuned flute and a suitable fingering, but also on a sensitive ear; without this, you will still not play cleanly, even with a correctly-tuned flute and good fingerings. If you have a good ear, you will be able to play very cleanly in all keys, which is not possible, however, on a common flute. These three things [good flute, correct fingering, trained ear] are absolutely necessary for clean playing on the flute. Without them it is a rarity on this instrument, and will remain so. The temperament on the flute is very difficult and so constituted that the player must have a good ear if he wants to play clearly, even on a correctly-tuned flute. This you can easily understand when you consider that the seven holes in this instrument must be so [placed by the builder] that they are usable in all keys. You look for this in vain on a common flute.

3.

This art of tuning a flute correctly, as well as developing a suitable fingering system, has thus far been missing. It is true that Quantz has specified the build of his flute, and also the fingering system, but he made [the fingering system] known more for general use than for his specific flutes. Whether it is suitable overall can be judged by those who have used it on his specified flute or on other flutes, or still use it. This deficiency is always the cause of unclean playing and the resulting disdain of this instrument. In some countries and regions, the flute is so despised that no one wants to hear it at all, and all

because of unclean playing. One avows his preference for pleasing tones; should he not then take the trouble to remedy this malady, which is certainly possible, and try to make the beautiful qualities and superiority of this instrument more useful? And will you find fault with me because I say so much about it here? People have always believed, and ignorant ones still believe, that it is impossible to be able to play clearly on the flute. Certainly this is true if you judge common players, for they have bad or poorly-tuned flutes, an unsuitable fingering system, and as a result, ruined ears. Consequently they have neither coherence nor expression in performance; what comes, comes. These players are simply mechanical and automatic players, from whom not all should be judged. I have often heard the mistake of unclean playing by people who not only call themselves virtuosos, but who want to be counted among the best and most famous, and it is still heard daily, and those who make that mistake are prevented from seeing it by pride, as they will presently be shown very clearly.

4.

We will now look at my fingering system more closely and examine its use more precisely. You will find the fingering system at the end of this chapter. I will not only remind you of the fingering system itself, but also what the tuning of common flutes and my flutes allows.

Here I will not establish a scale; rather I will take the tones from the lower register, one after the other, through the first, second, and third octaves. The notes from low D' to B' belong to the first octave, from C" to B" belong to the second octave, and from C"" on up, to the third octave. With the low D', you need not bother with anything except to see that all the keys are well covered; the same applies to D sharp' and E flat'. Because the E' in this octave sounds a little weak, many use the E flat key to make it brighter, which also makes the tone too high; then it is no longer an E', but an F flat. If you want to handle it this way, the E' must be brought down a little, although not too much, so that you can also have a distinct F flat, and you must proceed with caution when you use the E flat key, or otherwise it will be too high. If you have a D sharp key on your flute, too, it is better to use that than the E flat key, but the E' will still have to be brought down a little. However, doubt still remains if the player uses the embouchure as the tuner, for quite a lot depends on it. I refer those who are not sure of this to the chapter on embouchure.¹ Those who understand this, however, I advise to play the E' without the key, because if the flute is well-tuned, it is not easy to fail. In the second octave, the E flat key may never be used, because it

¹See Chapter Two, p. 66.

is already bright enough and would only be sharp; notwithstanding, you will find this bad habit with many players. The E flat key is used only for F flat.

5.

This mistake is also made frequently when playing F, in the lower as well as the middle octave. Here it is unforgivable, for the F will be completely unusable; already without the E flat key, there is much difficulty in keeping it completely true [to pitch]. What cannot be straightened out with fingering here must be accomplished through the embouchure. You must be particularly attentive when it should be E sharp, that it does not become unbearably high. Notwithstanding, the chord C sharp", E sharp", G" always sound foreign enough, for sometimes the G sharp on common flutes is worthless, and the C sharp"" and C sharp" are not at all suitable, as we will soon hear. A flute with F and G sharp keys eliminates these mistakes, and you can have everything pure.

6.

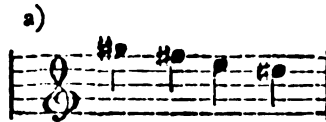
F sharp is flat on all flutes; on most it is so flat that it is nearly an F. This is a mistake. It can never be completely pure; nonetheless, the ear must be able to tolerate it. If you wanted to make it perfect, various tones dependent on it would become unusable. So, in order to keep the F sharp as true as possible, use the E flat key in the lower and middle octaves. In the lower octave, the E flat has the added advantage that the F sharp will be

not only sharper, but also brighter. You will find further remedies to this problem in the chapter about tone and intonation.² When you play the sequence G-F sharp, the F sharp is still tolerable, but if the sequence includes F sharp and G sharp, the F sharp is conspicuous, for the G sharp against the F sharp in the lower octave is so stuffy and dull that it produces a bad effect, and in the middle octave, the G sharp is much too sharp in comparison to the F sharp, which is much too low, and so this step-wise progression is consequently impure. Now if an E sharp comes in, too, for example F sharp, G sharp, E sharp, C sharp, it is hardly to be tolerated. There is nothing else to do with the F sharp fingering except to open the E flat key, and to help bring the pitch up more, boost the wind through the mouthpiece, turning it out as far as you can, but without detriment to the similarity in quality of each note, as seen in the preceding chapter. On a well-tuned flute this is easily done. When Quantz plays a cadenza in E major, where F sharp and G sharp occur, he plays G flat instead of F sharp.³ This is higher than the F sharp and relates better to the G sharp, but remember

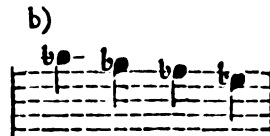
² See Chapter Six, *infra*, p. 179.

³ Quantz refers to an "exceptional" F sharp (On Playing the Flute, p. 45), giving the same fingering as his G flat. He claims it sounds better with both G sharp and E sharp, but must be used consistently throughout until there is no longer a G sharp in the music.

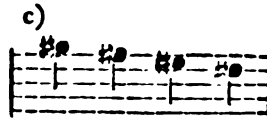
that the G sharp is high in relation to the other tones, and when the G flat sounds better than F sharp in relation to G sharp because it is higher, and the G sharp is too high; then both notes will be impure when played with the remaining intervals (see example a).



If you want to play this passage with G flat instead of F sharp, regardless of all mannerisms, it will still sound as though it were written like example b,



and now in comparison to example a, it is a comma too high. In example c,



the G flat would sound much better in relation to G sharp and E sharp, but not altogether to D sharp, and the E sharp next to the D sharp will still always make the bad effect that it makes next to F. For these two bad intervals, I advise evaluating your own flute and choosing the most desirable interval. There is no other solution to this. If the flute is tuned as perfectly as possible, use the actual F sharp and the step-wise sequence becomes tolerable. If you have a flute with F and G sharp keys, this bad effect will not occur. More about the G sharp later.

7.

There is nothing further to remember about G' except that in the lower octave you should use the E flat key, so that the G will be brighter and stronger, and closer in quality to the F sharp. Should it be too high, as it is on many flutes, it can be helped by the embouchure. However, to try correcting all notes which are too sharp or too flat by means of the embouchure creates an uneasy, unsure, and wretched performance, and you gain nothing from it. This mistake is less noticeable on well-tuned flutes, and thus not so conspicuous, and you can remedy it quite easily. In the middle octave, G" can be played with or without the E flat key, as it suits you, for it does not make any difference in the note.

8.

G sharp is another of the bad notes, very faint and dull in the lower octave, although when played with this fingering [see chart] and stated gently, it can be pure. You must proceed very cautiously with the wind, otherwise it will be sharp, like all the notes in the lower octave, which would sound dull or artificial when played without correct fingering. A flute with a G sharp key is not subject to this and similar mistakes. If we were not so accustomed to one arrangement of the flute and its fingering, we would more easily find a remedy for this mistake by arranging the flute without any keys except the E flat key, so that each tone would follow its predecessor properly, keeping a natural

movement of the fingers, and there would be no more weak and dull notes on this instrument. I have made an experiment with this and it yielded everything said here; however, that would require a new fingering which deviates from the usual, and it would probably be shocking to many learned ones. But do we not have a new fingering also on the flute with several keys? Perhaps I will make a little more known about this type of flute.⁴ The G sharp" in the middle octave is indeed brighter, but on the customary flute with the usual fingering, it is all the more impure. On my flutes, with these fingerings, it is even better. When the notes G sharp", F sharp", E", follow each other, use this fingering exactly, liping the G sharp down as far as possible and the F sharp up as high as necessary, which amounts to more on a poorly-tuned flute and less on a well-tuned one; thus the first [G sharp] will be more tolerable, and the last [E] will be nearly perfect. However, if you trill and cadence into E", the hangman is set loose; he is conspicuous even on superior flutes. Help yourself here as best you can. Without the G sharp and F keys, this trill will always sound bad whether you use F sharp or G flat, for the F sharp is as much too low as the G sharp is too

⁴ See Tromlitz's book, Über die Flöte mit mehreren Klappen (Leipzig: A. F. Blome, 1800). In this book, Tromlitz describes not only the keyed flute, but also a one-keyed chromatic flute he built which he claims plays perfectly in any key (see p. 135).

high.⁵ If you want to make F sharp higher, not only will the G sharp become higher, but the F", C sharp", and D" will be completely destroyed. I have done all of this on my flutes. A composer who writes for the flute should know this and all similar situations, and try to avoid them whenever possible. Every instrument has its imperfections, and none is perfect. Therefore every composer should have this knowledge, especially one who composes for all instruments--an undertaking that can never be advised. He who wants to compose a concerto for an instrument must know the instrument well, and must know what is idiomatic and what is possible. Above all he must know the range of the instrument and where the lyric as well as brilliant passages make the best effect, for not every place on the instrument is proper for every effect. Commonly, G sharp" in the second octave is fingered with 1, 2, 4, 7; however, on a properly-tuned flute it is not G sharp", but rather A flat", and this difference must be noted well, for it is necessary to pure playing. In order to bring the G sharp" closer [to true pitch], conform to this fingering. More about this when I discuss the use of the D sharp key.

9.

A flat' will be fingered differently, as already mentioned, and must be fingered differently from G sharp;

⁵Barthold Kuijken, Belgian Baroque flutist, maintains that an even trill creates a better effect, even if it is not perfectly tuned, than an awkward trill with a pure interval (Baroque Flute Master Class, Milwaukee, Wisconsin, 1979).

they are distinct like E flat and D sharp, G flat and F sharp, and so on, both by a comma. The tone which will be produced by A flat is about $1/9$ of a tone higher than that produced by A sharp; thus A flat is made by flatting an A, and is $1/9$ of a tone higher than G sharp, which is made by sharpening the G. On the piano there is only one key for each of these two notes: G sharp and A flat, B flat and A sharp, C sharp and D flat, and so on, but also [the intonation] is not as pure as if this difference could be observed. So G sharp is the most nearly perfect third to E, or the purest fifth to C sharp, but A flat is the perfect fourth to E flat, or the purest third to F flat, or the perfect fifth to D flat, so you will easily see that G sharp and A flat cannot be one and the same, although now there are many people who believe they can. If they are the same, why does the violin player finger the G sharp on the second string with the third finger, but the A flat with the fourth finger? If they were the same, the A flat fingered with the fourth finger would have to make a perfect third with E, and this A flat would have to have the same effect as G sharp, the actual perfect third to E. Just try it and you will certainly not want to hear it again! It seems you could argue here that one must temper his scale on stringed and wind instruments as it is on the piano, but I notice that it is one thing to temper an instrument when one has time to do it, and when one can fix each tone firmly in tune, so that each time he uses it he can find it again exactly as he tuned it, which happens

with an instrument that one must tune before playing, and that I do not dare to find, and it is a different thing to play an instrument that must be tempered in a moment while playing, and is tuned by pitting one tone against another. What kind of performance would that be where many must play, and they should all play with such a temperament! One who is accustomed to hearing pure intervals tries to play all his intervals clearly within each key signature; thus, such a player will never be completely in tune with the piano. What has been said here about G sharp and A flat also applies to B flat and A sharp, C sharp and D flat, and so on, and now you see why the D sharp key is there, and that it is necessary to pure playing and must be there. The fingering chart will show you the correct fingerings indeed, but the actual use of them will be discussed further below.

10.

A' will be played in the lower octave without the E flat key, because it will be brighter than with the key. Try holding the A' with a good and acute embouchure, put the E flat key down and back up, and you will hear clearly that when the E flat key is closed, the tone is brighter and firmer. The key makes no difference to those who do not have a piercing and bright tone. Leave the key closed in the second octave, too, although if you have just used it on the preceding notes and your finger is still on it, you can keep it there for A". It makes no difference if it is there or not.

11.

A sharp' is another of the weak and dull tones, and must also be executed gently if it is to be usable, otherwise it would be too high, which happens very easily; judge its purity as the major third to F sharp. It will sound quite bad if you use it as one and the same with B flat; the same mistake will arise as with G sharp and A flat. Therefore neither the fingering 1, 3, 4, 6, nor the fingering shown for B flat [1, 3, 4, 5] is usable, but rather it must be played as taught by the fingering chart [1, 3, 4, 5, 6, 8]. In the second octave, the flute must be so tuned that the fingering 1, 3 can always be used for A sharp, and never, or only seldom, for B flat. If you want to make this fingering for B flat pure and useful, you must so tune the actual fingering of B flat--1, 2, 4, 5, 6, 7--so that it can be used for A sharp. This is very difficult, however, because the E flat, upon which this fingering is totally dependent, must stay too low on account of this tuning. Since the A sharp and B flat must be the same, you do best to keep the first fingering [1, 3]; otherwise you would have no A sharp in this octave, not even a tempered one. This mistake would be all the more conspicuous if the pure B flat" at the same time should leave a perfect major third with F sharp", which even on the best flutes is always a little flat. This interval would then be much too wide, and would have a horrible effect on the ear, especially on an educated ear. It is admittedly difficult for the

builders and tuners of these instruments to make this A sharp" usable if the B natural" is not to be much too low, for the tuning of A sharp" is completely dependent on the B natural". One certainly never knows about flutes made by common instrument makers, just as he never knows about other similar things.

12.

The B flat' in the lower octave can be played two ways; however, when played with 1, 3, 4, 6, it is a little too high, and is useful only when F either precedes or follows it immediately. Outside of this particular instance, it is better to play it with 1, 3, 4, 5, for it is more pure. Quantz has still another B flat'--1, 3. If you use this fingering the most often, you must be very careful with it if it is to be pure, for it is much too high by nature; that is why I have not put it in my fingering chart. If you can place the pitch correctly with your embouchure, it can be used; otherwise not. And it is better to use the more proper of the two fingerings shown, for everything can be done with it, although it does not seem so in the beginning. Because the B flat' is one of the weak and dull notes, you must be careful not to blow too hard, making the note too high. Therefore, attack it with moderate breath, because blowing hard will not make the note brighter--only sharper. In the second octave, it is generally played with 1, 3, but that produces A sharp" instead of B flat". Therefore, I set the fingering for B flat" firmly,

to be able to fix the fingering for A sharp". The B flat" found in my fingering chart is seldom used except in some places where the former is more difficult. However, if you use the B flat" only in these few passages, and use the second fingering, 1, 3, as customary, there would be, as already said, no A sharp" in this octave. However, I have seen flutes built by instrument makers, on which both fingerings are too low, and consequently the B flat" is completely missing, but the tone produced by those fingerings is used as B flat". This cannot create other than a bad effect. Quantz calls my B flat" an extraordinary B flat",⁶ I do not see why, for there is actually no other B flat", because the 1, 3 fingering is A sharp". It does not seem extraordinary to me, but rather completely ordinary and natural.

13.

B natural' as a major third to G has, on the flute, as do other major thirds, a different temperament than on the piano, where it hovers a little high. On the flute, it must hover a little low, but not too much, so that it remains a usable perfect fifth with E, and is not too low. If this is not observed, you will not obtain a useful A sharp" in the second octave. The E flat key is used in both octaves, but more for the sake of better support, or if you have it down anyway from a previous note, keep it down. Because the

⁶Quantz refers to this fingering, calling it exceptional, but making no mention of Tromlitz (p. 44).

E flat key makes no difference in either tone quality or pitch, it can be used or taken away. The little that the B natural lacks in clarity can be cleared up by the embouchure. There is nothing more to be reminded of about this fingering.

14.

B sharp gets its name from B natural if a # stands before it, and it stands between B natural and C. It is the major third to G sharp, according to which it must be judged. As C is the major third to A flat, it cannot be used instead as a major third to G sharp, for A flat is higher than G sharp, and consequently the C, as a major third to A flat, would be too high for the major third to G sharp. In the second octave, it is fingered differently; since it is a little flat, just turn the embouchure hole as far out as is necessary. If you have a D sharp key on your flute, however, do not turn the embouchure hole out, but rather play it with 1, 3, 4, 6, 8, so that it is pure and sounds more beautiful. In the following sequence of tones, use this easier and more comfortable usage: G sharp", A sharp", B sharp", C sharp", the first with 1, 2, 4, 6, 8, according to the fingering chart. For the A sharp", keep 8 down, also for B sharp", and for C sharp" raise only your first finger. In this manner, that sequence of notes is very easy. Those who have no D sharp key, however, must play it as presented in the fingering chart.

15.

C flat" is the minor third to A flat, or the perfect fifth to F flat. With the fingering shown on the chart, it is somewhat dull, but still pure, and is the same in quality as its neighboring tones in the scale. With Quantz's fingering, it is a little low, and wails if you move it with your breath, and it has no similarity with its surrounding tones;⁷ therefore, it does not have a good effect. In the second octave, it is more nearly pure when played 1, 4, 5, 7, than with 1, 4, 5, 6, 7.

16.

C" is a weak tone, and is commonly played in the manner shown, but because it appears often, and because the neighboring tones are bright and strong, it fails badly, making a poor effect, the more so with sustained tones. You can make it brighter if you play it like C'", with 2, 4, 5, 6, 7. With this fingering, it will indeed be brighter, but also higher; therefore, it is necessary that you make every effort to play it lower, and consequently more pure, by turning the flute in. It can also be played in this manner-- 2, 3, 5, 6, 7--and will also be sharp, but only a little brighter. With this fingering, the sound is not so nice as with the aforementioned fingering. Choose which fingering you will use, and become comfortable with it so that you

⁷Quantz's fingering is 1, 4, 5, 6, 7 (p. 43).

have it firmly under your command and always pure and bright. I do not like the multifarious fingerings for one and the same note, for one is never the same as another, always a little higher or lower, and each requires a different handling; they create confusion, and you do not get certainty. The excuse of using these different fingerings for the sake of convenience or comfort should find no place with you, for you can use only those that are applicable, and others should not be used. However, the composer must know the intrinsic nature of this instrument, and what is proper and easy, and yet brilliant. In the second octave, three fingerings for C^{'''} are shown. Quantz uses 2, 4, 6, but it is flat and does not speak easily. Of the fingerings shown, 1, 3, 4, 6, 7 is my favorite; with it, the passage of Quantz's shown in example d



can be played much more clearly and easily than with his 2, 4, 6 fingering.⁸ Also, the passage in example e



can be played just as easily and even more clearly with the first C^{'''} than with the second, which is always just a little sharp. You can choose the first as the common one for other instances where C^{'''} occurs.

⁸Quantz, p. 42. This 2, 4, 6 is the third fingering Quantz lists. Tromlitz's 1, 3, 4, 6, 7 fingering does not appear in the charts of Hotteterre, Corrette, or Quantz. Quantz also mentions a fingering for C^{'''} using only 3 and the key, to be used in rapid, leaping passages.

17.

C sharp" should always be played without any finger, but because it usually happens that some of the fingers of the right hand are already down from the previous note, and in certain cases must remain down, the actual fingering seldom occurs. Because all of the fingers of the right hand can be down when playing this C sharp", always act according to the preceding or the following notes, which determine the number of right-hand fingers down for C sharp", whether one, two, or all three are necessary. I have set down a few examples here to make it more comprehensible (see example f).



Because leaving fingers of the right hand down makes this C sharp" lower in pitch, you must try to lift it with your embouchure. In the first example, the finger playing F sharp" remains down for C sharp"; in the second example, all three fingers of the right hand used for playing D" remain down, and also those used for E" remain down for C sharp". In the third figure, again the fingers used for E", and in the fifth example, those used for E" and E"" remain down. In the sixth figure, the C sharp" is played correctly without any fingers; also in the seventh and eighth figures. Those who do not cover the embouchure hole,

or cover it only a little, fall into the opposite mistake; the C sharps" are too high. It is impossible to produce a good, firm, and pure tone with too large an opening, and a well-voiced flute will become impure through such an improper and ruined embouchure. The third-octave C sharp" is sharp on all common flutes with the usual fingering; it is almost D flat", but not quite, so it belongs neither as C sharp" or D flat". If the pitch were to stand right between C sharp" and D flat", the C sharp" would always make a bad impression, especially in the key of A major and similar cases. On my flute, the C sharp" with added fingers, with 2, 3, 4, 6, 7, is pure overall, and played with 2, 3, 4, 7, it is a proper D flat", and if the flute is properly tuned, it can never be a C sharp". The second fingering, where all holes are open, is not very useful, although it remains in the fingering chart; the tone is harsh and shrill. I never use it. You can dispense with it without detriment. The examples given by Quantz are so easy, and are clearer with the C sharp" 2, 3, 4, 6, 7.

18.

D flat" played like C sharp" is always too low; by adding the D sharp key, it becomes a little higher, indeed, but not enough. Therefore, you must correct it further with your embouchure; it must make a pure second with E flat" and a perfect fifth with G flat". Instrument builders know nothing of this, and thus it happens that on the same flute the C sharp" is often already much too low, and consequently

the D flat" is not usable. In the trill between E flat" and D flat", the D flat" appears almost as a C sharp" when the right hand remains down, whereby it is too low and makes the interval between E flat" and D flat" too large, and this is the reason the trill sounds so bad. In the second octave, the D flat" played this way is pure on my flute, and makes a pure second to E flat" and a perfect fifth to G flat".

19.

D" can be fingered two ways according to the chart; the first is the correct way, and the second is not--it is shrill and harsh. Because many perhaps have accustomed themselves to it and will use it, I have included it in this discussion. I do not use it. Those figures for which Quantz recommends it are not idiomatic to the flute; consequently they omit themselves. Should such a circumstance arise, however, which only one who does not know the instrument well enough could have written, this fingering can be used like the other one Quantz showed: 2, 3, 4, 6. Nothing can be altered through the fingering here; if the D" is not in tune, it is either due to improper tuning, or the cork is not in the right place. Indeed, you can always correct the displacement of the cork, but if the actual cause of impurity does not lie with the cork, you can completely destroy the proper ratio as well as the tone by moving it. It is above all incorrect and a big mistake if you move the cork in this case. The cork, once it is correctly placed, may not be altered for one and the same middle joint if the tone and

pure intonation are not to be destroyed. Few instrument builders understand enough about the screw cork and reason for its existence, and yet they build it into their flutes. What can there be in the way of a beautiful and pure ratio in those flutes when the builders do not know why the screw cork and also why the register are on them, and how they must be used? These attachments are imitated immediately, whether they are proper to the flutes or not. If it only looks similar to the outside of the copied flute, these builders believe they have hit the bull's eye, but upon closer scrutiny, they have missed the whole point. When I write about flute building, I will clarify this.

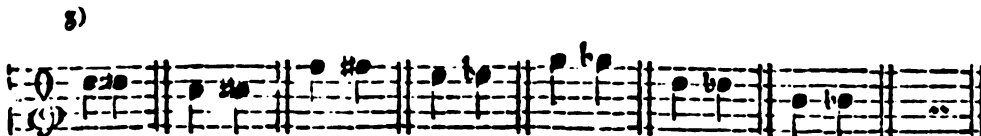
20.

The remaining high notes need no changes in fingering. They are all good except the F^{'''}, which does not speak easily and can be played with two different fingerings; although the second is a little too high, it speaks more easily than the first. You can help the delivery of the first if you play E^{''} first and go instantly to F^{'''}. On a flute with G sharp and B flat keys it speaks well, and you have it very easily, clear and pure. Although B flat^{''} seldom occurs, I have put it in the fingering chart, but C^{'''} is left off since it is never used. With these high notes, simply follow the fingering chart; nothing here can be altered by the embouchure. As the tone lies in the flute, so it comes out. From the preceding discussion you can understand how important a proper fingering is to a well-tuned flute, and how much

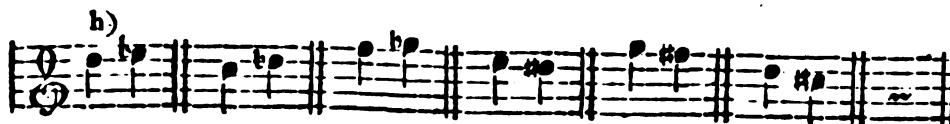
is then dependent upon embouchure control, which in turn is obtained from a musically adjusted ear if you want to play cleanly, and you can see how difficult it is to become a superior flutist.

21.

Now only the use of the E flat and D sharp keys remains to be discussed. I have already often mentioned that much depends upon the correct handling of these keys. Now I will endeavor to make this clear, and will try to demonstrate the importance of the existence of the D sharp key. Quantz is the inventor of this key, and it has its foundation in harmony. Because the D sharp originates from D, and the E flat originates from E, they cannot be one and the same, and they are also not interchangeable; they are distinct from one another by a comma, like every large and small half step; the large half step has five commas, and the small has four.⁹ The small half step is formed by raising a note of the same name by sharpening it, or lowering it by flatting it (see example g).



The large half step moves up or down a line or space (see example h).



⁹See translator's introduction, *supra*, p. viii.

Side by side they look like this (see example i).



What applies here applies to the rest of the notes. Through these examples you can understand that the two notes are distinct, and one cannot be used in place of the other. Therefore, you cannot use E flat for D sharp, D flat for C sharp, G flat for F sharp, B flat for A sharp, A flat for G sharp, or vice versa, or an incorrect and impure harmonic progression would arise, and you would never play cleanly. On the piano, indeed, you have only one key for these two tones, and this difference cannot be made clear, and so you must simply make do. Singers, and wind and string instrumentalists, however, have the advantage of being able to observe this more exactly. In addition, the piano is apparently easy to tune, an advantage over wind instruments, for each note has its own string which you can tune as you wish. On wind instruments, especially on the flute, you must tune as well as you can, for you actually have only seven holes with which to tune all the scales so that they are usable, and so that those who can hear are able to play clearly in all keys.

22.

Such tuning of all scales perfectly is more difficult than on the piano, and yet it is possible that this instrument [flute] in all three forms [one key, two keys, six keys] can

be more perfectly tuned than the piano, on which no interval other than the octave can be perfect, and therefore it cannot suit a good flutist or a good string player who has carefully observed all that has just been said. The good violinist observes the difference between large and small half steps, for example, when he plays G sharp' with the third finger and A flat' with the fourth finger on the second string; on the third string, C sharp" with the second and D flat" with the third finger, etc. If this string player wants to use one in place of the other, the A flat must be able to make a major third to E, and E flat as well as D sharp must make the major third to B natural, etc.; try it and you will hear. Thus I will say again that it is a big mistake if you play one note in place of another for the sake of convenience; it is impossible for one who does that to play with good intonation. That is why a firm fingering system is necessary to a well-tuned flute, and what cannot be done with this must be understood by the composer, so that he does not write [what cannot be played], for I maintain that it is always better not to do something than to do it badly, and to do it at the expense of one's ears.

23.

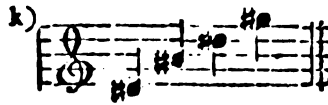
Allow me to say something more about the tuning of the piano. Is it not conspicuous when the string and wind instruments in a symphony are not in tune with the piano, especially at the end, but are much too high because of a key with a sharp or a flat, although at the beginning they

were tuned as well as possible? The reason for this lies in the preceding discussion. And then there is the tuning of perfect fifths on stringed instruments, which can have no place on the piano. You want the violin to be tuned like the piano, but to do that you require something that is in no way practical, for the good player, if the tuning were possible, would always want to follow his ear, and would not be able to because of the imperfect fifths; he would finger all the intervals perfectly, but the open strings would not fit. Would this not be worse than the first case? If the violinist chooses not to use the imperfectly-tuned strings, but rather fingers each tone, he would, with the guidance of his perfectly-tuned ear, finger just as if the strings had been tuned perfectly in the beginning, and the first bad effect would remain, namely that he would not be in tune with the piano. I suppose, however, you could help yourself to play better in tune with the piano if you tempered the fifths, but I doubt sincerely whether a whole orchestra would be in the position of setting the instruments in the same temperament, and if it were, would it also be in the position of keeping this tempered tuning subsequently accurate? Certainly not! Where is the law written that you should adjust to a single imperfectly-tuned instrument for the sake of intonation, thereby ruining the whole performance? Must this instrument be there, then? It is difficult to do without [the keyboard] in operas, but allow the strings to tune perfectly, so that the bad effect is not too great and

intolerable. This recommendation of tempering the tuning omits itself and cannot find a place if you do not want to spoil the whole performance. I believe, therefore, that if you want a clean and proper performance, it is most sensible simply to leave the keyboard out. Then it is impossible for a long-standing custom to be the spokesman for the wretched, bad, inferior matter. Excuse me for this debauch; I write it for the ignorant ones, and for the sake of those who assert that the strings must be tuned to the keyboard. Now back to the flute.

24.

D sharp is the major third to B, and this is the actual reason for the invention of the D sharp key, because the other key, tuned perfectly as E flat, cannot be used as D sharp. Quantz, as inventor of this key, observed four tones where it should properly be used (see example k).



However, this observation is guilty of making you fear it, and you do not accept it, because you think you must always be springing back and forth between keys with much difficulty. If this were really so, the supposition would be well-founded, but I will show here that with these keys it is easier to play than you think, and that it affords far more advantages than merely the use of the four tones named above. I maintain that when D sharp is an essential tone of the key in which you are playing, that is, if it belongs as an essential interval

in the key, the D sharp key will be used not just for D sharp, but for all other tones belonging to that scale for which the E flat key would otherwise be used, and it is then unnecessary to spring from one key to the other, but rather the D sharp is used as long as D sharp remains an essential tone. If the D sharp becomes a D again, then leave the key again, take the E flat key, and use it as usual; this can become a very comfortable habit as will be shown in the following.

25.

This is the first rule for the use of the D sharp key. I use it, however, with good advantage in other ways: when in a key where G sharp, next to D sharp, is also an essential tone, as for example in E major, I use the D sharp key, although D sharp will be converted to D, and I use it for all tones, as long as G sharp remains as an essential tone in the scale. If the G sharp converts to G, however, this key will be abandoned, and at the first appropriate opportunity it will be exchanged for the E flat key. If you have a correctly-tuned flute, you will very soon become aware of the usefulness of this application. Should it happen that G sharp, and not D sharp at all, is essential to the scale, use the D sharp key constantly as long as G sharp is there. An example will make it clear (see examples l and m).

b)



m)



In the first two measures of example l, here, you use the larger, or D sharp key, and in the last two measures, at + in the example, use the smaller, or E flat key, because the D sharp is gone. In example m, at the +, the D sharp key should be exchanged for the E flat, because the D sharp is converted to D; but because the G sharp in the following passage is essential, use the D sharp key until the end.

26.

The D sharp key is used quite advantageously in the keys of B major or minor, especially in the dominant chord F sharp", A sharp", C sharp". The C sharp", although I tuned it lower than is normal on my flute, will be too high

in this key if played with the E flat key, but with the D sharp key it is pure, and consequently the chord F sharp, A sharp, C sharp, which is highly impure when played as usual, is perfect. Example n will be played clear to the end with the D sharp key.



I want to set down a few more examples, so that you can see where the D sharp key is essential and where not, and how you exchange it with the E flat key most efficiently. First look at example o.



The D sharp found at 2 seems not to be essential to the harmony, but because of proper harmonic advancement, it is essential. If the passage began as at 3, the D sharp would not be essential, and could be played with the E flat key, but since it appears as the interval of a second in a progression with C sharp", which should be pure, and which cannot be pure if the D sharp is played with the E flat key, this D sharp [at 2] is essential and must be played with the D sharp key. Because no key is necessary to the preceding

tones, the D sharp key can be used comfortably with the B natural at 1, and held until the end, and in this manner, all of example o can be played cleanly and without further difficulty; the use of the D sharp key in similar passages will be easily handled.

27.

When the D sharp key should be used, move to it at the first suitable opportunity before the D sharp comes, and hold it until you find an appropriate opportunity to move to the E flat key again. Thus you will avoid springing back and forth from one key to another (see example p).



Here, do not wait until you get to the D sharp, but rather move to the D sharp key already at the A before, because although no key is necessary for it, it is better for the upcoming D sharp if you move to the key there and use it until the G at 4; play the G without a key, and you can more easily move again to the E flat key. You could, of course, keep the D sharp key through the following notes, but you must then try to play the E^{'''} and C^{'''} a little higher, because if they are played with this key, they will be too low. So that you can move comfortably to the E flat key, however, leave the D sharp key at the place shown [4], and

do not use it again until the following D sharp, and now keep it or move away from it as the situation demands.

28.

When D sharp or G sharp is not an essential note, but rather merely a passing tone, always use the E flat key (see examples s and t).



The first D sharp at 6 [in example t] is a passing tone, and thus can be played well without the E flat key, for the primary notes in this first figure are B and D, and the notes between are passing tones. The second D sharp at 7 is certainly not an essential note, and could also be played with the E flat key, but because of the following G sharp, which is an essential note (for it belongs here in the harmony, although only in a single quarter note chord),¹⁰ use the D sharp key so that you already have it, and do not have to jump suddenly from one to the other (see example u).



¹⁰Translator's parenthesis.

29.

In situations where the piano plays in unison with the flute and D sharp appears as a passing tone, you must still play it with the D sharp key, for the D sharp played with the E flat key would be much too sharp against the D sharp on the piano, which is often tempered too low. Also, if the pure D sharp on the flute should be a little too low against the piano's D sharp, it can easily be made higher either by turning the flute out or by a little strengthening of the wind, especially if the note is a long one and you have time to adjust the pitch. Similar subtleties often happen on this instrument, and this is what makes clean playing on the flute so difficult. In point of fact, this instrument has difficulties which are not so frequent on other instruments, and which only those who study it diligently understand, for not every flutist studies his instrument diligently. I want to show you one more passage from a sonata, and that will be all (see example w).

w)





In this example, the F sharp at 8 will be played with the D sharp key, which will be held until 9. At 9, the C[♯] should be played with the E flat key, but because of the following D sharp, you must retain the D sharp key and try to play the C[♯] a little higher. At 10, the G sharp is essential [to the harmony], and in order to avoid jumping back and forth between keys, which is always important to a good effect, you must play the C[♯] with the D sharp key. also, as said just above, and keep it until 11.

30.

I hope that through these few examples you will be able to learn how the D sharp and E flat keys should be used. To seek out more examples is, in my opinion, superfluous, and would make this work longer without need, deterring students with little patience. Therefore we will let the matter rest. Although I do not believe I have exhausted all the trifles of fingering, I do think I have said everything important that the student needs to help himself. Quantz makes a remark which, for the benefit of

the learner, I cannot pass over. He says in Chapter III, section 12, about fingering:

Since the fingering of the transverse flute strongly resembles that of the oboe, many believe that anyone who plays the oboe can learn the transverse flute by himself; and from this fallacy there arise many wrong fingerings and awkward sorts of embouchure. As anyone may easily perceive, the characteristics of these two instruments differ greatly; thus you must not allow yourself to be misled by the misconception just cited.¹¹

¹¹Quantz, On Playing the Flute, p. 48.

[illegible]

$\bar{c}_v$ $\bar{c}_{ev}$ $\bar{c}_{ev}$ $\bar{A}$ $\bar{B}$ $\bar{a}_{ev}$ $\bar{d}_{ev}$ $\bar{e}_{ev}$ $\bar{f}_{ev}$ $\bar{g}_{ev}$ $\bar{a}_{ev}$ $\bar{b}_{ev}$ $\bar{c}_{ev}$ $\bar{d}_{ev}$ $\bar{e}_{ev}$ $\bar{f}_{ev}$ $\bar{g}_{ev}$ $\bar{h}_{ev}$ $\bar{b}_{ev}$

1 2 3 2 3 3 1 2 3 1 2 3 1 2 3 1 2 3 1 2 3

1 2 3 2 3 3 1 2 3 1 2 3 1 2 3 1 2 3 1 2 3

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Chapter Four

About Notes and Rests, Equal Values and Divisions, and About Other Musical Indications

1.

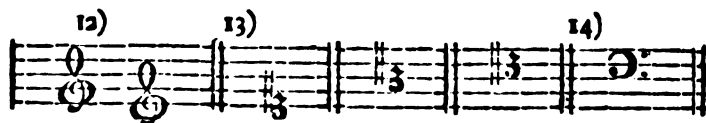
Because this method of instruction is written primarily for beginners, and for the sake of coherence, the present chapter also cannot pass over anything. Although the chapter heading may seem superfluous to some, I have had to be somewhat detailed so that it will be quite clear to the beginner, since indeed many writers have already discussed the fundamentals of music in detail.

2.

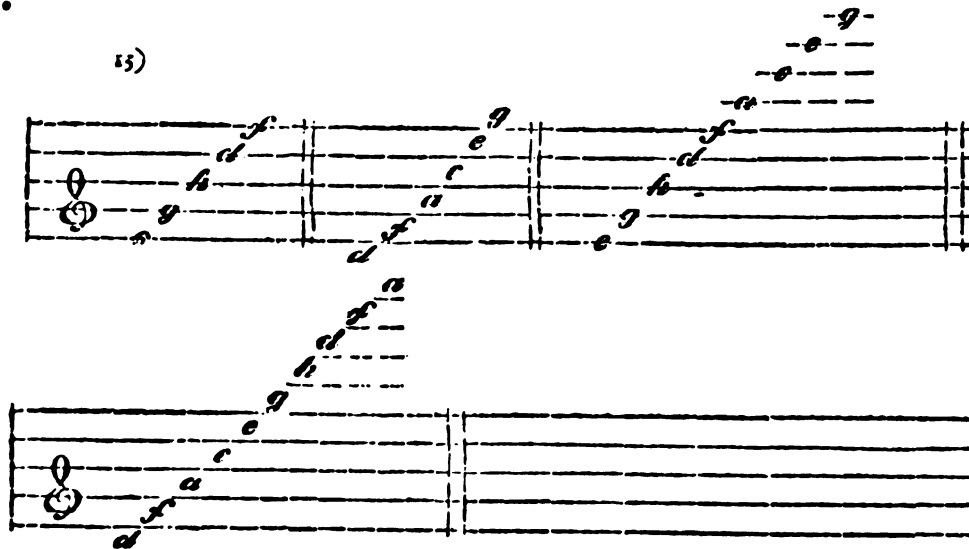
That notes are indications whereby the composer shows the tones of his melody and harmony is known well by all. These indications or notes are placed appropriately high or low on a five-lined staff, over and under which, when the music demands it, more lines are made. In order to know the correct significance of each note, a clef for these lines is set down so you can see the names of the notes.

3.

There are three types of clefs: the G clef (example 12), the C clef (example 13), and the F clef (example 14).



The G clef is usually used by the flute, oboe, and violin, and the line on which it stands is G. The clef with the names of the lines and spaces, according to the letters A, H [B],¹ C, D, E, F, and G follows (see example 15).



Here you find the lines and spaces, and next to them the lines above the staff. As the lines and spaces are named, so the notes are named (see example 16).



The difference of octaves in this row of notes is designated by one, two, or three strokes above the letter name as shown in example 16, and are called the first, second, and third octaves; each begins with C. The second

¹In the German language, H denotes B natural, and B denotes B flat. Throughout this translation, H has been replaced with B natural.

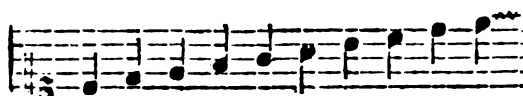
G clef, which stands on the bottom line, is called the French clef, but it is rarely used now (see example 17).

17)

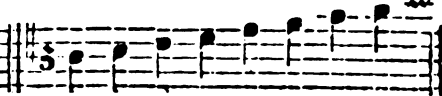


The C clef designates the singing voices, such as soprano (example 18), alto (example 19), tenor (example 20), and the F clef is appointed for the bass notes (example 21).

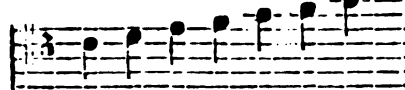
18)



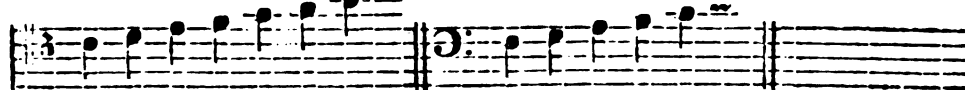
19)



20)



21)



There are more types of clefs, but because they are unnecessary and useless to today's galant music and to current purposes, I have passed over them.

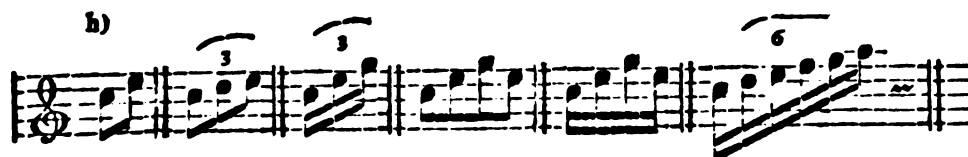
4.

There are various types of notes which all have their origin from the division of an accepted whole. The note at (a) [in the example below] is the accepted whole from which all the others arise. It is called a whole note; others call it a whole measure, but this name is unacceptable, because a measure is a different thing. When the whole note is divided into two parts, half notes arise (see b). If the whole note is divided into four notes, quarter notes result (see c). When the whole note is divided in eight,

eighth notes result (d), and if you divide it even smaller into sixteen parts, you have sixteenth notes (e). With further division, you get thirty-second notes (f). And so a whole note is worth two half notes; a half note is worth two quarter notes; a quarter, two eighths; an eighth, two sixteenths; and a sixteenth is worth two thirty-seconds.



The measure lies within this division; it cannot be over-emphasized. Those who despise this effort, I cannot help saying, usually learn it with irreparable harm. The eighth, sixteenth, and thirty-second notes are called one-, two-, and three-crooked, or beamed notes, which are connected with beams. More beamed notes are seldom found in whole figures, namely when two, three, four and more notes are beamed together. These beamed notes are called figures (see example h).



5.

The rests which occur in musical pieces are just as different as the notes themselves, for they get their value from the notes in whose place they stand. The rest showing a half measure, which is found only in 4/4 meter, is seen at (i), and is a thick horizontal mark that sits on the line. The rest denoting a whole measure is just as thick a horizontal line, but it hangs under the line (see k). The rest which indicates two measures is a thick vertical line filling the space between two lines (see l); the rest for four measures takes up three lines (see m). A rest showing a quarter note is seen at (n). An eighth rest is shown at (o), a sixteenth rest a (p), and a thirty-second rest at (q).



These rests conform to the movement of the notes in whose places they stand, and you must remain silent where rests occur, as long as the note which would stand there and from which the rest gets its value, would be played. More later about the rules of measures.

6.

The dot which stands behind a note also belongs to the division of notes and rests. The common rule for this is: When a dot stands behind a note, it is worth half as much as the note which precedes it (see example r),

r)



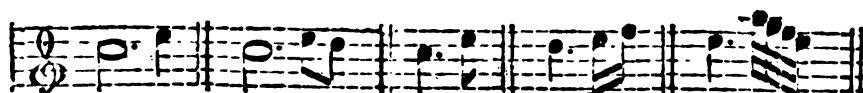
but not, as some contend, as much as the following note, for sometimes two or three, or sometimes none follow, and this would cause confusion for the beginner. The dot behind a half note is worth a quarter note, or half of the note which precedes it, and now the dotted half note is worth three quarter notes. The dot behind the quarter note, which is worth two eighths, is also worth half, namely one eighth, and together they are worth three eighth notes. The dot behind the eighth is again worth half, or a sixteenth, and together they are worth three sixteenths. The dotted sixteenth is then worth three thirty-seconds, etc. Because these short notes, namely eighths and sixteenths with dots, rarely stand alone, but rather are always preceded or followed by one or more shorter notes, figures like the following are created (see example s).

s)



The first two notes in example r, namely the dotted half and dotted quarter, often have one or more notes after them which belong to the figure and are worth as much as the dot (see example t).

t)



These, however, can also stand alone, as will be seen in the lesson about measures. What is to be observed in the performance of these figures is found in the sixth chapter, about the true speech on the flute, in section 10, in the seventh and eighth rules.

7.

A figure made of three notes beamed together is called a triplet. Because the triplet occurs especially in singing and has its own meaning, and because the knowledge of all these figures and markings is important to the measure, we will look at the triplet before discussing the measure itself. A triplet which consists of three quarter notes is worth a half note (see example u); one consisting of three eighths is worth a quarter (example v); a triplet made of three sixteenths is worth an eighth (example x); and one made of three thirty-seconds is worth a sixteenth (example y).



Because a triplet is made of three equal parts, the notes must be performed as nearly equally as possible, otherwise the triplet loses its beauty. This has already been said elsewhere. The triplet is written either simply as in examples u, v, x, or y, or you can put a 3 over it

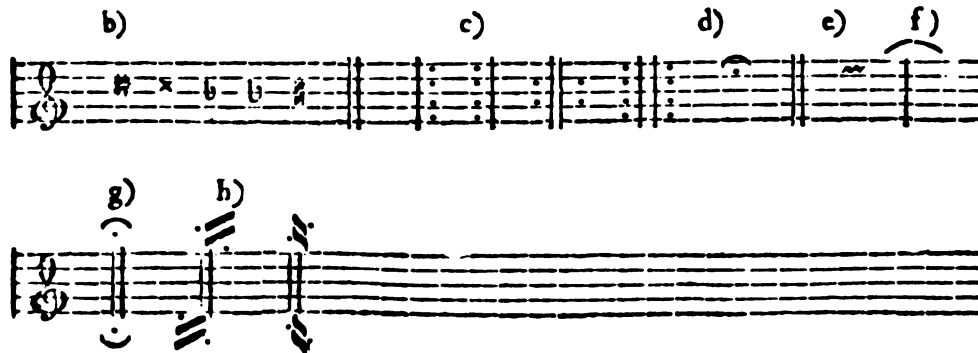
(see example z). You can also connect two triplets and put a 6 over them (see example a).



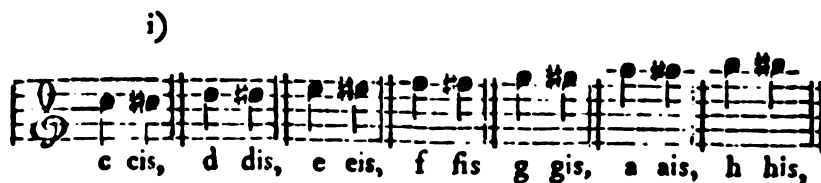
These figures, or triplets, are useful in every meter, as the lesson about measures will show.

8.

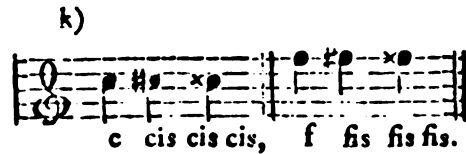
Accidentals (see example b) also occur in music, as do repeat signs (example c), fermatas (d), custos (e), slurs (f), final holds (g), repeat signs for individual measures (h), and Da capo.



The first accidental in example b raises the note before which it stands by a half step, and to the note name then is added the syllable "is" (see example i).



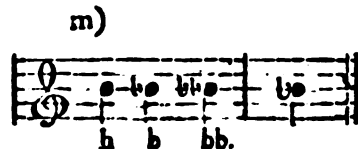
The second accidental is a simple x, and raises the note before which it stands by a whole step (see example k).



Here you finger D and call it a C double sharp. At the F with an x, you finger G and call it F double sharp, etc. This x seldom occurs. The third type of accidental is a $\flat$, and it lowers the note before which it stands by a half step, and you add the ending "es" to its letter name (see example l).



The exceptions are E, A, and B natural; the first when flatted is not called ees, but simply es; A with a flat is not aes, but as; B with a flat is not bes, but B. The others follow the established pattern. The fourth accidental is a large $\flat$, or double flat, and lowers the note before which it stands by a whole step (see example m),



and here, A will be fingered. Because a double flat almost never appears for this instrument, it is also not necessary to say more about it. The fifth accidental is the four-cornered $\natural$, or natural sign; this cancels the $\flat$ or $\sharp$, and puts the note in its original place, where it was before being raised or lowered (see example n).



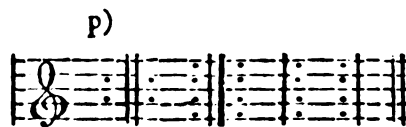
First the note is called C, then cis, then C again. In example o, the note is called B, then B flat, then again B.



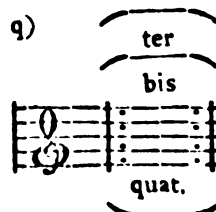
So it is with all notes. This mark takes the # and $\flat$ away, or cancels it.

9.

When a section, or a whole piece, or even just a single phrase is to be repeated, use this marking (see example p), and the side where the dots are is repeated.



It does not matter if two or four dots stand on the line, the preceding will still be repeated just one time. If the passage is to be repeated more than once, it must be written above (see example q).



10.

A fermata is a hold; it occurs in the middle of a piece and stands either over a note, whereupon a section follows, or over a rest, or over the last note of a concerto. If it stands over a note of the first type, you hold the note as long as you wish and think proper. If it occurs in a concerto,

the soloist has the liberty to play ornaments as he will, such as trills or a few notes from the piece, etc., or, if the fermata stands over a note that leads to the end of the concerto, the note with the fermata can either be held awhile with a trill alone, or different figures and passages from the piece, called a cadenza, can be used to close the concerto. If this fermata stands over a rest, there is silence as long as the performer thinks proper; if it is found in all voices of a full-voiced piece, all voices must be held, and here you must judge for yourself how long, but it is up to the leader when to begin again, and the others then follow him (see example r).

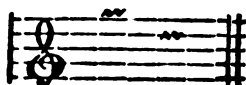
r)



11.

The custos is a sign which is given at the end of each line to warn the player of the first note on the following staff (see example s).

s)



In this way, you already know at the end of the line where the note at the beginning of the following line will be, so you will be able to grasp it in time. But it is so often missing, or misplaced by the copyist, that you expect more a mistake than reminder.

12.

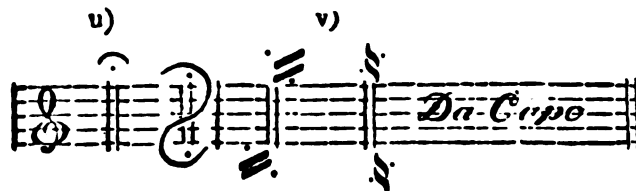
The tie mark in example t occurs first when two notes that stand on the same line or space and are not to be restruck, or which are divided by a bar line, should be held as a single note. Sometimes accented, and sometimes unaccented notes precede it.



When this phrase mark stands over several notes, it signifies that these notes or figures should be connected or slurred.

13.

The ending sign (see example u) shows the end of a piece. It occurs not just at the end of a piece, but also in the middle. It is seen at the end when the piece is entirely closed, and in the middle when one is commanded to go back to the beginning or to a previous point because of a Da capo or Dal segno (see example v).



Accent marks might also belong in this discussion, but I have spoken about them in the chapter about essential ornaments, so I will save [that discussion] for then. These then are the signs occurring in a musical piece which, if everything is to be performed correctly, must be carefully

observed, so that the performance is not like that of the one who does not observe rests because he thinks they are worthless.

Chapter Five

About Meter and How to Divide and Count the Notes; About Measures Themselves, or the Division of Time according to a Steady Tempo

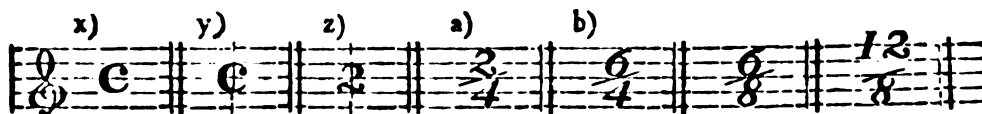
1.

The correct division of notes and their exact measurement is called meter, and their slow or fast movement is called tempo. Although the correct division of notes is difficult to establish according to a steady tempo, it is no longer so difficult as [establishing] the proper tempo of a piece itself. More about tempo later.

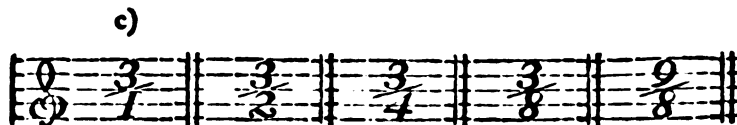
2.

We have two kinds of meter, even and uneven, which are either simple or compound. An even meter is one which can be divided into equal parts, and if this cannot happen, the meter is uneven. The simple even meter is either four quarter notes or two quarter notes. The $4/4$ meter will appear with a Latin C on the staff at the beginning after the key signature (see example x); it is also called common time, presumably as often as it is called even meter. There is another meter which signifies four quarter notes, and which is shown by C with a line through it (see example y). This meter is called alla Breve or alla Capella; it is played twice as fast as the usual $4/4$ measure, and is divided in two parts like a $2/4$ measure. It is used in fugues or fugal passages; however, in the galant style it is no longer

practical. Through the ignorance of the copyist, mistakes are often made here in which a stroke is made through the C when it should not be, or a stroke is made through every C. To avoid this mistake, in my opinion, the composer does best if instead of writing C with a stroke through it, he makes the sign shown in example z. This is called 2/2 meter, and determines the tempo more securely at the same time, so that it moves as it would in 4/4 meter, but the measure will be written with two quarter notes (see example a). The even compound meter is either six quarter notes, six eighths, or twelve eighths (see example b). The first two are divided into two parts, and third is in four parts; each division consists of three parts. In the first example the parts are quarters; in the others they are eighths.



The uneven meter is shown in example c. The first four are simple, but the last, a 9/8 meter, is compound, and is divided into three parts, each of which is subdivided into three parts, so that the entire measure consists of nine parts.



3.

To make this clear to the beginner, we will examine each of these meters carefully. You can recognize the

beginning and end of a measure by the vertical lines between measures; one bar line to the next must contain as many parts as the preceding metersignature indicates. For example, in $4/4$ meter four quarter notes must be included from one bar line to the next. You must not believe, however, that the quarter notes must remain in their actual form; the difference in notes may be there, which means the quarter notes may be reduced (see example d).

d)



Here in the first measure, there are four natural quarter notes, indeed, but in the following measures it changes. In the second measure, there are two natural quarter notes, and a half note which is worth two quarters, and which also contains four eighth notes, where as much time is used as the first two quarters require. The third measure consists of eighth notes, of which two belong to each quarter, and you arrange their movement such that each two fall in the space of one quarter. From this you can see that the eighth notes must be played twice as fast as the quarter if they are supposed to take up the same time as the quarter. The fourth measure has a mixture of notes. The first part is a quarter; the second consists of two eighths which must

have exactly as much time as the first part; the third and fourth parts consist of a half note which is held as long as the steady, defined tempo demands. The fifth measure requires a still smaller and more exact division. The first and second parts consist of sixteenth notes, four of which equal a quarter note, and to make a part of this measure, four sixteenths must not take more time than one quarter note. The four sixteenths must be played very evenly in the same amount of time that a quarter note takes in the established tempo. The third part of this measure is again a quarter note, but this quarter has a dot after it which, according to the rule already stated, takes half the value of the note preceding it, and is worth an eighth note here, with which the fourth part of the measure begins, and to which the last eighth, the other half of the fourth part, belongs. Because the following two measures are divided similarly to the preceding measures, I will pass over them here since much more will be said about this later. Only the last measure remains. Here is a whole note which must be counted as four parts of the measure, but in the established tempo. A small note stands before this last measure which [note] is called a grace note and which will be explained later. For now you may simply omit it, so that you will be able to observe carefully the division of the simple notes.

4.

Because in the practice of measures, rests belonging to the division of notes also occur in a song, and because they,

too, must be as carefully observed as the notes themselves, it will not be superfluous if I give still another example (see example e).



You can see here again the precise division of notes into four parts of the measure. There is a half note in the first measure which you would divide into two equal parts, just like the two following quarter notes. The first beat of the second measure has two eighth notes, the second part is a quarter note, a quarter rest makes the third part, and a quarter note again is the fourth part. During the rest, remain silent as long as a quarter note in this tempo. The division of the third measure is easy-- hold the first quarter note its determined time, and the dot is the beginning of the second quarter. Then the following note is the second eighth belonging to the second quarter, and the last two quarters belonging to this measure are divided evenly. The fourth measure begins with two quarters as two equal members of the measure; the other two quarters are rests in whose place a half rest or two quarter rests stand. Count two such quarter rests just as evenly and carefully as the first two quarters were played. The divisions

in the fifth and sixth measures are easy. The seventh measure begins with two eighths comprising the first quarter; the following eighth rest and eighth note define the second part -- count two on the rest, and then play the eighth note. The third and fourth parts are just the same. In the last measure, count two quarters on the half note, and three on the dot, which is held, and the fourth beat comes on the rest. I have often repeated it, and apparently it can only be said one way without becoming superfluous. I know well that it is annoying to read when you know all of this, for it is unnecessary; I write it for the beginner, and those who, as I have, have occupied themselves with teaching for forty years, know how important it is for the teacher to repeat the rules governing divisions of notes and measures often, for that is always the stumbling block for the amateur, who seldom learns to play rhythmically correctly. I have often met people who simply have no concept of rhythm, so I hope you will excuse my frequent repetitions. Since this is written for beginners, perhaps it will be useful to those, of whom there are many, who want to teach, but who do not know how it should be taught. More will be found in the lesson about tempos.

5.

This has been about the common 4/4 meter. Now I want to exemplify the alla Breve or alla Capella meter, which is more frequently use fugally (see example f).

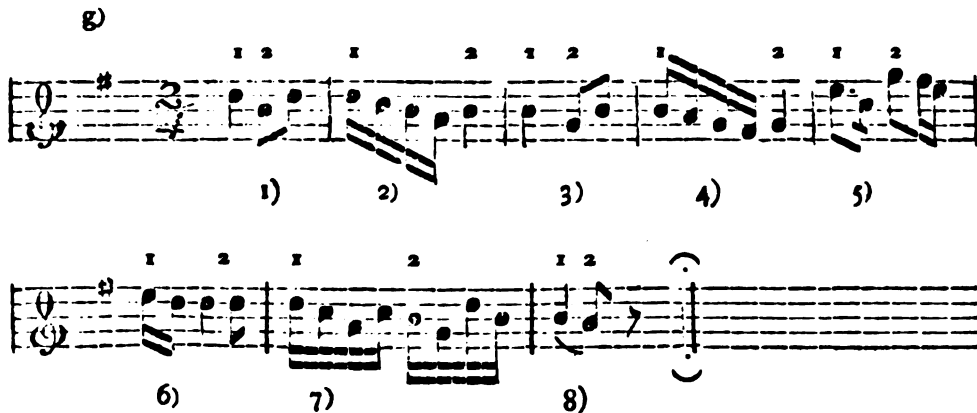


This meter is played twice as fast as the former, and you count not four quarters, but two half notes, like the two quarters in 2/4 meter; thus there are only two parts to each measure of this example. On the first half note, count "one," and on the second, "two." In the second measure, count "one" on the half note and "two" on the dot. The last quarter note, as the other half of the second beat, comes after. The quarter notes in the third measure are as fast as eighth notes would be in 2/4 meter; thus count "one" on the first two quarters and "two" on the second two quarters. It is obvious that when two notes comprise a beat, the beat falls on the first one, so in this example, count "one" on the first quarter, and the second quarter follows; and count "two" on the third quarter, and the fourth quarter follows. The fourth measure is like the third. In the fifth measure, eighth notes appear which are handled here just like sixteenths would be in 2/4 meter; the first four make the first part, and the following four make the second part of

the measure. The sixth and seventh measures are divided just the same as the fourth and fifth. In the eighth measure, the half note makes up the first half measure, and the second half is a rest. The notes which stand above belong to another voice; we will deal only with the lower notes here. The ninth measure begins with a quarter rest on which you count "one;" the second quarter, as the other half of the first beat, follows; on the third quarter, count "two;" and the fourth quarter follows. The rest has already been explained.

6.

Now we still have the $2/4$ meter to observe; a very short example of this will suffice, because it has numerous similarities with the preceding (see example g).

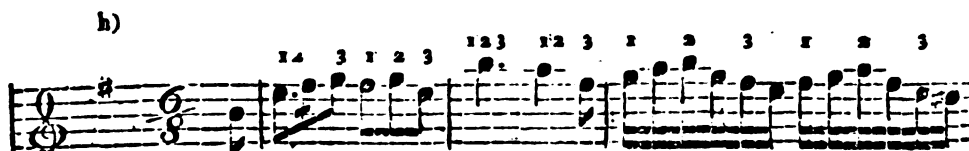


There are two parts to this meter, also. The quarter note in the first measure comprises the first beat, and the following two eighths make up the second beat. In the second measure, the figure of four sixteenth notes defines the first beat, and the following quarter makes up the second beat. The two following measures are just like the first two. In the fifth measure, the first beat consists of a dotted eighth,

the dot being worth a sixteenth which, with the following sixteenth, defines the first beat of the measure; the second beat is a figure of an eighth and two sixteenths which is divided equally when playing, and is played in the time of a quarter. The figure in measure six is a syncopation; the first two sixteenths make an eighth, or half of a quarter, and the other half is taken from the following quarter to make up the first beat. The half remaining from the quarter, which equals an eighth, along with the last eighth, makes a quarter, or the second beat. The rest has already been explained.

7.

Because $6/4$ meter, which also belongs to the category of even meters, seldom appears in the galant style, and because it is counted in quarters like the preceding meters, I will not dwell on it further. I remind you only that $6/4$ is divided into two parts, each of which has three subdivisions set together like $3/4$ meter. However, because $6/8$ more often appears in galant style, let us take an example. It consists of two parts, like $6/4$, each of which has three subdivisions, namely three eighth notes (see example h).



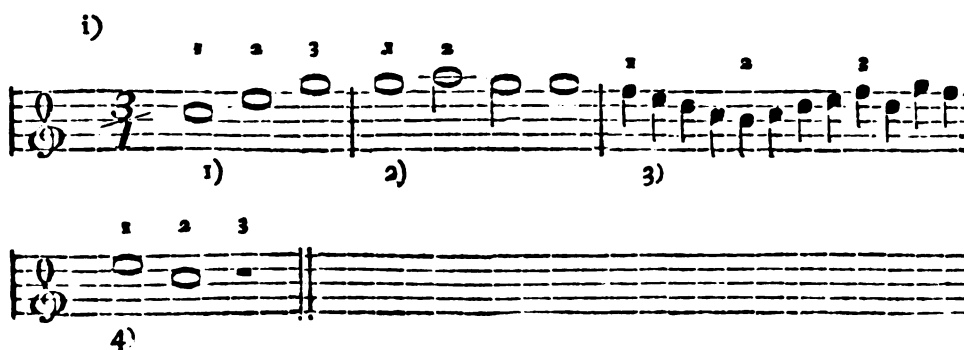


The division of beats in this meter happens in the manner of $3/8$, except that instead of counting three beats per measure, you count six. In the above example, the first eighth note stands as an upbeat before the bar line, and will be counted in the last measure. Examples of a true arsis are found in $3/4$ meter. Here we will examine only a few measures. The first note in the first measure is an eighth which signifies the first beat; the second beat begins with the dot, and together with the following sixteenth, it makes up the second beat; the third, fourth, fifth, and sixth notes are easy to count, for they are nothing but eighth notes, and consequently are single members of this measure. The second measure begins with a dotted quarter, which is worth three eighths, or three beats of the measure; the fourth and fifth beats are in the following quarter note, which is worth two eighths; and the sixth beat comes on the last eighth of the measure.

The rest is easy, so I will not dwell on it. The division of 12/8 meter is just like 6/8, except that 12/8 is divided into four main parts, each subdivided into three beats.

8.

Now we come to uneven meters; the first is 3/1 meter, a meter which is not fashionable in the galant style (see example i).



You count three, because this meter consists of three beats, namely three whole notes, as seen here in the first measure. In the second measure, the second beat is made up of two half notes which must be played in the same amount of time as one whole note. In the third measure, simple quarter notes appear, four of which equal one whole note, making up one beat in this meter; the first four quarters make the first beat, the next four make the second, and the last four make the third beat. The fourth measure begins with two whole notes, the first two beats of the measure; the third beat is a rest showing a whole note, and this third beat here is the end. From this you can see that a whole rest does not always signify a whole measure of rest.

9.

To this follows the $3/2$ meter in which three half notes make up each measure (see example k).



Here you count three beats in each measure as before, but the half note signifies one beat where previously the whole note equaled one beat. Because this meter is just as simple, and because it is used just as rarely as $3/1$ in the galant style, we will not dwell on it long, but will examine just a few measures. In order to find the beats more easily, I have again, as in previous examples, put the numbers above each beat. The first beat of the first measure is the half note. The following two quarters make up the second beat, and the last two quarters are the third beat. You must try to play these three beats as evenly as possible, as has already been said. And now I will forego further discussion of this example, and go on to $3/4$ meter.

10.

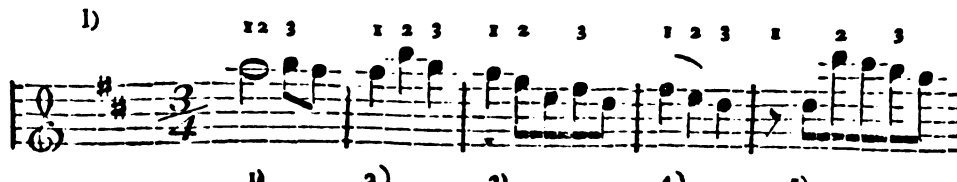
Since the $3/4$ meter is one of the most commonly used, we will examine it somewhat more closely. Although everything has already been said about the division of the notes, I will

say it many more times, because I know very well that it cannot be said often enough for some beginners. If you were to present a piece to a beginner, for example in $3/4$ or another meter, and tell him nothing further about it than that it is in $3/4$ meter, then ask him if he comprehended it, he would certainly say no, or should he perhaps answer in the affirmative, just try letting him play a few measures of it, and you will hear [that he does not understand]. In this case, I would not yet have the beginner play, but rather simply have him count and divide; when he can count the beats in the measure so that he knows where each begins and ends, then is the time [for him to try playing it]. I wish to try every means of making the division of notes and measures clear and understandable to the beginner, which seldom happens, for the smallest and sometimes completely insignificant things are often a stumbling block to the beginner. Few teachers know the right way to teach beginners about rhythm; almost all believe that playing with the student constantly without further instruction (whereby the beginner would, however, accustom himself to thinking),¹ teaches rhythm, but they find in the end that they are mistaken. Many place the learning of rhythm on the passing of time, during which they believe the learning will come, but in reality, it does not come if you do not study it, indeed, and study avidly.

¹Translator's parenthesis.

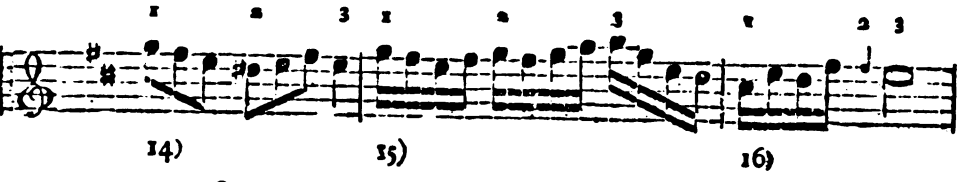
11.

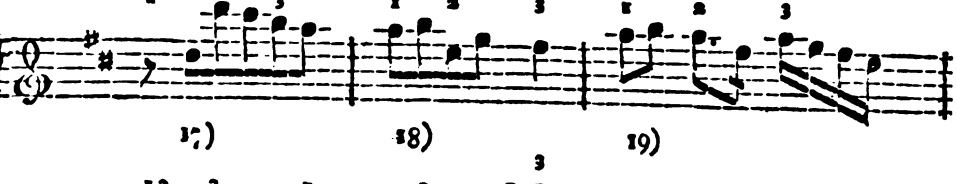
The beats in this meter are three quarter notes, and you will notice that the division here, whatever figures it falls into, must be brought into three parts, as in preceding examples (see example 1).

1)  1) 2) 3) 4) 5)

 6) 7) 8) 9)

 10) 11) 12) 13)

 14) 15) 16)

 17) 18) 19)

 20) 21) 22)

 23) 24)

The first measure contains a half note which is worth two quarters, or two beats in this meter, and which is divided into two equal parts; the third beat consists of the following two eighths, which are equal to one quarter note. The three quarters must be divided in three equal parts, like the three beats of the measure. The second measure is very easy, because the three single quarters make up the three beats, and you have only to play them evenly. The third measure begins with a quarter note as the first beat; the following two eighths make up the second beat, and the last two eighths, the third; from this you must try to make three even beats, namely three quarters. I remind you once more that when two, three, or four notes make up one beat of the measure, the first note of such a figure must fall on the beat. Here count the first beat on the first quarter; the second beat is counted on the following first eighth, letting the second eighth follow; the third beat is counted on the first of the last two eighths, and the second follows. More is found in the measure itself. If you are careful, you will be able to play evenly. Experience has taught me that although this seems insignificant to some, it must be said often for the beginner. The fourth and sixth measures are the same as the second, and are very easy. An eighth rest stands at the beginning of the fifth measure on which you count "one," as half of the first beat, and the eighth note following makes up the other half; the second beat begins with the

D^m, to which the following C^m belongs; and the last two eighths belong to the third quarter or beat. Since the division of the following notes and figures has already been discussed, I will pass over them here, so that I do not become too detailed.

12.

When a quarter or eighth note stands alone before the first bar line, it is called an arsis, or upbeat. On the whole, it makes no further change in the division than that you play the note unaccented, so that the primary accent falls on the first note of the following measure. That is, [when a piece] begins with the last note of a measure, an unaccented one, it can never stand as a down-beat; this single note standing alone at the beginning is counted into the last measure (see example m).



Stressed and unstressed² notes will be discussed in the chapter about the true language of this instrument.³ This applies only to two equal notes, however, the first of which is accented and the second of which is innately shorter, or to triplets where the first is more stressed than the

² "Lang und kurz..."

³ See Chapter Eight, p. 248.

other two, and where the single parts are not beats in the measure, but rather are subdivisions. Here it is a different matter, because the accented and unaccented notes are beats in the measure. In $2/4$ meter, the first quarter is innately longer than the second. In $3/4$ and $3/8$, the first beat is long, and the second and third are shorter. In $4/4$ (or C), the first and third beats deserve more emphasis than the second and fourth. When the conductor designates the meter by moving his hand, he will always bring it down on the first beat in $3/4$ or $3/8$, and raise it for the other two beats, since they are less emphasized. In $2/4$, the conductor brings his hand down on the first beat and up on the second, as it is shorter; so, the first beat is always downward, and the other is uplifted. [When conducting] $4/4$ (C), the first beat is shown by moving the hand down, but the second unaccented beat is shown by a repeated downward motion so that the third, which is again stressed, can be shown by raising the hand with which the fourth, again unstressed, will be taken also. This is done for the sake of the two even divisions into which the C meter will be divided, even though it has four beats; thus the first two beats are conducted down, and the last two, up, the first being long, the second short, the third long, and the fourth again short. Hopefully you will now understand what it means to begin on the downbeat or upbeat. The division, as said before, does not change, and always remains the same, except that with the repetition of this

unusual passage, the quarter note arsis will be counted into the last measure. The rest has already been dealt with, so I will pass over it. More will be said later about conducting meters.

13.

The triplet, which I will discuss now, is the only figure which has not appeared in any example. Its difference and validity is discussed, to be sure, in paragraph seven of the fourth chapter, but its actual use in a measure has not been shown. In the thirteenth measure of example 1 (p. 145), the first beat is a quarter note, the second is a triplet, and the third is also a triplet. These three notes belonging to the triplet must be played in the time allotted for one quarter note. If you want to play both at the same time, you must finish the triplet in the same time as the quarter, but you must play it so the three notes are as nearly equal as possible, as has already been said (see example n).



Triplets are useful in all meters. To put dotted notes with triplets is, in my opinion, not good, for it goes against proper and natural feeling, and this is also the reason one cannot come to terms in the performance of these and similar figures (see example o).



One will play the sixteenth note after the triplet, and another will demand that it be played with the last note of the triplet. According to the latter argument, three eighth notes would result from the dotted figure.⁴ These two figures then will seldom, or I might even say never be performed properly, such that the short note of the dotted figure comes after the last note of the triplet; and even when it does happen, it has such an adverse effect that I would take it to be a mistake if great masters had not used it. Also, even notes, such as two eighths, played against a triplet make a wretched effect, especially in slow tempos (see example p).



Also, some demand that the second eighth here be played with the third note of the triplet; thus if the first two notes of the triplet come on the first eighth of the duplet, 3/8 or 6/8 meter is created when it should not be. For my part, I will bequeath all these trivialities to someone else.

⁴ Quantz also favors this argument, p. 68. C. P. E. Bach, however, disagrees, saying composers often write this figure when they might rather have written the passage in 6/8 or 12/8. (Essay on the True Art of Playing Keyboard Instruments, trans. by Wm. J. Mitchell (New York: W. W. Norton, 1949), p. 160.)

14.

I go now to $3/8$ meter. With this meter, proceed as you did with $3/4$, except that here the parts of the measure are eighth notes, although some parts may consist of quarter notes (see example q).



The first and second measure here are easy to divide into the aforementioned three parts, for they are simple eighths which make up the beats of this meter. The third measure begins with an eighth note on the first beat; then the following two sixteenths, which equal one eighth, make up the second beat; and the last two sixteenths make up the the third beat. The following measure consists again of two eighths as two beats, and the third beat is an eighth rest. The fifth measure is more difficult. The first beat falls on the eighth note; the second falls on the dot after the eighth which, with the following sixteenth as the second half, makes the second beat; and the third beat is made up of the remaining two sixteenths, which together equal one eighth. The following measures are easy, because they are

similar to the preceding. The second example begins with an arsis, which was discussed in the section about $3/4$ meter (see example r).

Allegretto.

The musical notation is for an *Allegretto* in 3/8 time, consisting of 16 measures. The notation is arranged in three staves. The first staff contains measures 1 through 7, the second staff contains measures 8 through 13, and the third staff contains measures 14 through 16. Each measure is numbered below the staff. Fingerings (1, 2, 3) are indicated above the notes. Above the first staff, counts are provided for measures 1-7: 3 1 2 3, 1 2 3, 1 2 3, 1 2 3, 1 2 3, 1 2 3, and 1 2 3. Above the second staff, counts are provided for measures 8-13: 1 2 3, 1 2 3, 1 2 3, 1 2 3, 1 2 3, and 1 2 3. Above the third staff, counts are provided for measures 14-16: 1 2 3, 1 2 3, and 1 2. The key signature has one sharp (F#), and the time signature is 3/8.

The eighth note upbeat belongs to the last measure, so do not include it in the beginning, but rather the measure begins after the first bar line. A quarter note stands here, and because the beats of this meter are eighths, everything must be counted in eighths; thus the quarter note will be counted as two beats, and the third beat is the following eighth. In the second measure, count the first beat on the first eighth; the second beat comes on the dot, which is worth one sixteenth, and to which the following sixteenth belongs; and the third beat falls on the last eighth in the measure. The third measure has a dotted quarter note which, according to the rule, is valued as three eighths, and must be divided in three parts in this meter. The

fourth and fifth measures are like the first and second, so you proceed in the same manner with the division. All of the following has been examined in preceding examples; therefore I hope you will be able to deal with this division easily and without further help. Also, I will pass over $9/8$ meter, since it is merely an enlarged $3/8$. It has three equal parts, each of which has three parts, or eighths. These then are the common meters and their divisions, and we go now to the tempo itself.

15.

In the preceding we have simply counted and divided, but now we must learn to use the divided notes according to a definite movement and correct tempo. We learn how fast or slow this movement must be by the information written at the beginning of the piece, such as Presto, Prestissimo, Allegro assai, Allegro di molto, all of which indicate very rapid movement. Allegro, Poco presto, Vivace all indicate rapid movement. Allegretto, poco Allegro, poco Vivace, Moderato, Allegro ma non troppo, non Presto are found in less rapid pieces. Include all that is joyful, merry, bold, defiant, etc., to these movements named above. A very slow tempo is indicated by Adagio assai, Adagio di molto, Largo, and Lento, and finally, moderately slow is indicated by Andante, Andantino, Larghetto, poco Adagio, poco Largo, or poco Lento. All that is sorrowful, grieving, lamenting, modest, etc., belongs here. To these tempos

are added the affection and inner nature of the pieces by adding adjectives like affettuoso, amoroso, arioso, cantabile, grazioso, maestoso, mesto, scherzando, and others.

16.

These words cannot decide a common, fixed tempo since so many gradations lie between, and no composer can conform to the same rigid tempo, but rather must simply act according to the feeling which arises from his own temperament or taste. And since nearly all composers have differing feelings, the words describing tempos cannot mean exactly the same thing for each temperament. It follows, therefore, that no common, defined, and firmly established tempo can be determined. For example, Allegro means joyful, happy, but is certainly not the same gradation with different temperaments. Therefore a piece marked Allegro will be played slower by one or faster by another, as his temperament dictates. Quantz's proposed means of setting the tempo by the pulse seems to some extent indeed to be suitable, because one would think the movement of the pulse would always conform to the nature of the temperament, but I find it not so.⁵ By all observations I have made, I have

⁵E. R. Reilly, in his footnote to Quantz, p. 286, sets Quantz's pulse at 80. Quantz himself gives the following table:

Allegro assai = one pulse per half note
 Allegretto = one pulse per quarter note
 Adagio cantabile = one pulse per eighth note
 Adagio assai = two pulses per eighth note

always found that the pulse is not the same from day to day, or even from one hour to the next, and that each age (for temperament changes with age) has a different pulse, not to mention that this movement can be greatly altered as much through internal as well as external circumstances such as weather, food, and drink, and these can change a great deal without thinking of more similar difficulties. Therefore I doubt that this means [of establishing tempo] can be used advantageously. However, if you want to, you may try this method--it is at least a measure, but in the end you must let your feeling decide, if you do not want to miss the right way. After long experience, most will do it this way. If you ignore this means entirely, you have been led astray. Where would a young, spirited musician be with his fast passages, for example, if his pulse has been brought to still more violent motion by some accident of chance, and he wants to set his Allegro assai or Presto according to his pulse? How would this sound with the accompaniment? Where would the true content of the piece be--the feeling of the composer? It is the same with the Adagio, especially with a very slow Adagio, because at all times it is difficult, if not impossible, to deliver a pathetic song with such a spirited and hot temperament. I believe it would be better for today's contemporary composers to omit this type of song, because almost no such Adagio exists anymore. Whether that is

right and good I will not decide, but it seems too bad to me. It is not only difficult to play, but also difficult to compose.

17.

However, a means of establishing the tempo indicated by the words must exist. I know of no other than the feeling. Before you can establish a tempo by feeling, however, you must recognize the content of the piece. To judge simply by the words written above is a mistake in my opinion, or at least a very weak means. The composer often writes Allegro, but not with the meaning of simply "fast;" on the contrary, he wants to show a specific grade of mirth or joy according to his feeling. If the performer judges it simply to mean "fast," as often happens, he will certainly, or at least many times, miss the purpose of the composer, and then he does not understand the content, the essential, which he should keep in mind, and upon which everything depends. On the other hand, the performer, with all his searching and with all his feeling, will deliver nothing if the composer has thought nothing about the tempo indication, or is not able to think about it, and has merely set together sounds, completely without design, and has merely defined a slow or fast tempo. Then his fingers simply follow one another on the piano, so only a little can be in the piece, for content is thought and felt, but the fingers can neither think nor feel. Such pieces are commonly ruled by monotony, indolence, uneasy affected

usage in the harmony, or completely false harmonic progressions, especially when the composers want to imitate other great masters, but possess no thorough knowledge of them. Therefore nothing significant results, and everything is a similar jingle, and most such composers blame and despise any other work.

18.

One who can read and sing a piece in his mind, and who can recognize the content of it, can certainly help himself, but what of the one who cannot? What of the one who first discovers the content of the piece after he has looked at the measures? Since the feeling must always judge, it is necessary that the beginner observe all of the rules previously mentioned exactly, namely he must divide the measure into the appropriate number of parts, take the tempo of these beats at his own discretion according to the tempo marking as well as he can, play his piece now simply according to this tempo, and count exactly. If he cannot [count] in his head, he must use his foot to help, marking each beat exactly, as will be clearly shown farther on, so that he hears, sees, and feels. This he must do with each measure often enough that he is convinced he hears, sees, and feels correctly, and must be correct. When he can properly divide his piece and play it according to the tempo marking, he listens closely to the song and its inner sense, and judges according to his feeling whether this song is suited to the tempo established, or whether it

should be faster or slower. He tries it both ways until he perceives where his feeling is most inclined, and he adapts the whole to this tempo. I know well that it is difficult and cannot happen all at once, but frequent practice in this manner will lift the difficulties little by little, and make the whole thing easier. And it will finally come to the point where he can dispense with these rudimentary mechanical aids, and will be able to establish the proper tempo according to his feeling simply by looking through the piece or playing through it once. Using these aids exclusively would result in the performer's never thinking about the music or feeling comfortable with it, and thus always missing the proper design.

19.

This is said for the beginner. One who is so advanced that he sees the content with his first glance at the piece does not need these aids which are necessary to the beginner. For him, the feeling is enough. If he has learned to feel properly, it is no longer necessary for him to concern himself so much with the tempo marking, but rather only to conform to it in so far as he sees whether the piece should be played fast or slow--how fast or how slow, however, depends entirely upon his proper feeling for the content of the piece. You can see by this that it is no simple matter to play a piece in the correct or proper tempo. If it were, so many would not fail at it. For those who have not

learned it from rules, it happens only by chance that they play a piece in proper meter and tempo, and thus they often fall into incidents of uncertainty.

20.

I want to present some examples here to try to make this as clear as possible. I cannot know whether you will always understand it as I intend, and put the proper diligence to it, thereby making it [as I intend]. If I could help to clarify these exercises where they are unclear, it would be nice, but because this is impossible, I will make an effort to write this so it is clear and as useful as possible. First we will take an example in fast 2/4 meter (see example 5).

5)

Allegro mod.

1) 2) 3) 4) 5) 6)

7) 8) 9) 10) 11) 12) 13)

14) 15) 16) 17) 18) 19)

20) 21) 22) 23) 24)

In this example, which requires a moderately fast tempo, the quarter notes, as fundamental divisions of the measure, will be marked with the foot. When you have divided the measure into two parts, or quarter notes, according to the above instruction, take a moderately fast tempo for these two quarters, and even if it is not the right one, follow it exactly and try to make the beats as even as possible. If you cannot do it in your head, tap your foot to help, so that each beat gets a foot tap. In the first measure, the first tap comes on the quarter note, as the first beat of the measure; the second tap comes on the first of two following eighth notes, and the second eighth will be played upon raising the foot; these make up the second beat. The foot taps must be exactly in the established tempo, so listen carefully and do it several times until it is right. In the second measure, hold the half note until the foot has made its two measured taps, then go on to the third and fourth measures, which are handled just like the first two. In the fifth measure, tap "one" on the first eighth, and "two" on the third eighth; when these two beats are correct, the second eighth falls easily between the two beats, and the fourth eighth comes after the second beat, so that an eighth always comes in the middle between two beats at the time the foot is raised. Since the sixth measure is like the fifth, and the two measures together have eight eighth notes, you

can learn to play succeeding eighth notes clearly, particularly if you practice often and do not just leave it that the first time through is good enough. If you want to time these eighths exactly, accustom yourself at the beginning when you designate each quarter note with a foot tap, so that your foot rises correctly on the second half of the quarter, making two equal parts. If you have two quarters in a measure and mark each one, the first foot tap comes on the first quarter, the foot is raised on the second half of the beat, the second foot tap comes on the second quarter, and the foot is raised again on the second half of the quarter. In this manner you get four equal parts: upon tapping the foot you count "one," on raising it, "two," on tapping it again, "three," and on raising it, "four." "One" signifies the first beat, "two" passes through, "three" denotes the second beat, and "four" passes through. If natural eighths stand there, as in this example, it is easier, and all the notes are marked by tapping and raising the foot. If sixteenth notes appear, as in the seventh measure, count "one" when tapping your foot on the first sixteenth; lift the foot on the third sixteenth, the other half of this quarter note or beat, and tap your foot again on the first sixteenth of the next group, counting "two." Lift it again on the third sixteenth, the other half of the second beat, and the second and fourth sixteenth notes pass through. In the eighth measure, the quarter note

falls on the first beat, and the rest, which is divided into tapping and lifting [the foot], falls on the second beat, like the first quarter note. In the ninth, tenth, eleventh, twelfth, and thirteenth measures, proceed as you did in the first five measures. The fourteenth measure again has sixteenth notes on which the first tap goes to the first sixteenth, the foot is lifted on the third sixteenth, and you tap the second beat with it again on the first eighth note, raising it on the second eighth. Measures fifteen and sixteen are like measures seven and eight. In measure seventeen, tap the first beat on the first quarter note, lift your foot in the middle of this quarter, and tap the second beat on the dot, lifting the foot on the last eighth, doing this such that the tapping and raising create equal parts. The first quarter in measure eighteen is tapped as the first beat, and you lift your foot again in the middle, the second tap coming on the second quarter note, in the middle of which you again raise your foot. The following two measures are the same as the preceding two. The last four measures have already been explained. Should an Allegro or Allegro moderato have several syncopations, especially at the beginning, it is wise for the student to mark the eighth notes loudly at first, so that he can play the syncopations better and more confidently. However, if he has practiced enough in the manner just described, where each tap and rise of the foot indicates an eighth note, it is not necessary for him to

mark all eighths with foot taps. Syncopation will be defined and discussed in the chapter about language, in the thirteenth rule. When you can count the beats of a measure correctly with this method of tapping and raising your foot, it will not be difficult to apply it to all meters. For example, here in 2/4 meter, instead of tapping your foot on each quarter, tap it only on the first quarter and lift it on the second quarter, so that the first beat is marked by tapping, and the second beat is marked by raising the foot.

21.

As you proceed in 2/4 meter where each quarter, or beat, is tapped by the foot, so you also proceed in 3/4 meter. Everything worth a quarter note will be designated by a foot tap in the manner described above. (see example t).

t) *Un poco Allegro.*

The image displays three staves of musical notation in treble clef, illustrating foot tapping patterns for 2/4 and 3/4 meters. The first staff shows five measures of 2/4 meter, with foot tap counts (1, 2, 3) written above the notes. The second staff shows five measures of 3/4 meter, with foot tap counts (1, 2, 3) written above the notes. The third staff shows two measures of 2/4 meter, with foot tap counts (1, 2, 3) written above the notes. The measures are numbered 1) through 12) below the staves.

When you have divided the notes into three quarters, or parts of the measure, play these three beats in a moderate,

quietly happy tempo, and if you perceive the content of this piece through these measures, judge the tempo accordingly and proceed as you have been taught about $3/4$ meter. In the first measure of this example, tapping your foot to the three beats is very easy, because they are simple quarter notes which are the unit beat of this meter. In the second measure, the first beat comes on the first eighth note, the second eighth passes through, or comes as you raise your foot, and the second beat comes on the third eighth note, the fourth passing through. The third beat comes on the last quarter note. The third measure begins with a half note which is equal to two quarters, or beats, and which you must hold for two beats, or foot taps; the third beat comes on the following quarter note. The fourth measure is like the second. In the fifth measure, where a dotted half which is equal to three quarters stands, you must hold the note until you have tapped three beats with your foot. The sixth measure is the same. The seventh measure begins with a dotted eighth followed by a sixteenth. In this figure, which makes up the first beat or part of the measure, the beat comes on the eighth note, and will be held until you are ready to play the second beat on the following quarter note, except that just before the second beat, you play the sixteenth note as quickly as possible. The shortness of the sixteenth note in this particular figure will be discussed farther on--you simply hold the

dotted eighth almost as long as a whole quarter, and leave just enough space before the following quarter that the sixteenth note can hardly be fitted in. This usage is similar to figures which consist of sixteenth and thirty-second notes. Read about this in the eighth chapter under the note to the eighth rule.⁶ The third beat comes on the last quarter note. The half note in the eighth measure will again be held as long as the two quarters to which it is equal, and will be marked by the foot. Nothing is played on the third beat as it is a rest equal to a quarter; thus you tap your foot to the beat, and wait until the time of the third beat is past. In the ninth and tenth measures, there are dotted figures again which will be observed like the single dotted figure in measure seven. In measure eleven, which holds sixteenth notes, the first beat comes on the first sixteenth note, and the other three must be played between and before the second beat; because the following figure again consists of sixteenth notes, proceed

⁶Infra, p. 272. The "double-dotting" of dotted figures seems to be the accepted practice. Quantz, p. 67, gives these dotted notes a specific length. For example, a dotted eighth would receive the time of three sixteenths and a dotted thirty-second. Leopold Mozart, in his Treatise on Playing the Violin (1756, translated by Editha Knocker, Oxford University Press, 1937), p. 41, states that in fact all dotted notes should be lengthened, and not just those in Adagios. He maintains that not only is the performance enlivened, but that rushing, "that almost universal fault," is checked. C. P. E. Bach agrees, but qualifies his statement by saying that the melody must be examined carefully before any altering is done, for any ornaments in the melodic line might change this "rule," p. 157.

as you did with the first part [of the measure]. The third beat comes on the first eighth of the third part, and the other eighth passes through. In measure twelve, proceed as in measure three, etc. When you have practiced this enough, you will be in a position to designate the whole measure with one foot tap on the first quarter, raising your foot on the two remaining beats instead of tapping your foot to each individual beat. Thus you count "one" on the first quarter, and by raising your foot a little to the right side, count "two," and again raise your foot a little higher and to the left, counting "three," so that three equal parts are created.

22.

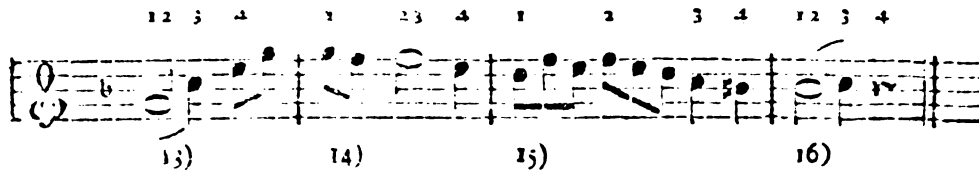
Now we will take an example in C, or 4/4 meter, in which nothing new appears, except that each measure contains four quarter notes; otherwise it is played like the preceding (see example u).

u) Allegro moder.

1) 2) 3) 4) 5)

6) 7) 8) 9)

10) 11) 12)



When you establish a moderately fast tempo in this example, count "one" on the long note in the first measure, which is a whole note equal to four quarters, and hold it until, according to your established tempo, four beats have gone by. The first beat in the second measure comes on the first eighth note, and the second eighth comes as you raise your foot; the second and third beats come on the half note, the fourth beat comes on the following eighth note, and raising your foot denotes the last eighth. In the third measure, the first beat comes on the first quarter; the second, on the following eighth; the third and fourth beats come on the first and third of the last four eighths. The two quarters in the fourth measure get the first two beats; the rest is the third beat, and the last quarter is the last beat. There are two half notes in the fifth measure, each of which is equal to two quarters, and so each gets two beats. The sixth measure is like the second, the seventh is like the fifth, and the eighth, like the seventh. Triplets are found in the ninth, tenth, and eleventh measures, each of which is equal to a quarter--the beat always comes on the first note of the triplet. Count the beats in exactly the same tempo that you started with, and arrange the three notes of the triplet so that they

fill out the time from one beat to another exactly, but so that each note is as long as the others. I will pass over the rest of the measures, since they are very similar to the preceding, and are very easy to play. Everything else that has already been said about $2/4$ and $3/4$ meter can also be applied here. If you want to mark whole measures in this manner, proceed in this way: when you have established a definite tempo, tap your foot on the first quarter as you begin to play, and count the second beat either in your head, leaving your foot down, or make another small downward motion with the foot; the third beat is shown by raising the foot, and the fourth by a sideways motion of the raised foot. Thus the first two quarters, or beats, as the first half of the measure are marked by tapping the foot down, and the other two beats, as the other half of the measure, are marked by raising the foot, so together four equal beats will be observed.

23.

Since ϕ or $2/2$ meter has already been discussed in paragraph five of this chapter, I will remind you of nothing more about it except that with your foot you mark half notes in this meter the same way you mark quarter notes in $2/4$ meter; or if you want to do the whole measure, divide each measure into two parts, a foot tap and a raising of the foot. When you have practiced this meter enough, you will find it easy to learn $6/4$ meter. If you want to mark whole measures

in this meter, take three beats with your foot down, and three with it up. In the hopes that you will be able to play in this meter without further example, I will leave it, especially since I will say more about 6/8 meter, which has just as many beats and is handled the same, although the beats are eighth notes instead of quarter notes. I will also pass over 3/1 and 3/2 meters, because they are marked just like 3/4, only that in 3/1, the beats are whole notes, and in 3/2 the beats are half notes. Now we will continue with those meters whose members are eighth notes.

24.

First, 3/8 meter. It consists of three beats or eighth notes, and is handled just like 3/4 (see example v).

v)
Andante.

1) 2) 3) 4) 5)

6) 7) 8) 9) 10)

11) 12)

Separate the notes and figures in this example into simple eighths, and count three in each measure. Determine the tempo according to the printed word Andante, which stands

between Cantabile and Allegretto, and is consequently a rather slow tempo, as well as you can, even if you cannot judge at sight the content of the piece, and leave it. Tie yourself to this tempo, and count each of the eighths by tapping your foot, trying to make each beat as long as the others, so that the three beats or eighths are quite equal. In the second measure, the first beat comes on the quarter whose first half is counted as the first beat, and whose other half is counted as the second beat, and the following eighth is the third beat. The dotted figures in the third measure, where the dot follows the second note, must be observed as the reverse of the figure where the dot follows the first note, namely the short note is made very short, but you must conform to the song. If the song should be gentle and flattering, the short note must not be so hasty. When the composer writes one or two dots in such figures according to his feeling, this uncertain rule will not apply. The foot tap here comes on the thirty-second note, which is fast and is slurred to the following dotted sixteenth, and the two together make up the first beat. Proceed in the same manner for the second beat, and the third beat comes on the first of the last two sixteenths, the last sixteenth being marked by raising the foot. The fourth measure is handled like the first. In the fifth measure, tap your foot on the rest for the first beat, and count "one;" the other two beats come on the two following eighth notes. Here you must try to make notes and rests

the same length, so that you retain the tempo with which you began. The sixth measure begins with an eighth note, the first beat; the second beat is on the first of the four thirty-second notes which together equal an eighth, and consequently make up the second part of the measure. These four notes must be played evenly from the second to the third beats. The last four notes, making up the third beat, are handled the same. In the seventh measure, the first figure consists again of four thirty-second notes, the first part or beat of the measure; the second beat comes on the following dotted sixteenth, and the short note belonging to it will be handled as already often explained; the last eighth, as the third part of the measure, gets the third beat. So that the three eighths in this measure will be quite even, the beginner must put up with practicing them often. In the eighth measure, mark the first beat on the quarter note, and since it includes two beats in this meter, hold it through the second beat; the third beat comes on the sixteenth rest, and the sixteenth note belonging to it will be played as the foot is raised. The ninth measure has a syncopation; the beat comes on the first thirty-second, and both thirty-seconds are played so quickly that the following eighth, of which half, or a sixteenth, belongs to the first beat, will come upon raising the foot. Hold the eighth note, and tap the second beat on the second half of it as the first accented note of the second beat, which

is marked by the breath as shown in the chapter about language, so that you hear and feel correctly where the second beat begins. The third beat consists again of thirty-second notes which are handled as said in the preceding measures. The tenth measure again has thirty-second notes on the first of which the beat comes; the second beat comes on the dotted eighth, which must be held until the third beat falls on the dot. The last sixteenth, belonging to the third beat, comes with the raising of the foot. Measure eleven is like measure seven. The handling of the quarter note in the twelfth measure is like the second and eighth measures, where the first two beats fall on the quarter, and the third falls on the rest. Masters will practice this often, too. If you want to mark whole measures in this meter, as you are compelled to do with fast tempos where you cannot mark each beat individually due to the speed, proceed just as you would in $3/4$, except here the units of the measure are eighth notes. If the tempo is very fast, tap your foot on the first beat, leave it down during the second, and lift it again during the third beat.

25.

Now let us deal with an example in $6/8$ meter. I will pass over $9/8$ and $12/8$ since they are founded in $3/8$ and $6/8$. In dividing $6/8$ measures, all figures and beats will be marked by eighth notes just as in $3/8$ if the tempo allows

it and is not too fast, but this example is not like that, and you will do well to mark the whole measure, so that your foot goes down on the first half and rises on the second half. The beginner can, of course, study it slowly at first, marking each eighth until he has it, then playing it faster little by little until he feels that he has the right tempo, but he must mark the whole measure, or at least the half measure (see example w).

w) *Prelo.*

The musical notation for example w) is in 3/8 time and consists of 12 measures. The first measure is marked with a dotted quarter note. The notation is divided into three rows of four measures each. Above the first row, the fingerings 1 2 3 4 5 6 are indicated for the first, second, third, and fourth measures respectively. Above the second row, the fingerings 1 2 3 4 5 6 are indicated for the first, second, third, and fourth measures respectively. Above the third row, the fingerings 1 2 3 4 5 6 are indicated for the first, second, third, and fourth measures respectively. Below the first row, the foot markings 1), 2), 3), and 4) are indicated for the first, second, third, and fourth measures respectively. Below the second row, the foot markings 5), 6), 7), and 8) are indicated for the first, second, third, and fourth measures respectively. Below the third row, the foot markings 9), 10), 11), and 12) are indicated for the first, second, third, and fourth measures respectively. The notation includes various note values, rests, and slurs.

If you want to play this example in a slow tempo at first, mark each eighth note, or part of the measure, with the foot. Here in the first measure stands a dotted quarter note which is equal to three eighths. These beats you tap with your foot, holding the note as long as three eighth notes in the established tempo. The other three parts of the measure are included also in a dotted quarter note which is played like the first note. Six simple

eighth notes make up the second measure, all of which are marked with the foot so that six equal parts of the measure result. The third, fourth, and fifth measures are like the preceding. In the sixth measure, three eighth notes stand at the beginning which you mark with your foot; the fourth beat comes on the rest, and the fifth and sixth beats come on the following two eighths. The rest is like the preceding, and thus is easy to play. If you play in a faster tempo, however, you cannot mark each eighth with your foot, as previously shown, but rather you must mark the half measure, and proceed as you would in $3/8$ meter. If you play in a very fast tempo, mark each whole measure, namely, the three eighths as the first half as your foot taps, and the other three eighths as the other half, as your foot rises. In this manner, two parts will result, as seen in the first measure of this example, when you tap your foot on the first dotted quarter and raise it on the second dotted quarter, thinking three eighths each time.

26.

This has been a discussion of even and uneven meters whose parts consist of quarter and eighth notes, and in which you can either count individual beats or, in fast or moderately fast tempos, you can mark the whole measure. In an Adagio in $2/4$ or C meter, proceed differently, so that the notes and figures in the measure are not separated into quarters, but rather into eighths, and thus only eighths are marked. The accompaniment, which consists

mainly of eighth notes, will make this much easier. An example in 2/4 meter will make it clearer (see example x).

x) Adagio.

1) 2) 3)

4) 5) 6)

7) 8)

9) 10) 11)



Although this example is in 2/4 meter, eighth notes, and not quarters, will be marked, because of the slow tempo. In order to understand this better, I have added the bass, which contains mostly eighth notes. If you want to count quarter notes here, it becomes very easy to make mistakes, because of the many differing figures and the slow tempo. Therefore, if you make shorter beats and divide the measure into eighth notes, you can understand the whole measure more easily. In the first measure, hold the dotted quarter note for three eighth note beats, which it is worth, and which are the parts of the measure in this slow tempo. The following thirty-second notes together make up the fourth eighth note, and you tap your foot on the first of these, letting all four pass in the space of one eighth note beat. In the second measure, the first beat comes on the first sixteenth note, and the other [sixteenth] comes upon raising the foot; the second beat comes on the eighth, and the third and fourth come on the following quarter. In the third measure, the first beat comes again on the first sixteenth, and the second [sixteenth], as the other half of this beat, comes

as the foot is raised. The second beat comes on the first of the four thirty-second notes, the others passing through, and the foot is raised to mark the last two. The third beat comes on the following eighth note, and the last beat comes on the four thirty-second notes, which are handled just like the second beat of this measure. Two eighth notes stand at the beginning of the fourth measure as two parts of the measure, and the foot marks both of them. The third beat comes on the sixteenth rest, and the following sixteenth belonging to this beat comes as the foot is raised. The fourth beat, consisting of four thirty-second notes, is played like the preceding figures of its kind. Because the following measures have so many similarities to the ones just discussed, I will pass over them. Only the ninth measure needs further explanation. The first beat here comes on the first eighth note; the second, on the first sixty-fourth note, and the other three sixty-fourths must be played before you raise your foot, so that the next group of sixty-fourths can be played as you raise your foot, and the eight sixty-fourths together make the second beat. The third beat again has eight sixty-fourth notes, and also the fourth beat; both the third and fourth beats will be handled like the second beat. Everything else has already been discussed. In such a slow tempo, do not mark entire measures unless you have [the rhythmic figures] entirely in your power. What has been said here about 2/4 meter applies

also to C. An Adagio is seldom set in $3/4$ meter so that you need to subdivide the beat, but rather you just mark the quarter note beat slowly. Now I will close this chapter with the hope that you will excuse my long-windedness. I did it to help the beginner, to whom everything is difficult at first if he does not have the opportunity to enjoy a clear instruction. I am indeed convinced that if you believe this has all been said with good reason, and if you practice diligently and often, you will obtain the expected results. Should the examples included here not meet with everyone's approval as showing purpose in the song, nonetheless they serve as information which I gave, not as models of songs, but rather only as examples for learning the divisions of notes and measures. One person's opinion is not always another's in these matters.

Chapter Six

About Tone Quality and Pure Intonation¹

1.

Since good tone quality is essential for a good performance, as much for instrumentalists as for vocalists, one cannot be diligent enough in keeping the tone always as beautiful as possible. It is known to everyone that a stuffy, dull, and wooden tone is not right, and is detrimental to a good performance. The singer must take the tone nature has given him; he can, however, ruin his best tone by pressing it through the nose and between the teeth, or misplacing it through a peculiar line of the throat and mouth. If the instrumentalist has a bad tone, however, he is to blame, for a good sound is dependent primarily upon his skill; however, much depends also on the instrument. A bad instrument cannot produce a good sound.

¹Tromlitz later wrote an article "On the Beautiful Tone of the Flute." The article appears in two parts in the January, 1800, issue of the Allgemeine Musikalische Zeitung (Leipzig: Breitkopf und Härtel), p. 301-304 and 316-320. In this article, he reiterates that a beautiful tone is a matter of personal taste, but that it should imitate the beautiful singing voice as nearly as possible, something more easily done on the flute than on any other instrument. He also speaks more about modern composition here than in his book, saying it is unfortunate that most music is now written in the second and third octaves of the flute range, and how is a virtuoso to show expression in his music if it always lies in the upper range? He misses this expression most in Adagios--"The large part of feeling and harmonic knowledge in an adagio, where both composer and virtuoso can show their superiority, is almost completely lost."

2.

Since all people do not like the same kind of tone, but have different tastes, a tone quality which can be recognized as beautiful by everyone cannot be established. One will like a full, strong tone, not bright and ringing; another will like a strong and crying sound; still another will prefer a thin, pointed, and biting sound; a fourth will like a thin, faint tone, etc. When the tone is bright, ringing, and pleasant, it will please most people, but to some there will be something wrong with it here and there. This demonstrates that tone quality is a matter of taste. I have often found that a tone held to be quite beautiful by one, cannot be tolerated by another. Therefore it is difficult, if not impossible, to define a beautiful sound for everyone exactly. I say that the only model upon which an instrumentalist must build his tone is a beautiful singing voice, and in my opinion, a beautiful voice is one which is bright, full, and ringing--intense, but not shrill, gentle, but not stuffy--in short, the voice that is beautiful to me is full, singing, smooth, and supple.

3.

Each instrument conforms to that voice which is most appropriate to it. For example, flute, oboe, and violin model themselves after a beautiful discant and alto; viola, violoncello, and bassoon are like a beautiful alto, tenor, or bass voice. Now since this tone defined by the voice

is, without debate, closest to perfection, the instrument with the tone that comes closest to this tone has the most nearly perfect tone.

4.

The flute lays claim not to a stuffy, dull, or wooden tone, but rather to a tone procured by the means described above--the former is worth nothing here. It is also not sufficient when you can produce only some bright and beautiful tones, and must leave the others faint and dull. This causes unevenness, to which every ear is unaccustomed. Similarity of the tones in all keys, with a bright and singing sound, is one of the exquisite things about the flute, but because of the difficulties involved, it is seldom found. It is, however, possible to keep a passable evenness in tone quality in the lower octave of this instrument, but only for those who have an intense sound and are accustomed to covering the embouchure hole quite a bit. The tones C, B, and A flat can be played very nearly like the others with the proper fingerings, which are found [in the chapter about fingering]--only the G sharp does not respond very well, but something can be done about it. On a flute with a G sharp key, it is certainly possible, but that is not what I mean here.

5.

A dull tone is certainly easier to maintain throughout the range of the flute than a bright tone, for dull unites with dull, and everything consequently becomes dull. He who

has a bright full sound throughout the whole instrument has many advantages over the others who do not have it, but many do not have such a sound. Many also believe it is not possible to make the tones which are by nature dull on the flute, as bright as the other tones, but much is possible if the flute, the embouchure, and the ear are good. That this applies only to the lower octave has already been said; in the upper register there is more evenness by nature, and it is therefore much easier to retain equality.

6.

When you are in the position to do all of this, you must take care to learn to retain evenness between high and low also, so that not just the high register alone [has good quality] while the lower register does not match at all, as often happens. In this case, either the high register will be overblown, or the embouchure hole will not be covered enough, creating a shrill high register, and a stuffy low range, and pure intonation suffers from that. As a result, not only the evenness between high and low, but also the purity of the intervals, even on a well-voiced instrument, is lost.

7.

This evenness must be created such that the low register is just as strong as is proper to the high register. Also, you must not interpret the rule that the low register must be strong and the high one weak, as many do, to mean

you should blow with all your power in the low range, and make the high notes so weak that not only the aforementioned ratio between high and low, but also the clear intonation will be destroyed, for then the low notes would be sharp, and the high ones flat. It is indeed true that the high tones of the flute are much more penetrating than the low tones, and thus it is important that the lower tones be produced with more force, but this stronger and weaker production must not be exaggerated on either side, otherwise you will always encounter the aforementioned mistake. An educated and correctly-attuned ear can easily decide how much weaker the high notes must be played in order to retain the same sound quality as the lower octave. When I say that the lower notes must be produced more forcefully, you must not believe that this can be brought about only by blowing harder, for then the tone would certainly be stronger, but without the proper and correct position of the lips, it would also be sharp. With careful observation of this, you will be able to avoid this mistake, and the tone will be firm, strong, and penetrating, yet also remain pure. With the opposite, the tone would be thick and sharp. More has already been written about the position of the lips in Chapter Two.

8.

In order to obtain a firm, strong, and bright tone, you will do well to play individual notes and hold each one as

long as your breath lasts. Turn the flute out a little or in little by little, always with steady wind, until you come to the right spot, and the tone is firm and strong. If you go beyond this point, namely if you turn the flute farther in than it should be, the tone will still keep its edge, but it will become thin and pointed, so that it cannot be shaded in performance, which is hard enough anyway, and which cannot be accomplished by everyone. Therefore, those individuals who have no knowledge of instruments are moved to believe that it would be entirely impossible to shade tones on the flute, but it is possible. You need only to take care to obtain a healthy, firm, full, intense, and supple tone of such strength that you can still always produce a piano or forte; a good singer is the best model for this. Some make the tone as thin and weak as is possible only for them, and they believe that makes their performance more pleasing than if they had chosen a stronger tone, but they are mistaken. If a singer sang like these flute players, with a sound as thin as a thread, and squeaked like a little mouse in his performance, could this be pleasing? I think not. If he does the opposite, however, and wants to cry out with bodily strength, his performance will certainly not be any more pleasing. Neither of the two will be able to shade properly, and since this is much more difficult on the flute than on any other instrument, it will be entirely impossible with such a procedure. A firm, healthy, full, and intense tone that is neither too strong

nor too weak will let itself be shaded at will on the flute, too, if the performer only knows how to handle the instrument properly.

9.

With this shading, however, which always remains a great art on the flute, you must pay careful attention to pure intonation if a cat's howl is not to result. Therefore it is not nearly enough to strengthen the tone simply by blowing harder, or weaken the tone by blowing less; if you do not know the advantages, and do not have a properly attuned ear to keep the intonation clean, you will cause more damage than good, for by blowing harder, the tone will not only be stronger, but also sharper, and vice versa, as often said. In order to avoid this evil, if you want to strengthen the tone or passage little by little, you must also turn the flute in little by little as the sound increases. To diminish a tone or passage, turn the flute out little by little so the intonation remains pure, and the tone becomes neither sharper nor flatter, and does not, as said before, create a howl. This increasing and diminishing has its gradations which you can distinguish through diligent practice, so that you can easily meet the appropriate strength and weakness in short notes and in the progress of the song, to which the proper movement of the lips contributes a great deal.

10.

I do not believe there exists an instrument on which pure intonation is more difficult to attain than the flute. Many things contribute to this--the inherent unevenness of tones on this instrument, blowing too hard or not hard enough, an incorrect embouchure, a poor ear, an unsuitably-voiced flute, etc. Experience is proof enough. If one were in the position to do everything possible on this instrument, and pure intonation failed him, his performance would never be able to create a good effect; but not everyone sees the causes of this. Many sit there and hear a player with a beautiful tone perform clearly and with taste, and still the performance is not pleasing, and they will not understand why until the cause for his poor intonation is understood, and when they are shown why, they do not believe it. Even people who are musicians by trade, as I have just recently learned, do not hear it. Therefore a mediocre performance with a beautiful tone and clean intonation makes a better effect than all the art possible without these two things. However, those who are in the position to do everything possible on this instrument with a good tone and clean intonation, and who know good performance, are much preferred by everyone.

11.

An exact knowledge of the intervals belonging to the scales is necessary to clean intonation. Without this

knowledge, he who plays the scales, which are otherwise very useful, has little use of them. If he has a precise knowledge of the intervals, he will be able to play in all keys proficiently when he has first established a firm tone and tries to impress on the ear all the intervals, especially the half steps and whole steps. In this way he will find and take note of tones which demand stronger or weaker breath. Breath of similar strength for all intervals finds no place, even on a flute with superior tuning. Herein lies one of the first reasons for impure intonation. Therefore it is not good for a beginner, whose ear is not yet attuned, to play the scales alone; rather, he should have a master of good reputation help him and correct him if he can. At the very least, he will attain his goal sooner. If he has learned to sing clearly, for singing is of two sorts just as playing on the flute is of two sorts, it will make this work much easier. I have already stated that when practicing this, he should hold each tone as long as his breath allows. By this means he will not only build his tone better and sooner, and learn to play clearly, smoothly, and flowingly, but he will also strengthen his lips and breath control, which are so important, so that the tone is firm and will not shake or falter.

12.

I want to present here a means of learning to hear pure intervals--a method which I have often used to great

advantage. Perhaps it will find approval. It is this: learn to tune a keyboard instrument, whether it be clavichord, piano, or harpsichord [clavier, fortepiano, clavecin]. I prefer the clavichord and piano when they are available, because the harpsichord has strong and also faltering tones.² The student has more time to hear and tune the tones of the clavichord and piano carefully, because they are clearer. This tuning is of extraordinary value, and builds an acute ear, especially when you learn exact temperament.³ Of course one who wants to use this means must be able to hear what is sharp or flat; otherwise it is for nothing, and he would gain as little from it as if he had not used it at all. If one cannot hear sharp and flat, however, and is therefore not in the position to tune intervals, as many are not, even some who make wind instruments their profession, then he should not want to learn an instrument such as the flute, where purity of intervals is dependent on the player. On the contrary, he should choose to learn the piano, because it is tuned well, and when he plays the assigned keys, he will play in tune. Although there are different printed instructions for keyboard tuning, and many more [probably exist], I will nevertheless

²Of the three instruments, only the harpsichord is plucked, so the tones are not as sustained as piano or clavichord tones.

³The discussion here is probably about equal temperament. Tromlitz feels that a perfectly-tuned flute can play with a tempered keyboard, and tuning this way will help the ear.

show the beginner a way [to learn tuning]. It cannot hurt those, too, who have played a long time, especially on wind instruments with impure intonation, if they will only put up with it. Playing cleanly is difficult, but also so highly important and necessary that methods of obtaining it cannot be overused. Therefore I hope you will not view this well-meant advice as superfluous.

13.

If you want to learn to tune or temper a keyboard instrument well, do it in the following manner: first learn to tune the unison correctly, trying to tune two neighboring strings so that they sound like one. This is not easy, and since it has as much influence on the tuning of the whole instrument as the violins in an orchestra have, you should not take it lightly, as often happens, but rather take the time to learn it perfectly. It is best to take a string that is already tuned and tune the second string to it from low to high, but not vice versa, because if you leave a string tuned too high, it will not stay, but will flatten little by little. Now try to hear a perfect fifth, and learn to tune it. If you cannot do it by yourself, do it with the help of a teacher. Repeat it often enough that you have the sound of the interval firmly placed in your ear. Then tune down an octave from this fifth, repeating it as strongly as possible in the ear. These are the three main intervals, and you cannot practice them diligently or

often enough in order to make them perfect. If you have practiced this long enough and impressed these intervals in your hearing, then you may begin to temper. This happens now only on the fifth, and the other intervals arise from that. Unison and octave have no temperament, but rather are completely pure. Now if you want to temper the fifth, be careful to learn to tune it perfectly at first; then let it slide down so that it does not offend the ear, but can easily, willingly be endured. This is useful on the keyboard, and you will find it most accurately if you attempt tuning the string with the perfect fifth so close that the beats of this interval almost completely disappear, and the ear bears it willingly and gladly. This practice must be continued until you can find the temperament easily and without trouble. Although you use it less on stringed and wind instruments than the perfect fifth, nonetheless this practice is valuable in learning to hear the perfect fifth more accurately and competently. I have found that those who are in the position to tune a keyboard instrument correctly always have clean intonation on stringed or wind instruments. When you have mastered the fifth and its downward octave, go on and tune a tempered fifth up from the low note of the octave, resulting in a second from the original note. If you again tune a fifth to this second, you get a sixth to the original note. Now if you tune an octave down from this sixth, and up a fifth from that, you get the third to the original note.

14.

If you have proceeded correctly, the first tone, which we will name C, along with its fifth, G, and its third, E, found last, make a useful chord in which the third is a little high and the fifth is a little low, but not so much that the ear does not willingly accept it. If the beginner, and this is said only for the beginner, cannot rely completely on himself and trust himself, he should enlist the help of an experienced [musician]. If the chord is tuned well without anything adverse, and the ear accepts it willingly, practice it until you are sure of it. I have used the C chord here, because it is usually the first chord tuned on the keyboard, but because the flute only occasionally has a C', you can begin with C'', or with the E' below. Or you can begin the experiment with the D chord, but then each interval will be treated differently because of the wind and because of differences in temperament, for this chord is not always the same as that of the keyboard. More about this later. This practice will greatly ease the problems of pure intonation on the flute if you have learned to recognize pure and tempered intervals exactly. Although the temperament of the flute deviates from that of the keyboard, you will find, when you take the flute in hand and practice the chord, that the chord can be completely pure on the flute, although it is not the same on all flutes.

15.

D, the second to C, which creates a whole tone, must also be practiced often enough that you learn to hear the perfect whole tone. From C, as the fundamental tone here, there are two whole steps up to the major third, namely from C to D, and from D to E. From this third, E, tune now the fifth, B natural; this adds the major seventh to our scale. The sixth, A, has already been found, so from the fifth, G, to B natural is again a major third which consists of two whole tones--G to A, and A to B. These should also be practiced diligently. Now we are missing only the fourth, F, which next to the third, E, makes only a half step. If you cannot find it using your ear, you must go on with octaves and fifths until you come to it. Finally, tune the upper octave C" with the fundamental C', and see if the F' you have found creates a properly-tempered fifth with this C". If it does, you have found two half steps, namely from the third, E', to the fourth, F', and from the seventh, B', to the octave, C", and the scale is complete. These two half steps are found in the same places in every major scale, and should be practiced just as industriously as the whole steps so that they are also just as firmly established in the ear.

16.

In order to be more certain about this procedure, after you have tuned six fifths in the manner just described, you can deviate from that and go another way, namely you can

tune the octave C" to C', and go back to where you deviated [on F] through pure fifths downward. Through this tuning in opposition, you will have the scale sooner than if you tune straight through. It happens like this: tune C' to G', G' to D', D' to A', A' to E', E' to B', B' to F sharp', and now C' to C", C" to F', F' to B flat', B flat' to E flat', E flat' to A flat', A flat' to C sharp', and C sharp' to F sharp'. This F sharp' which was broken off previously, must now pass as the fifth lower than C sharp".

17.

You can also be sure if you tune first by thirds in the following manner: first tune C', and then its octave C" perfectly. Now divide the thirds which lie in this octave--C' to E', E' to G sharp', G sharp' to C" (instead of B sharp')--so that one is as nearly the same as the others. When this is accomplished, tune perfect octaves above and below each note. Then tune the fifths F to C', C' to G', and from this G', tune the octave below, G, and the fifth to it, D'. Then again tune the octaves above and below. Now tune the thirds lying between D' and D": D' to F sharp', F sharp' to A sharp' or B flat', B flat' to D", and their octaves. Then tune the thirds A to C sharp', C sharp' to E sharp' or F', and F' to A', and their octaves. Then the fifths A to E', E' to B', the octave B, and the fifth B to F sharp' and their octaves, and finally tune the thirds in the octave G to G': G to B, B to D sharp', D sharp' or E flat' to G', and their octaves;

and you are finished. If you have not yet tuned all the octaves above and below, do it now. While you are tuning, you must always play the established intervals against succeeding ones and listen to hear if the fifths hover properly a little, in the same manner as you listened to the thirds at first. Where they do not, you have not properly apportioned the thirds, and you must go back to find out which thirds are too small or large.

18.

When you have cultivated your ear through this practice, and have made the chord C', E', G', or another chord, and the whole and half steps belonging to its scale, pure as well as tempered, play through the whole scale: C, D, E, F, G, A, B, C, or more comfortably for the flute, the scale: D', E', F sharp', G', A', B', C sharp", D". Try to play each interval as perfectly as possible, which is easy on a properly-tempered flute, and practice until everything is well established in your ear. Pay close attention to learning to distinguish half and whole steps, and if you are unsure, play your tuned piano [along with the flute], and listen to whether the two are tuned together. This, even if only the piano is tempered, will direct the student properly. Practice all keys in this way, and at the beginning, do not play any scales except those which have the previously-described order of intervals [i. e. major scales only]. You will find the other [scales] in the

chapter about scales.⁴ Here we are concerned only with the good tone and pure intonation, that is, to learn to play each interval clearly, as has been sufficiently said in the preceding. When you have accomplished this first, the rest will come easily.

19.

The second means [of learning pure intonation is to secure] a good master--one who you know for sure plays with clean intonation. The master plays scales as often as possible with the student, and shows him clearly at every opportunity where he is playing uncleanly, never allowing a mistake to pass, but rather showing him the bad interval, and playing it for him to imitate until he has grasped it. He teaches the student especially to recognize exactly what is a whole or a half step, and how it must sound. When he has learned this, the master teaches him to play other intervals, which he will find much easier when he has learned the former well, because the other intervals are based on these. Do not think that just because you can play the scale perfectly, the other intervals are also perfect--each key signature on this instrument will be handled differently with the breath, as will be seen in the following. Even if you already use the correct touch, namely playing the tone properly, you will still play

⁴See Chapter Seven, p. 224.

uncleanly if your ear is not properly attuned so that it regulates the wind suitably. I have often said this, and I also believe that it cannot be said often enough, that one must not rely totally on the grasp of tone quality, and if one has a good tone on the best-voiced flute, clean playing will still be impossible without the prior establishment of the ear. Clear intonation will be obtained through both of the methods given here. Do not neglect this establishment or shaping of the hearing, therefore, and do not defer it until another time, as commonly happens. As the ear is once adapted, so it will stay. It is therefore very important that the master himself understand this, and that his student practice it diligently. The general method of teaching where the master, but not less than a master, constantly plays for the student without reminding him of anything, and indeed not once looking at either the meter signature or tempo marking, because he does not always understand the Italian word written above at the beginning which indicates the tempo, I say, is worthless and leads the student more to corruption than to profit.

20.

Those who want to teach should have either studied their instrument diligently and according to the rules by themselves, or enjoyed the instruction of a master. They should be very musical and should have more inner awareness of music than most people have, and it would be even better

if they had done something in another related science. But they are usually ignorant and merely mechanical players, who often play stiffly and wooden simply by chance, and have learned without any rules or insight. These players now want to teach others when they themselves are not in the position to teach. They are made proud by other ignorant ones, and they deceive. Thus, if you do not want to spend your money for nothing, and do not see that you are getting something for the price, you will lose double in the end. Rather, you should take the best when you can have it. If you are not in the position to judge and choose, you should consult an impartial man for advice. Although such honest men are not abundant, there are a few who can lead you down the right path.

21.

This clean playing mentioned above always takes more care. He who has much talent learns it quickly when he uses either the given method or has a teacher who knows this art and understands the proper means of imparting it to his student. I have said that all scales cannot be played in the same manner on the flute because of the breath. Therefore it is of utmost importance that you learn to recognize which tones must be played with stronger or weaker breath. You will do well if you first try to get hold of a scale and impress it in your ear before you continue. In order to learn to recognize the difference in handling the

breath more exactly, we will go through the scales, one after the other, beginning with D major. What major and minor mean will be explained in [Chapter Seven], where you can then acquaint yourself with the intervals that belong to each key. The low D' on the flute requires full breath support; the second, E', however, does not. If the flute is also well-voiced, this tone must be played with only moderate wind if the interval is to be pure. Therefore the breath falls off considerably from the first note, and becomes weaker. The reason is the small hole, and the air has too little free passage. You will learn that this is the reason if you put down the E flat key [while playing E]. Now the air has free passage, and the tone becomes brighter and stronger, but also sharp. If the hole were placed properly, it would be bigger, and the E would be just as full as the first tone. However, if this hole came much lower, you would also have to have a longer finger. But because this is not so, the hole must conform to the finger--it must be near enough that the finger can reach it, and small enough that it will not be sharp when played with more moderate breath.

22.

Now here you already have two kinds of wind. The following third, F sharp', is generally a little too low, and also cannot be tuned exactly if the F' and some other adjacent notes are not to become unusable. Because this

F sharp' now is too low, you must again use a stronger breath to make the interval pure. The reason lies with the holes again. None of these holes can be correctly placed [acoustically], because our fingers must be able to reach the holes. The fourth, G', uses less breath, and the fifth, A', still less. B' and C sharp" are played like G'. From this you can see how difficult it is to play this scale cleanly, although it is one of the easy scales, and how uneven it will be from changing strong and weak breath if you do not know how to help yourself by pulling the lips back or pushing them forward, or by turning the flute in or out, or both together. You will find, in the chapter about fingering, that a correct fingering is necessary, and more will be said about this. If you will pull your lips back a little when playing notes which are naturally a little low on the flute, and which can be made pure by a stronger breath, or if you turn the flute out a little, or both together, the opening will be larger and the tone higher, and you will need less wind and still retain your objective. Do the opposite with notes which require less breath, namely turn the flute in a little or push the lips forward, or both. The opening will be smaller, the tone lower, and you will be able to blow a little stronger, still keeping your aim, and get a seemingly even tone quality. With diligent practice, almost no unevenness will be noticed. Do not think of a large movement when turning the flute in

or out, or when pushing or pulling the lips. It amounts to very little, especially when both are used together. If it is well done, it is unnoticeable. However, it is not so easy with all the scales as with this one, as you will see in the following.

23.

Because you cannot determine the strength and weakness of the breath and the proper usage of the other remedies by any other means than an educated ear, it is necessary that you make a point of [practicing] diligently to train your ear, whether by playing the piano, or with the help of a skilled teacher who plays the scales with you, helping you to play each interval cleanly, until you fully understand and have learned to hear the intervals correctly. This has been said often enough, but I will still say it again at every opportunity, because I am convinced that on account of the importance and difficulty [of learning to hear intervals], I cannot say it too often, although some take this to be easy, if not altogether unimportant. It is said about stringed instruments that pure intonation is half the playing. Why then not here, too? Especially since clean playing is not missed nearly so much on other instruments as on the flute. Since so few bother to learn this, there are also few who are able. Therefore it is thought to be impossible to play cleanly on this instrument. Thus, gentlemen, arise! You who play this instrument, and want

to carry the title of Virtuoso with dignity, take the trouble to get a beautiful tone, and learn to hear pure intervals, and if you have a well-tuned instrument, you will be able to play cleanly so that the prosecutors of this otherwise beloved instrument may some day be silenced. If you cannot help yourselves, suppress your pride, ask advice, and one will serve you. You see easily that this applies only to conceited virtuosos; this reminder is not necessary for honest and perceptive men.

24.

You will see from the preceding that the temperament of the flute is a totally different and much more difficult temperament than that of the piano. On the piano you have only one string for each pitch and you can tune it higher or lower as you please, and thus you can establish the temperament of the intervals as you wish. However, the best [temperament] is the one where all keys are as nearly the same as possible, that is, where all fifths are a little small and all thirds are a little large. This, however, does not apply to the flute. No tone is dependent on itself alone, and therefore cannot be tuned by itself without regard for other neighboring tones. Then if you overlook this with one tone, all the neighboring tones will be ruined, as you can see with the single instance of F sharp. To please the common instrument builders, because they actually know nothing, I will make this instance a little

clearer, and perhaps they will appreciate [the problem] and also learn to use it on the rest of the voicing. I have said previously that the F sharp cannot be tuned perfectly without ruining the F and a few other neighboring tones. The tuning lies partly with the measure, and partly with the F tone hole. If the F sharp is tuned perfectly, the F will be much too high, and if the F sharp is tuned as a perfect major third to D, the F becomes completely useless. And where, then, is E sharp? The G sharp" and C sharp"" would also become much too high, so that the one would hardly be A flat" and the other would scarcely be D flat"". Even the D"" would suffer, for if you think the octave D"-D"" is made perfect simply by moving the cork, you are in error. Yes! if nothing more than the octave D"-D"" were dependent on it, moving the cork would be allowable, but the other intervals and especially the tone must be considered. The cork gives the best and firmest tone only in one place; if you change it, both tone and intonation suffer. Good instrument builders can understand this (which, however, is only one of the smallest adjustments),⁵ and can use it in all cases, which is truly no mean trick, although they think it is. They can, then, also tune a flute, although without this understanding it is truly not [possible]. So you see that the temperament of the flute is different from that of

⁵Translator's parenthesis.

the piano, and it is of utmost importance that this [difference in temperament] be practiced, and that the ear be educated so that you establish the temperament accordingly, and can consequently play cleanly on a well-voiced flute.

25.

In the preceding we have observed how the lower octave on the D' scale should be handled with respect to breath. Now we will look at the other octaves a little. The second from D'', E'', requires a little more breath than the E' in the lower octave, but still less than the D''. The third, F sharp'', needs more wind than the second, E''; G'' and A'' also need stronger breath support; B natural' needs even more; C sharp''' and D''' require a little less. I mean, however, the C sharp as it is on my flute played with the appropriate fingering, because if you play the C sharp''' on a common flute with the common fingering and also with a strong wind, it will be still higher, and consequently even more useless. Although I have said that I will deal with minor keys in the chapter about keys, I feel it is necessary, on account of handling the wind, to discuss one here. The explanation of major and minor, however, will be deferred until later; there you will find how minor keys ascend and descend. In the key of d minor, the ascending order is the same as D major except that the minor third from D', namely F', must be played just as gently, or when you have the embouchure, even more gently than the E'. In

descending, the C" and B flat' will be played more gently than the D": if you do not observe this carefully, the tones F', B flat', and C" will be too high. In the second octave, be careful again of the two intervals E" and F", and play both of them weaker than D". The remaining tones, ascending as well as descending, will be played equally strong except for B natural", which must be played a little stronger. The B" is still a little too low and cannot be tuned perfectly, since otherwise the A sharp" would be completely missing and the C sharp" would then be too high.

26.

In the key of E flat, the E flat' must be played with more force if the flute has only one key; the second, F', must be played much weaker if it is to be pure; the third, G', needs more force; the fourth, A flat', needs very little breath or it becomes sharp, like G sharp', which is fingered differently; the fifth, B flat' is also weak; the sixth, C", a little stronger; the seventh, D", stronger; and the octave, E flat", the same. Playing with pure intervals in this key, particularly in the octave just described, is very difficult; in the second octave it is somewhat easier, but still difficult enough. From the E flat" to the second, F", is not so troublesome as it was in the lower octave. It must, however, be played with less breath than E flat", otherwise it will be too high,

especially if the E flat" is not tuned perfectly. The G" is stronger, A flat" somewhat weaker, B flat" stronger, and C", D", and E flat" just as strong. The fingerings in these keys are not so hard, but clear intonation is difficult and always remains a great art not often found. E flat minor ascending is handled like E flat major with respect to breath, except that the minor third, G flat', must be played quite weakly if it is not to be too high. Descending, the E flat", D flat", C flat", and B flat" are played with the same force; A flat" is weaker, G" is stronger, F" is weaker, E flat" is again stronger, D flat" is just as strong, at which point you must turn the flute out a little, and C flat", B flat', A flat', G flat', and F' are weak, and E flat' is again strong. This great difference in breath applies only to a flute which has no more than an E flat and a D sharp key. On a flute with F, G sharp, B flat, and C keys, all notes are played with equal force except G sharp and B flat, which you must help with the breath, since they also double as A flat and A sharp, for A flat is a comma higher than G sharp, and A sharp is a comma lower than B flat.

27.

The key of E major is another of the difficult ones. Although you know how the whole step from E' to F sharp' must be played from the discussion of the D major scale, even more cautiousness is demanded here. If the progression D', F sharp', G sharp' is to be bearable, the F sharp', which

is too low and strong in relation to both E' and G sharp', must carefully be made higher and more pure, so that the passage from E' to G sharp' is not too conspicuous. Here you see clearly once again that the fingering alone cannot help it. He who does not know how to establish the wind in this progression would bring a fine scale to the world, especially on flutes that have essentially no voicing, and where the F sharp' is nearly as low as the F'. The E' gives way if even a little too much breath is used, and it becomes sharp; the G sharp' also, and the F sharp' between them is so fixed that it cannot be made higher by the wind alone, but only by using the means just described at the same time. On a stringed instrument it is much easier and more sure if the ear knows how it should sound, and when the fingers are comfortable, you need no further instruction. After this step, you come to the fourth, A'. This A' must always, without exception, be played with a moderate breath, or, if you want to give this note more power, you must use the means described above, namely turn the flute in a little and push the lips forward a little so the tone becomes lower, thereby keeping the pitch proper but giving the note more strength. B natural' and C sharp" remain as they were in the D major scale. If you have a D sharp key on your flute, the following D sharp" in the scale, as the seventh, will be played just as strongly. If you have no D sharp key, the D sharp" played with the E flat key, if it is

properly tuned, will be too high, and you must moderate the wind as much as possible, turning the flute in to make the note lower. If the E flat is perfectly tuned, however, it can hardly be made low enough. Also, in this case, the preceding C sharp" must be made a little higher so that the false step from C sharp" to D sharp" is not too noticeable. The octave E" will then be played somewhat weaker. If you observe this carefully, you will no longer truthfully say that the flute is easy to play. If you do not observe this and play as most have always played, you will always play unclearly, as has constantly happened in the past, and still happens presently. He who cannot observe what is said here, or considers it to be superfluous and plays in the common way, is no flutist and will certainly never become one. He will be tolerated as a player for dances and the like, but for a recital for masters and true virtuosos, he is worthless.

28.

In the second octave, this progression of E", F sharp", G sharp", on the common flute with common fingering, is even more intolerable than in the lower octave; in particular, the G sharp" is much too high in relation to the F sharp" and cannot be made low enough with the use of any mannerisms. On my flute, which is tuned and fingered differently to make it cleaner, the wind, nonetheless, must still be moderated if the G sharp" is not to be too high.

This malady is certainly completely remedied on a flute with many keys; indeed, I tune the F sharp a little lower on these flutes than on the flutes without these keys, so that those who are not yet familiar with the keys can handle the flute without using them, as though no keys were on the flute. If you can use the keys, however, you need only to use the F key along with the F sharp, and it will be perfect. Take the following G sharp' also with the key, and because the E', played with caution with the D sharp key, is stronger on my flute, you have a bright, clear, and even quality in the E', F sharp', G sharp' progression, in the lower as well as the upper octave, and thus a proper and beautiful trill, which will be discussed further in its place. The A" and B" here will be handled just as in the D major scale. This progression of A", B", C sharp", is constituted nearly like the E", F sharp", G sharp". The B" is somewhat flat, and it must be flat if you want a usable A sharp". Like all the tones differentiated by # and b, the difference between A sharp" and B flat" can be found in the fingering chart, as well as how they must be played according to my fingering on my flutes. D sharp" and E" use so much wind that they speak easily and well without being shrill. The E minor scale ascending is played just like E major until the minor third, G, the altered step, and here the intervals E, F sharp, G, A, B, will be handled, descending as well, like the intervals in the D major scale.

29.

The F scale is not one of the difficult ones, but it must be handled with care nonetheless, since F, as a fundamental tone, is unstable and can easily be sharp, thereby ruining the whole scale. Thus, in order to know if you have this F correct and pure, you must ask its neighbors G' and A' for advice, so that you do not make the F too high by blowing strongly, for it needs only a little breath. G' and A' have already been seen in the D major scale. B flat' is a faint and dull tone needing little wind; although the following C" is also a faint and dull tone, it demands more wind than the B flat. D" uses still more wind, E" uses less, and F" needs still more. In the second octave, the scale is easier and can be played with nearly even wind to F"', except that the higher notes must be propelled a little more intensely. This F"' has a defect in that it is a little difficult to make it speak; if you play an E"' quickly and connect it to the F"', it speaks more easily. You can help this, of course, but the other tones will suffer. It is better on a flute with G sharp and B flat keys. Because B flat is found in this scale, remember that when the flute is properly voiced, you must finger it 1, 2, 4, 5, 6, 7, and not the common way with forked fingering, because this fingering, namely with 1, 3, is A sharp. If, however, the forked fingering were a pure B flat, and if the fingering with 1, 2, 4, 5, 6, 7,

were also a pure B flat, A sharp would be lacking, and the flute would be tuned falsely. If you want to convince yourself of this, play the chord F sharp", A sharp", C sharp", and you will hear the beautiful intonation. F sharp" is flat, A sharp" is sharp, and C sharp" is still sharper. This defect is not found in my flutes. If you want to temper the B flat" so that it can be used also as an A sharp", like the piano, you must also be able to temper the F sharp" as on the piano, which cannot happen because the F would then be so sharp that it would pass neither as a fourth nor a fifth to B flat, and would not be at all usable as E sharp", the major third to C sharp", to say nothing of several other cases. That is namely the case with E flat and D sharp. The minor scale on F is much more difficult than the major, although it is the same as the major ascending until the minor third A flat (which tolerates only very little wind),⁶ but it is not the same descending. Indeed it seems as though the tones from high to low, F", E flat", D flat", C", B flat", A flat", G", and F" must be played with even force, but it is not so. If the flute has only one key, the E flat" will be flat, the D flat" too sharp, the C" too flat, B flat" too flat, and A flat" too sharp. If you want to try to make the C" pure without the E flat key, the D flat" will become still sharper, and the A flat" will be nearly unusable. I will gladly grant that on the common flutes, sometimes by chance, some tones can be procured

⁶Translator's parenthesis.

differently, but they will certainly not be pure, because what one gains, another will lose. Truthfully, this tuning is not so easy, and he who wants to tune a flute so that all tones are good and usable must have an absolute knowledge of the ratios of the intervals and of the connections of tones on the flute; otherwise it is impossible to be able to tune it properly. Perhaps I can make known through the printed word that building a flute which can be properly tuned is possible. Although the progressions named here have their difficulties, they are fewer than in the lower octave. The first [difficulty] is that the E flat" against the F" is flat. The following D flat" is even flatter, and must be played by turning the flute out and blowing more forcefully. Then comes C", a miserable step. The preceding D flat" needed a forceful breath and was very strong and bright, but this C" must be played with less force, and it is weak and dull. If you have a C" key on your flute, you can play your D flat" strongly and clearly, and the following C" will be just as clear and bright. B flat' and A flat' without keys are also feeble tones, and use little wind. G' and F' are already known.

30.

Although the key of F sharp major is not a principal one in which one would compose an entire piece, it is nonetheless used on the flute, so you must know the scale. It is one of the hardest on the flute, as much in fingering

as in pure intonation. I have already said that the F sharp' is a little flat on the flute, and must be a little flat because of the aforementioned reasons. Therefore if the first step, F sharp-G sharp, is to be proper, you must try to make the F sharp higher by the means described above. The G sharp' is faint and weak, demanding little breath, as is A sharp'. B' and C sharp" have already been mentioned, but the worst progression is D sharp", E sharp", F sharp". The E sharp" is by nature sharp, and seems even sharper in comparison to the preceding well-tuned D sharp", and the following flat F sharp". If you have no D sharp key on your flute, but only an E flat key, the D sharp" is then also too high and the C sharp" below it is too low, and the progression C sharp", D sharp", E sharp", F sharp" becomes even worse. As you proceed into the second octave, the sharp G sharp" follows. If you can play B flat" properly with 1, 3, on the flute, the A sharp" will consequently be too high, B" will be too low, and C sharp" will be excessively high. Now this is a terrible progression present in all common flutes, and proper tuning of these notes is so lacking that even with all manner of help, it is impossible to present the intervals correctly. I have therefore tried to bring the tones F sharp", G sharp", A sharp", and C sharp" into proper perspective, partly through changes in construction, and partly by means of fingering. And of course an educated ear, together with the proper embouchure,

also helps. You will hear the difference if you play the triads C sharp", E sharp", G sharp" and F sharp", A sharp", C sharp", how horrible they sound.⁷ And this mistake will certainly not be corrected by any instrument builder, because there is more involved than just the design of the flute. On a well-tuned flute, with keys for the dull notes, everything is pure, arousing a feeling of pleasure since those intervals that were heretofore seldom heard clearly on the flute can now be played so pure, even, and bright that it seems as though it is no longer the same instrument. Certainly playing with these keys is more difficult than without them, I confess, but if you have an instrument that is properly voiced in both cases, namely with and without keys, you can always play it as though it had no keys until you are in the position to use the keys little by little in your playing. There are flutes all over now that have keys, but what intonation! Just recently I had two of them, a German one and an English one, and I can attest that practically none of the intervals were good, and the flutes had a bad, rough, and woody sound. If you set your prejudices aside and try my flutes in their present state, you will find a rich, bright tone, both high and low, which can be produced very easily, and the intonation in all keys can be clean with a proper embouchure. If you play leaving the whole embouchure hole uncovered, or if you do not cover it

⁷Tromlitz means here that he has corrected this pitch problem on his flutes with the addition of keys.

enough, you certainly cannot succeed; the embouchure hole must be over half covered if the tone is to be firm, strong, and pure. However, if you go over the mark and cover it too much, the tone will be thin, pointed, and worthless. [To return to our discussion of key signatures], f sharp minor is, to be sure, somewhat easier, but it still contains several of the difficulties named above. In ascending, nothing is changed except that the major third, A sharp, becomes the minor third, A. The rest is like the major scale. Descending, it is easier. You must watch only that the C sharp" and G sharp" are somewhat lower than usual.

31.

The key of G major is one of the easiest, having no dull tones except C". If the player has a good and somewhat acute embouchure, he can help himself in making the C brighter, but he must be able to hear correctly, otherwise I would not advise him to use this fingering; some flutes speak more brightly with the fingering 2, 4, 5, 6, but with some you must add the key, 7, taking care that the tone does not become too sharp. Those who leave the embouchure hole quite open, not covering much, cannot use this fingering, but rather must make do with the usual. The rest of this scale should be played like the D major scale. G minor is more difficult, because the ascending scale has the minor third, B flat', a faint tone, and the descending scale has the step from F" to E flat", which is never pure because the

F is usually sharp, or can be too high by too much wind, and the E flat is always flat on common flutes. This can be a false step on a well-voiced flute also, if the F is not handled gently. In descending in the second octave, I remind you again that the B flat" on a well-tuned flute should not be played with 1,3, but rather with 1, 2, 4, 5, 6, 7, which is the actual B flat". The handling of the remaining intervals has already been mentioned often.

32.

Now we come to the G sharp scale, but because [the key of] G sharp practically never occurs on the flute, we will take the A flat scale, which is found more often. A flat' is a dull and faint tone, and must therefore be handled cautiously. The second, B flat', is the same, and C" is not much better, but requires somewhat more wind. Now comes the worst step, from C" to D flat". This D flat" is, as already stated, flat. The fingering helps a little, but not enough, so you must try to make it pure through the means named above. The C" below it, and E flat" above it (if it is pure),⁸ must be managed by the player if he can hear. F" must be played with caution, G" remains as formerly, A flat" requires more wind than A flat', B flat" conforms to the given rule, and if the flute is properly tuned, the remaining tones are played with regular fingerings and usually with even wind. The scale of A flat minor

⁸Translator's parenthesis.

is very difficult, but appears only very seldom. You must know, nevertheless, how to help yourself in the following situations. A flat minor is like the other minor keys, where nothing is changed in the ascending scale except the third, which is minor, and is C flat" here. This progression: A flat', B flat', C flat", D flat", E flat", F", is difficult, and must be handled with much care. A flat' and B flat', even C flat" when played with 2, 3, 4, 5, will sound weak, but if you play C flat" with 1, 7, it will become higher, so the first fingering shown is cleaner. D flat", as often said, must be raised enough that it makes a clear second with E flat". F" is again weak. Descending, A flat", G flat", F flat", and E flat", with proper fingerings, are played with even wind. D flat" again requires the necessary caution. C flat" with 1, 7, is slightly sharp, and B flat' and A flat' are weak with equal wind. In the second octave, the whole ascending scale, on one of my flutes with my fingering, can be played with equal wind except that the minor third, C flat", can be made a little higher played with 1, 4, 5, 6, 7, and if played with 1, 4, 5, 7, the tone will be a little lower. Descending, A flat", G flat", F flat", the G flat" and F flat" must be a little higher. Even E flat" will stand a little [raising], and the remaining [are played] as already said.

33.

The following scale, A major, seems easy to many, but with respect to pure intonation, it is not. Consider only the step from F sharp" to G sharp"; F sharp" is much too low and G sharp" is much too high, and all types of mannerisms will not help. The rest of the scale is played like D major. The C sharp" in this scale, however, is more noticeable and seems sharper than in D major; one can hardly help himself, though. On my flutes, F sharp", G sharp", and C sharp" are much purer, and you can easily help yourself with the aid of my fingering. If it were true that this key had no other difficulties, then you could avoid them, like in E major, C sharp and F sharp minor. If you will only read the preceding and the following, you will be satisfied. In the key of a minor, everything applied to related tones in this key and in previous discussions will be observed. To repeat all of these steps would make the matter far too detailed.

34.

In the B flat major scale, if the E flat" is tuned properly, the rest of the progression is easy to find. Only the fifth, F", like the B flat" itself, must be handled carefully. In the second octave, it is easier to play clearly because it can be played with even breath. B flat minor is more difficult, because here again the D flat" appears as the minor third, and ascending, the rest is played

like the E flat major scale. In descending, notice the progression, A flat", G flat", F", E flat", D flat", so that the clarity in intonation is retained. What needs to be observed has already been said. If the flute is well tuned, these difficulties diminish.

35.

C major is easy, and you must be careful only of the steps E to F, where neither note must be played too strongly, and the step B" to C", where the B" is often too flat, and you must try to raise it. All of this has already been said. In c minor, again you must be careful of the interval E flat to F, so that the E flat is not too low and the F too high. Descending, play C", B flat", A flat", G", F", E flat", D", and C" with even wind until the [bad interval] already named, F-E flat. It is more difficult in the lower octave, because the first three notes are faint, thus using less breath, and the step, F' to E flat', which is bad as in the second octave, needs again to be noticed; play F' very weak, and E flat' with force.

36.

The nature of C sharp major is very much like F sharp and G sharp major; whole pieces for the flute are not written in these keys, but on account of their kinship with related keys, you should know them nonetheless. In the progression C sharp", D sharp", E sharp", the E sharp" must be especially noticed because, since it must also

serve as F[♯], it is much too high, and you must try to play it so that it is about a comma lower than F. It is pure on a flute with an F key. The step from E sharp to F sharp is thus much too small, because E sharp is too high and F sharp too low. If you wanted to play G flat instead of F sharp, next to the other tones it would be as much too sharp as the F sharp is too flat. The step from F sharp to G sharp is again impure, since the G sharp is commonly too high; with the D sharp key, and fingered 1, 2, 4, 6, it becomes better. In the lower octave this step is even more conspicuous, since the F sharp[♯] is strong, and G sharp[♯] against it is very weak. The following A sharp[♯] again is not pure, because it is completely missing on flutes where the fingering 1, 3 makes a pure B flat[♭], and if B flat[♭] is used in the place of A sharp[♯], it is much too high. B sharp on a flute with only one key, fingered 2, 3, 4, 5, 6, 7, is a little too low, and must be raised; if you have a D sharp key, however, it becomes pure when played 2, 4, 5, 6, 8. The octave C[♯] is much too high on the common flutes, and it is not possible to lower it by diminishing the wind: it lacks too much. On my flutes with my fingering, it is pure. C sharp minor is easier, especially descending. Notice especially the step from G sharp[♯] to F sharp[♯]. The actual nature of all of these scales can be found in the chapter on key signatures.

37.

Hopefully, you will excuse me for being somewhat ceremonious here when you consider how important it is for good intonation to learn to recognize the different treatments of the scales. How is the beginner to find this out if no one tells him? So this is written for those who do not know; those who already know it may skip over it. Because so much depends on good intonation, and so much is missing on the flute, you cannot be diligent enough in learning this. Therefore do not view this discussion as superfluous until you see first, after close scrutiny, that it is worthless. However, I am convinced enough that these things are valuable. If you cannot or will not trouble yourself to do all of this, at least it is not the fault of this Instruction if you cannot learn it.

38.

When practicing the scales and equality of tones, you must always see to it that the upper and lower octaves are equally pure, so that one octave is never higher or lower than the other, or that isolated notes are not occasionally too high or too low in the upper range or lower range. You must therefore proceed with much care, and it will not be superfluous if, for example, you play through a few tones in the lower octave, like D', E', F sharp', G', several times carefully until you feel that they are in tune. Then

play the same notes up an octave, tuning them individually with the lower octave, checking carefully to see that they make a pure octave, and practice this until you are certain that all is correct. Continue with the rest of this scale: A', B', C sharp", D", proceeding in the same manner. Do this with all the scales until you are in the position to play them all with a firm, good, and as far as possible, equal tone quality. If you try to compare different intervals in this manner, also, like D', F sharp', with the upper octave D", F sharp"; then D', G', with D", G"; D', A', with D", A'; D', B' with D", B"; D', C sharp" with D", C sharp"; D', D" with D", D"', etc., you will profit greatly from this exercise and will be able to undertake this practice with pure intervals as well. But you will not learn to play perfect octaves until you have a firm understanding of the smaller intervals; otherwise the octaves will certainly not be pure.

39.

With this useful exercise you certainly will find out first of all what is important about the force of breath here and there, and whether you use more breath in the low range or the high range. Through experience, I have found that to produce a crisp and bright tone, I use more wind in the lower register than in the upper. Quantz is of another opinion, with which, after the closest examination, I cannot agree. He says that "high and low are produced

with even wind if you only push the chin and lips a little forward as you go from low to high,"⁹ and he uses the example D' to D". That this D' to D" is allowable is certainly true, but if you try it with other intervals, it will certainly not be tolerable. The reason D' to D" is so easily accepted is the lifted first finger. The flute can now play no other note, and the D will be stated if you do not move the lips from their place. In other octaves, other notes [overtones] are always possible, since no change is made in the fingerings, or if the fingers change, even more notes are possible, and that is not at all acceptable. If the octaves of some notes did speak with only the pushing forward of chin and lips, they would not be perfect, because the tone would be flat due to the lack of wind support. Because of this, the pushing forward and pulling back of lips and chin will certainly never find acceptance, especially in rapid passages. In order to attain your goal, you need only push your lower lip forward as far as necessary, and the chin will follow naturally. The upper lip does not go forward at all, but rather pulls back a little through this motion, and presses itself more firmly on the lower lip. Thus the slightly stronger wind is directed properly, and the tone speaks firmly and well.

⁹Quantz's discussion in this regard is mainly geared against a mechanical flute player built by Jacques de Vaucauson, which had to overblow the octave merely by increasing the wind since it had no lips, p. 54. However, Corrette, p. 27, maintains the wind must be increased for higher notes, "always saving it, not making it so loud that the tone shakes."

Just try it, pushing your chin and lips forward while playing a low note, and you will hear that, without attention to the direction of wind, the octave is not pure. Therefore when jumping from low notes to high, you must push only the lower lip forward, whereby the upper lip pulls back a little. But you must also use a little stronger wind, because the pushing forward of the lower lip makes the embouchure hole smaller, and therefore the tone is lower. The opposite occurs when you pull the lower lip back to play low notes, and the upper lip pushes forward, thereby making the embouchure hole larger, demanding more wind. The upper octave, as already said, has a smaller opening, so you would use less wind, but somewhat more force with it. Just experiment and hold a low D as long as you can, then hold a high D as long as possible, and you will see that the lower note takes more wind than the higher one. You can hold the high D three or four times longer than the low D. This does not apply to the dull notes in the lower octave. All of this has its value, but you can say that the wind does not determine the tone, rather the tone determines the wind. Be careful, then, that you have a beautiful, even tone quality in the high and low register, together with good intonation, and you will also have the right wind.

Chapter Seven

About Present-Day Key Signatures

1.

All Key signatures and intervals originate from the seven primary tones in music: C, D, E, F, G, A, B, and from the neighboring notes changed by accidentals. The seven primary tones are called an octave when you repeat the first one after the seventh. The range of an instrument is described in terms of how many octaves from low to high can be played on it.

2.

This arrangement of beginning the octaves on C is taken from the piano, and to avoid causing confusion, I will also use it, although the flute does not have a low C', but rather the lowest note is usually D'.¹ Therefore when you are dividing octaves on the flute, think of them from C' to C". Now in order to distinguish the separate octaves, we have marked them with lines above, so that you will know which octave is under discussion. The lowest octave on the flute is called the one-lined; the next one

¹Numbers of these flutes with one or two open foot keys were made around 1800, the oldest probably being those made by Richard Potter in London (c. 1777-8). Instruction books therefore began to provide for the "newly-invented" keys, as witness Tromlitz. (Adam Carse, Musical Wind Instruments [New York: Da Capo Press, 1965], p. 90.)

is the two-lined; and the one farthest up is the three-lined (see examples y, z, a).



Generally one plays only to this A^{'''} on the flute.² This system of differentiating octaves, taken from the piano, is also used on all instruments and the voice as well. More is said about this in the chapter on fingerings.

3.

The neighboring tones are created by either raising the primary tone by placing a # next to it, or lowering the primary tone by placing a $\flat$ next to it. The syllable "is" is added to the name of the note raised by a sharp, and the syllable "es" is added to a note lowered by a flat. The exception are "es," "as," and "b", which have already been explained. With the #, C becomes cis; D, dis; E, eis; F, fis; G, gis; A ais; H, his; and with the $\flat$, D becomes des; E, es; F, fes; G, ges; A, as; H, B; and C, ces. From this, a scale of all diatonic, chromatic, and enharmonic tones is created (see example b).

²Hotteterre, p. 45, maintains any note above E^{'''} is forced and unusable, but he gives fingerings up to G^{'''}. Quantz, p. 42, gives fingerings up to A^{'''} without discussing the usual range, but Tromlitz claims Quantz never played above an E^{'''}. Corrette, p. 30, gives fingerings up to A^{'''}.

b)



A diatonic scale consists of a sequence of tones in which half steps and whole steps are set together, as we will see later. The sequence of tones C-C sharp, D flat-D, E-E sharp, F-F sharp, G-G flat, G sharp-A, etc., is a chromatic sequence. And the tones C sharp-D flat, D sharp-E flat, E sharp-F, G sharp-A flat, etc., are called enharmonic tones. The enharmonic tones C sharp-D flat, D sharp-E flat, E-F flat, E sharp-F, F sharp-G flat, G sharp-A flat, A sharp-B flat, B-C flat, have only one key on the piano, but on the flute they are differentiated.³ If you could use all these as individual keys, there would be more on this instrument than on the piano. The most common are C, (C sharp-D flat), D, (D sharp-E flat), E, F, (F sharp-G flat), G, (G sharp-A flat), A, (A sharp-B flat), and B. From these now, whole scales can be made, but they are not all equally usable. D flat is more common than C sharp, E flat is more common than D sharp, A flat is more used than G sharp, and B flat is more common than A sharp. This also applies to the flute.

³Tromlitz, p. 83ff., and Quantz, p. 46, are in agreement. The large semitone (C-D flat) has five commas, but the small semitone (C-C sharp) has only four.

4.

All of these scales are either major or minor. Before we examine what major and minor are, we must become acquainted with the keys themselves and their intervals. A scale is a row of notes contained in the range of an octave, defined by one tone, and made up of whole and half steps. These tones in their sequence, according to their measured steps, are called a scale. Such a scale or key is either major or minor. Here we will consider first the major mode. This you will recognize by the major third. If you can count up two whole steps from the fundamental tone without being hindered by the key signature set on the staff at the beginning, you have a major third. This counting is always from low to high. We will now deal with these keys. A major key consists of the fundamental note. The second is an interval contained in two notes; the third, an interval contained in three notes; the fourth, with four notes; the fifth, with five notes; the sixth, with six notes; the seventh, with seven notes; and the octave, containing all eight notes. An interval is the distance from one sound to another, and from the difference in the boundaries of the sounds comes the difference of the intervals. The intervals of a diatonic scale are composed of whole and half steps. We must first recognize these if we want to make such a scale.

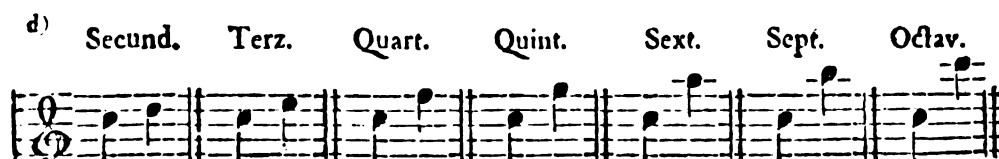
5.

The half step is either large or small, as has already been shown in the chapter about fingering. In the diatonic progression of tones, we use only the large half step, namely that which arises from two different notes (see example c).



A whole step consists of two half steps, one small and one large. For example, C to D is a whole step which contains two half steps found in the following manner: here, C is a sound which, with respect to another tone, makes a half step, a whole step, or another larger interval. Thus, C to C sharp is a half step, indeed a small half step, and C sharp to D is again a half step, but a large one. These two half steps make up the whole step, or the second C to D. The following interval, the major third, consists of two whole steps, namely from C to D is one, between which lies C sharp as just shown, and from D to E is the second, between which D sharp lies. These two whole steps make up the major third C to E. The fourth consists of two whole steps and a half step: C-D is a whole step, D-E is another whole step, and now E-F is a half step, the first large half step we have in the diatonic progression of a major scale. Nothing more lies between E and F, so we get the fourth C to F. The

fifth consists of two whole steps, a half step, and another whole step. C to F was the fourth, and we now add another whole step, namely F to G, and we get the fifth C to G. To get the sixth, we use four whole and one half steps; thus when you add another whole step to the fifth, C-G, you get the sixth, C to A. The seventh contains five whole steps and one half step. When you add still another whole step to the sixth, C-A, the seventh, C-B, arises. You come to the octave by adding the second half step, B'-C'', and now you get the octave C'-C'', which includes five whole and two half steps. These, then, are the intervals of a major scale (see example d).



6.

In this manner all major scales can be found if the beginner always has the whole and half tones of every interval in his mind, but this does not happen. Because the different keys are recognizable by the number of sharps and flats set at the beginning, the beginner is well-advised to learn the key signature of every scale by heart, and to know the number of flats or sharps and their positions, so that he can know what each scale is called in each occurrence. It has always seemed to me that this means of learning key signatures, although it is both good and correct, is very

d
t
r
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E'

difficult for the beginner. The beginner does not notice the number and place of the sharps and flats. Also, he has no means of finding them again if he has lost them, so he must carry a slip of paper with him on which he has written them, so he can refer to it. The beginner is certainly forgiven for not perceiving them. Learned ones and those who only think they are wise sometimes forget, too, or they never have known the sharps and flats, and yet they will still distort them, etc.

7.

In order to be more certain, I will give a means here of helping the beginner, founded on the rule given earlier, which is easy to understand, namely when you want to know a major scale and its key signature, go up from the fundamental tone in whole steps, except from the third to the fourth, and from the seventh to the octave, which are half steps each time. In this way, you will be able to find even the most difficult keys and their key signatures. Although I have already shown in [paragraph 5] the intervals in C major, I will reiterate it, nonetheless, to make it completely clear, and try to establish the scale according to the given rule. The fundamental tone is C¹. From this you go up a whole step to D¹ (a whole step is one between which a half step lies, as here C sharp¹ lies between C¹ and D¹, etc.). From this D¹, continue up another whole step to the major third, E¹. To get the fourth according to the rule, go up only a

half step, namely from E' to F'--this is the position of the first half step in a major scale. From this fourth, F', go on up another whole step to get the fifth, G'. From this G', go again a whole step farther to get the sixth, A'. Continue up another whole step to get the seventh, B', and from this B', go a half step up to the octave, C". This last is the position of the second half step in the major scale. Now you have established the C major scale, and you know that no sharp or flat stands in the key signature (see example e).



In this key of C major, all the tones belonging to the diatonic scale lie naturally, so that it is not necessary to establish the intervals with a flat or a sharp. Outside of A minor, this is not so in other keys, except under certain restrictions, as we shall see later. Therefore the intervals in each key which do not already lie in the diatonic scale, as in C major, must be altered by means of a flat or sharp, so that they fall into such a diatonic scale as C major.

8.

In order to comprehend this more clearly, let us try the key of D major. The fundamental tone is then D'. From this D', a whole step upward brings us to the second, E'. From this E', go on up another whole step. In the diatonic

C major scale, F' follows here, but because this F' in relation to the preceding E' is only a half step, and in this scale we need a whole step, a half step must be added, and the F' raised by means of a #, becomes F sharp'. This now is a major third to D', which consists of two whole steps: D'-E', and E'-F sharp'. From this major third, F sharp', go up only a half step farther to the fourth, G', and from this G', up another whole step to the fifth, A'. From this A', go up another whole step to the sixth, B'. From this B', go again up a whole step to C sharp" (B' to C sharp" is a whole step, and C" lies between). From C sharp" go up again a half step to the octave, D". Now this scale is D', E', F sharp', G, A', B', C sharp", D", and in this manner you have found the key signature for this key, namely F sharp and C sharp, which is shown by the two sharps on the staff at the beginning. Example f shows the scale with its signature.



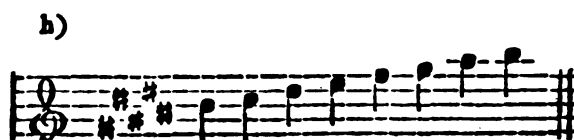
9.

We will examine still one more remote key, namely B major. Proceed always according to the rule. The first whole step is from B' to C sharp". The following whole step

is from C sharp" to D sharp", which is the major third. From this D sharp" to the fourth, E", is a half step. Continuing on a whole step farther is the fifth, F sharp". Another whole step up is the sixth, G sharp". From G sharp", a whole step up comes to A sharp", the seventh. Now just a half step creates the octave, B". Between B' and C sharp" lies C". Between C sharp" and D sharp" lies D". Between D sharp" and E" lies nothing, as the half step to the fourth. Between E" and F sharp" lies F", between F sharp" and G sharp" lies G", between G sharp" and A sharp" lies A', and between A sharp" and B" lies nothing, as the second half step of the scale (see example g).



Now you see how much this scale has gained from the sharps. Five sharps, C sharp, D sharp, F sharp, G sharp, and A sharp are used, which are placed on the staff (see example h).



10.

I hope you will understand me now and be able to find the rest of the major scales by yourself according to this rule. Now let us take one of the scales with a flat.

E flat, made by the flatting of E, will be the fundamental tone. The first whole step up from E flat is F, and E lies between as a half step. The second whole tone from F is G. From this G, as the major third to E flat, go up a half step to the fourth, A flat. You cannot take G sharp instead of this A flat. G to G sharp is a half step, to be sure, but just a small half step which we cannot use in the diatonic scale. Here I must remind you that there are many who do not take this A flat for what it is, namely passing as A flat, but rather they say G sharp is just the same. This mistake is found with musicians who generally received poor instruction, and therefore have no theoretical knowledge. These people say D sharp can pass for E flat, F sharp for G flat, etc., or they say it because on the piano, G sharp and A flat are the same key. However, these enharmonic notes cannot be taken for a single note, because if you want to call an A flat a G sharp, for example, on the violin you would then always finger G sharp, even if A flat appeared. But that is not allowable, even to those who would say G sharp and A flat are one and the same, because [such a string player] would always finger A flat on the second string of the violin with the fourth finger, and G sharp with the third finger. I believe I have already written about this elsewhere. Thus I repeat, if you can call A flat G sharp, you must also be able to write G sharp for A flat. You would then get an improper scale. For example, G sharp

stems from G, and G is the major third to E flat. If you then raise the G to G sharp, you would get an augmented third to E flat, and no fourth at all. I will say nothing here about the mathematical ratio, since the beginner would not understand it. Just consider it now as follows, and it will be clearer: E flat stems from E, and the fourth to E is A, so if the E is lowered a half step with a flat, becoming E flat, so the fourth, A, in order to retain the proper ratio, must also be lowered a half step with a flat, so you get A flat as the perfect fourth to E flat. From this you can see that G sharp and A flat cannot be considered as one note, because they are a comma apart. This also applies to E flat and D sharp, G flat and F sharp, A sharp and B flat, and all enharmonic tones. Now back to the scale. The whole step following A flat is B flat, the fifth. The whole step to C is the sixth, and still another whole step higher, D, makes the seventh. From D up another half step is the octave E flat. Example i shows the scale, and example k shows the key signature.



I have taken only these few keys in order to show the procedure, and hopefully they will be sufficient. Now I will show you the rest of the major keys, or major scales,

next to their process of origin, so that you can see and understand them more easily (see example 1).

b

The image displays six major scales, each consisting of two staves (treble and bass clef) and a key signature. The scales are arranged in three pairs. Each scale includes fingerings (1-5) and scale degrees (1, 2, 3, 4, 5, 1̇) above the notes.

- G dur.**: Treble clef, one sharp (F#). Notes: G, A, B, C, D, E, F#, G.
- A dur.**: Treble clef, two sharps (F#, C#). Notes: A, B, C, D, E, F#, G#, A.
- E dur.**: Treble clef, four sharps (F#, C#, G#, D#). Notes: E, F#, G#, A, B, C#, D#, E.
- Fis dur.**: Treble clef, five sharps (F#, C#, G#, D#, A#). Notes: Fis, G#, A#, B, C#, D#, E#, Fis.
- Cis dur.**: Treble clef, six sharps (F#, C#, G#, D#, A#, E#). Notes: Cis, D#, E#, F#, G#, A#, B#, Cis.
- Des dur.**: Bass clef, five flats (Bb, Eb, Ab, Db, Gb). Notes: Des, Eb, Fb, Gb, Ab, Bb, Cb, Des.
- Gis dur.**: Treble clef, six sharps (F#, C#, G#, D#, A#, E#). Notes: Gis, A#, B#, C#, D#, E#, F##, Gis.
- As dur.**: Bass clef, six flats (Bbb, Ebb, Abb, Dbb, Gbb, Cbb). Notes: As, Bbb, Cbb, Dbb, Ebb, Fbb, Gbb, As.



The first line shows the origin of the scale, which occurs either through a sharp or a flat, and the whole and half steps are shown by the numbers standing over the staff. The second line shows the scale with its key signature standing at the beginning. In the D sharp major scale, on the major third and major seventh, the simple sign x appears, which raises the note a whole step. The origin of the x is this: in the D major scale, F sharp is the major third. If you raise the D a half step to D sharp, the F sharp, as the major third to D, must also be raised a half step, just as the D was raised by a sharp. Now the F sharp is already raised by a #, and since it must be another half step higher still, another # must stand in front of it. Now two #s stand in front of the F, as seen

in the D sharp major scale, and this tone is called F double sharp, or fisfis; however, because two #s might cause some confusion, a simple x has been contrived to have the same effect as two #s, and to stand in their place. This tone is now raised a whole step, and would be played on the piano as a G. On other instruments it would be played a little lower, so that it would make a perfect major third to D sharp. This applies also to the seventh in this scale [C double sharp], and to the seventh in the G sharp scale.

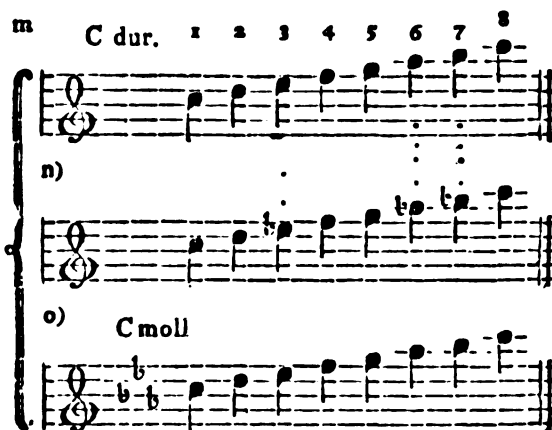
12.

We will now go to the minor keys. They consist also of five whole and two half steps, but their positions are different from the major keys. All of the preceding major keys can also be made into minor keys. A minor scale is one in which the third above the fundamental tone is minor, that is, when it consists of one and one-half steps. The positions of its half steps are, according to its actual formation, from the second to the third, and from the fifth to the sixth. However, in your practicing, the second half step comes from the seventh to the octave. ascending, but from the sixth to the fifth descending. This will become clearer with the following analysis. All other tones found in these scales are a whole step apart.

13.

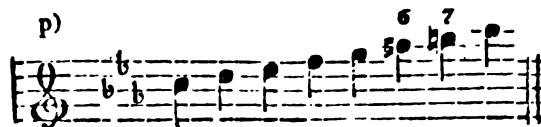
Here, too, you should learn the keys in the usual manner from the key signature, since the same difficulties

arise which were found in the major keys, and since the key actually arises not from the key signature, but from the major keys. I will give a rule here for the beginners. I assume that if you have practiced the major scales and can play them easily, the minor scales will be very easy to find, because they are made from the major. The rule is short and easy: if you make the third, sixth, and seventh of a major scale a half tone lower, you will have a minor scale; the remaining intervals stay the same. Example m shows a major scale on C; example n shows the third, sixth and seventh lowered a half step; thus arises the key signature in example o. This now is the C minor scale: C', D', E flat', F', G', A flat', B flat', C".

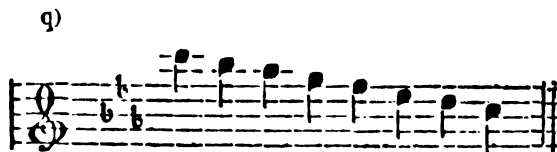


However, since the seventh note of the scale must be a major interval from the fundamental, you must play B here instead of B flat. According to this rule then, the progression from the fifth to the octave would be G, A flat, B natural, C. However, since the step from A flat to

B natural, a minor sixth to a major seventh, is augmented, which is contrary to the pure diatonic progression, you must leave the sixth as a major sixth to the fundamental, in order to avoid the bad interval, and to give the chord built on the fifth a clear second. So you take A natural instead of A flat, and the progression from the fifth to the octave reads G, A, B, C. This happens in ascending minor scales (see example p).

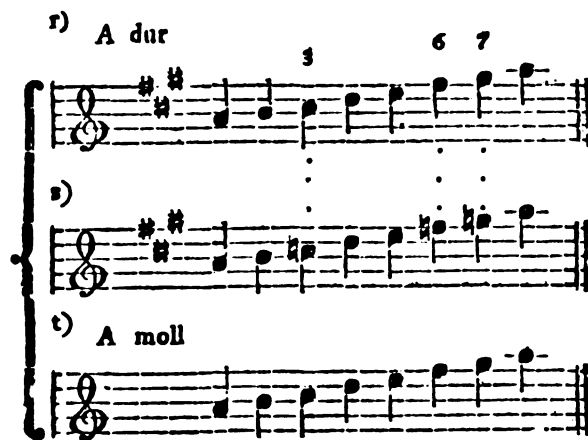


In a descending scale, the minor seventh and minor sixth assume their places again, and the scale is played according to the key signature, namely you proceed stepwise from C to B flat and A flat to G (see example q).

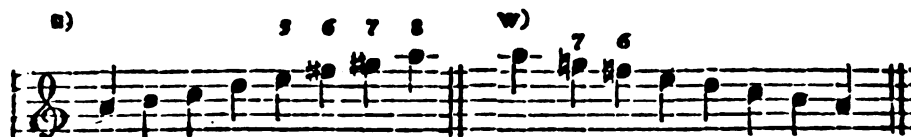


14.

When you want to change A major to A minor, proceed in the following manner: set down the A major scale (example r), and make the third, sixth, and seventh a half step lower by taking away the sharps (example s), and you get the key of A minor (example t).



In example s, the sharp is taken away by a natural sign and voided, so you get a scale with no key signature, as in example t. Also, this is the only minor key with no signature, like the C major scale. What was said about ascending and descending in the C minor scale, with respect to the sixth and seventh, applies here as well. See example u for ascending and example w for descending scales. All the remaining minor scales will observe this rule.



15.

These two keys are sufficient for learning the arrangement of major and minor keys. I will add the others without further comment (see example x).

x) G dur.

3 6 7

G moll.

5 6 7 7 6

auff. abst.

The image shows a musical score for two pieces. The first piece, 'D dur', is in D major and 3/4 time. It consists of two staves. The first staff has a treble clef and a key signature of two sharps (F# and C#). The second staff has a bass clef and a key signature of two sharps. The melody is written in the first staff, and the bass line is in the second staff. The second piece, 'D moll.', is in D minor and 3/4 time. It also consists of two staves. The first staff has a treble clef and a key signature of one flat (Bb). The second staff has a bass clef and a key signature of one flat. The melody is written in the first staff, and the bass line is in the second staff. The score includes fingerings (3, 6, 7) and a repeat sign.

E dur

H dur

H moll

Fis dur

Fis moll

Cis dur

Cis moll.

Des dur

Two systems of musical notation. The first system is for 'Des dur' and the second for 'Des moll.'. Each system consists of two staves. The first staff of each system has a treble clef and a key signature of three flats (B-flat, E-flat, A-flat). The second staff has a bass clef and the same key signature. The first staff of 'Des dur' has a triplet of eighth notes (F4, G4, A4) and a sixteenth note (B4) marked with a '3' and a '6' above it. The second staff of 'Des dur' has a triplet of eighth notes (F4, G4, A4) and a sixteenth note (B4) marked with a '3' and a '6' above it. The first staff of 'Des moll.' has a treble clef and a key signature of three flats. The second staff has a bass clef and the same key signature. The first staff of 'Des moll.' has a triplet of eighth notes (F4, G4, A4) and a sixteenth note (B4) marked with a '3' and a '6' above it. The second staff of 'Des moll.' has a triplet of eighth notes (F4, G4, A4) and a sixteenth note (B4) marked with a '3' and a '6' above it.

Gis dur

Two systems of musical notation. The first system is for 'Gis dur' and the second for 'Gis moll.'. Each system consists of two staves. The first staff of each system has a treble clef and a key signature of three sharps (F-sharp, C-sharp, G-sharp). The second staff has a bass clef and the same key signature. The first staff of 'Gis dur' has a triplet of eighth notes (F-sharp4, G-sharp4, A-sharp4) and a sixteenth note (B-sharp4) marked with a '3' and a '6' above it. The second staff of 'Gis dur' has a triplet of eighth notes (F-sharp4, G-sharp4, A-sharp4) and a sixteenth note (B-sharp4) marked with a '3' and a '6' above it. The first staff of 'Gis moll.' has a treble clef and a key signature of three sharps. The second staff has a bass clef and the same key signature. The first staff of 'Gis moll.' has a triplet of eighth notes (F-sharp4, G-sharp4, A-sharp4) and a sixteenth note (B-sharp4) marked with a '3' and a '6' above it. The second staff of 'Gis moll.' has a triplet of eighth notes (F-sharp4, G-sharp4, A-sharp4) and a sixteenth note (B-sharp4) marked with a '3' and a '6' above it.

As dur

Two systems of musical notation. The first system is for 'As dur' and the second for 'As moll.'. Each system consists of two staves. The first staff of each system has a treble clef and a key signature of three flats (B-flat, E-flat, A-flat). The second staff has a bass clef and the same key signature. The first staff of 'As dur' has a triplet of eighth notes (F4, G4, A4) and a sixteenth note (B4) marked with a '3' and a '6' above it. The second staff of 'As dur' has a triplet of eighth notes (F4, G4, A4) and a sixteenth note (B4) marked with a '3' and a '6' above it. The first staff of 'As moll.' has a treble clef and a key signature of three flats. The second staff has a bass clef and the same key signature. The first staff of 'As moll.' has a triplet of eighth notes (F4, G4, A4) and a sixteenth note (B4) marked with a '3' and a '6' above it. The second staff of 'As moll.' has a triplet of eighth notes (F4, G4, A4) and a sixteenth note (B4) marked with a '3' and a '6' above it.

Dis dur

3

6

7



Dis moll



Es dur

3

6

7



Es moll



B dur

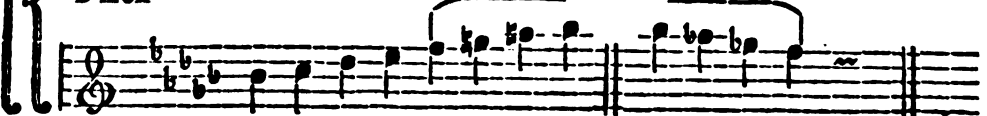
3

6

7



B moll





In each of these examples, the first line contains the major scale, the second line shows the formation of the minor scale, and the third line shows the key signature of the minor scale and the ascending and descending forms from the fifth to the octave and back. In the D flat minor scale, a double flat appears on the sixth note, which lowers it a whole step. Since this sixth should be a half step higher in the ascending scale, we put a natural sign, but also still a $\flat$ before the note, so that the player sees that the natural sign takes away only one flat, not both flats. The descending scale has the double flat again before this note. In the G sharp minor scale, notice the x on the major sixth, found also in D sharp minor.

16.

These then are the major and minor keys. Each musical piece is written in one of these keys, which you recognize at the end of the piece. For example, if the piece ends formally on D, you say the piece is in D. If this piece has a major third and you are not prevented from using it,

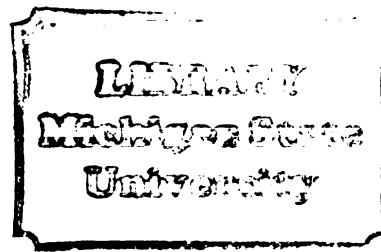
either by its position or by the key signature at the beginning, the piece is in D major. If it has a minor third, it is in D minor.

17.

To determine the key is the first thing a beginner must observe in the analysis of a piece. When he has done this, then he deals with the scale in order to become acquainted with the intervals, so that once and for all he knows what occurs relative to tone and fingering in that key. When this is found, investigate the measure, its division, and the tempo. You will find which keys are the most usable for the flute in my "Treatise on Playing the Flute," which actually belongs here.⁴ Because this treatise is not in everyone's hands, I will add this material to the last chapter of this work, which will be a summary of the whole, and will repeat it literally. That chapter is of utmost importance, and should be read to the beginner.

⁴Abhandlung vom Flötenspielen (Leipzig: Breitkopf und Härtel, 1786).

THESIS
v.2





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Chapter Eight

On the True Speech of this Instrument,
or on the Means of Properly Regulating the Airstream,
Both in Slow and in Rapid Passages,
Which is also Called Simply the Single Tongue

1.

Everyone who knows to some extent at least what good performance is, must understand and admit that for a good performance on this instrument, you must observe a steady regulation of the airstream. Without this regulation of the airstream, neither lyric nor technical passages can be clearly and expressively performed. Or if you do not regulate the airstream at all, but rather let it pass unhindered, as often happens, the music becomes smeared together and is ground out like an organ grinder, making everything very unclear, as Quantz says, "sounding like a bagpipe." You can understand more easily how this sounds if you imagine playing an entire passage on a stringed instrument with only one stroke of the bow. This cannot happen, because the bow must move according to the nature of the music, and according to the rules of artful playing, so you can readily see that with wind instruments, a similar, established movement of the airstream is necessary to insure an understandable performance. This movement and regulation of the airstream can be brought about only by the tongue, which lets the air through as the music and the rules demand. By comparing a stringed instrument with the

flute, you will see that what the bow is to the stringed instrument, the wind is to the flute, and that what the arm is to the bow, so the tongue is to the airstream. No other means of regulating the airstream is possible. Occasionally, although seldom, passages can be marked by the breath, but this treatment cannot be viewed as a rule, or applied in general, because the performance then would be distressingly poor.

2.

From now on, this treatment of the tongue will be called "tongue-stroke." This expression is not exactly proper to the matter at hand, because the words "tongue-stroke" will produce the idea that the wind must be thrust out by the tongue. This cannot and does not produce a good effect, but instead produces harsh, dry playing, to which the nature of a good song does not correspond. When you do not know the correct way, and turn this way, then that way, something quite different comes out--you feel then as though you are on the wrong path, but cannot help yourself. Probably we all miss the correct way, because we seek no fast rule whereon we can build--all is merely supposition. And if we also do not have a firm method, the objection can never be raised that another performance is arbitrary, although even such an unregulated performance can sound good. Many experiments, long practice, and experience have convinced me that a sure and regulated

control of articulation is possible, after which all else flows smoothly. Therefore I cannot sanction the term "tongue-stroke," as it pulls all sorts of evil consequences behind it. First of all, the constant thrusting of the tongue will displace the lips, and because of that, the airstream will become so restricted and overly exerted that the tone, upon release of the tongue, will sound harsh, and through the movement of the tongue, the flow of the tone will be hindered. Also, the tone will then be ruined, because water will be brought between the lips when the tongue is thrust out, which is a detriment to a good tone.¹ You are also greatly hindered by this thrusting of the tongue when playing fast passages. Without a rule, you have no expedient way to use the wind in the manner that the music demands, and art then becomes immaterial. He who does not know the proper rule to regulate the airstream leaves much to chance, and the piece will be performed differently each time it is played. Another reason for proper articulation is that you can change the interpretation of a passage at will. With this form of articulation, you certainly cannot promise the good performance of a good singer, not to mention the inconvenience of each so-called "thrust" of the tongue, often a half inch or more out of the mouth.

¹Quantz also argues that the term "tongue-thrust" is a bad one, p. 72. Tone production results from the withdrawal of the tongue rather than the stroke of it, in his opinion.

3.

I would like to present my experiences, clothed in rules, as clearly as possible, so that they are readily applicable. In a brief treatise about playing the flute, which has come out here from Breitkopf,² I said, and I say again that our model is the good singer, who we must seek to imitate. Singing was known earlier than the playing of instruments, and there is no doubt that playing instruments is only an imitation. It is certain that no singer would try to imitate an instrument in his performance, especially one which by nature cannot deliver a tone free from restriction. It must have happened out of necessity that a singer, wanting to do well, having no master who could sing, and who was not in a position to help himself, had to perform all the notes on an instrument. Certainly no one would believe such a person to deserve the title of singer. Here I am not thinking of such a model, but rather a subject full of talent, musical knowledge, and thoroughness. When such a good singer is our model, we must seek to imitate his performance, both in lyrical phrases, which should be flowing, gentle, and full of emotion, as well as in running passages, which should be clear and expressive. He does not produce his tone harshly, but rather each tone is gently marked by him so that the tones always follow one another in a like manner. One note is therefore not

²The aforementioned Abhandlung vom Flötenspielen.

louder or softer, harsher or gentler, brighter or duller than the notes around it. The notes then seem to hang together without being stuck together, and are expressed separately, and each interval, even the smallest and the widest, is correct. Stronger and weaker playing, or light and shade in a performance, is not meant here, but rather only the smooth, clear, and even performance. On our instrument we must seek to imitate all of this. We can articulate the tone with the chest, to be sure, and it is necessary, but to begin each tone this way as a general rule will not do, as it will produce a poor and disgusting effect. Therefore we must seek to find a different means of accomplishing this, and that is none other than the tongue.

4.

It is difficult to say how the tongue should move in every instance, especially when we do not know exactly which characteristics of movement assure a clear and intelligible response. It is impossible to say that in this instance the tongue should move thus, and in that passage it should be placed or moved differently. Certainly no one would be able to imitate that, since the movement of the tongue is not seen. Therefore another means is necessary. Upon close scrutiny, you will notice that the tongue, in its movement to produce a tone, has created syllables which, when combined, create words, and finally a language which

comes from the general application of this arrangement of syllables. Quantz has already dealt with this in his Essay on the True Art of Flute Playing.³ There, however, his whole instruction about articulation is applicable to only a few passages, and is not thorough. Therefore his rules are only simple attempts which the student should play with a master who understands them, as Quantz himself says. So I ask here if it is not possible to supply a written instruction which the student can understand without help from a teacher, for what good is a written instruction if you must first have a teacher to clarify it? In that case you would take the teacher and put the book away. Quantz says, "with each individual note, speak the syllable ti or di." I believe, however, that the letter i does not produce the best effect on the flute, because this pronunciation pulls together all inner parts and muscles of the mouth, and makes the tone pointed. If you try it and listen carefully, you will hear it is so. If you do not want to

³See pages 71-85 in the Quantz book. It is true that Quantz's discussion is not so thorough. His chapter on articulation is divided into three sections. The first describes the use of the tongue with the syllables ti (for quick, lively passages), and di (for slower, more sustained passages). The second section deals with the word tiri, used with dotted notes:


 ti ri ti ri ti

For further discussion of this pattern, see Tromlitz, *infra*, p. 271, and Hotteterre, p. 59. (Their syllables are tara and turu respectively.) The third section in Quantz deals with the double tongue, using "did'll." Further discussion of the double tongue is found in Tromlitz's ninth chapter.

agree that this inner arrangement of the mouth has an effect on the tone, why is it then that the tone of a wind instrument always has so much similarity to the natural voice of the player, if it is not for the inner structure of the mouth compelling the tone or the language? Even I have noticed wind players who, when they speak, speak through their noses, or as one says, sniff, so that the tone on the instrument is also nasal. If you cannot produce a light tone on the flute, the *i*, although you might believe it sounds the same, is not spoken as *i*, but rather as *u*, and that has an even worse effect.⁴ This gives me cause to choose another vowel which makes the tone fuller, rounder, and lighter, and it is my feeling that none is more becoming than *a*. You must endeavor to pronounce this *a* as nearly as possible like *a*, and you will find that the expansion of the throat and other necessary parts will make the tone fuller.⁵ Instead of *ti* or *da* then, the syllables *ta*, *da*, or *ra* arise, whose use and proper application will be clarified in the following.

5.

The pronunciation of the syllable *ta* or *da* occurs when you touch the tip of the tongue up behind the teeth on the

⁴Hotteterre uses only two syllables, *tu* and *ru*, both containing the *u* vowel, p. 59. Corrette calls this word *turu* "absurd," but gives no other, p. 34.

⁵Bear in mind that the German '*a*' is pronounced like the English '*ah*' as in *fa*ther. It also bears mentioning that the German '*i*' is pronounced as our alphabetic letter '*e*'.

dental palate, harnessing the air, and when the tongue is taken away, the syllable ta or da is spoken; also at the same time, the throat and inner cavity must be opened as wide as possible so the sound will be full. Now we come to the

First Rule

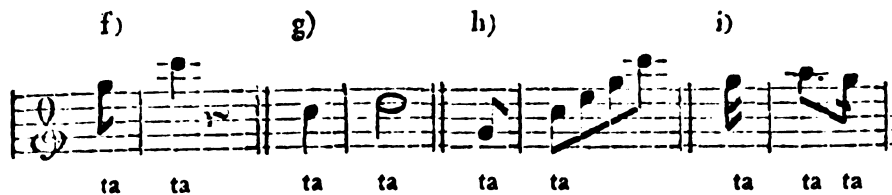
This ta, when it stands alone, is used thus: 1) with single notes, whether they are stressed or unstressed (see more about stressed and unstressed notes below), that is with notes that stand alone without connection to other notes of the same value (see examples a-e).



Note: Example a shows clear single notes of differing values which are not actually connected with one another, so each must be articulated separately. There are, of course, cases where you slur notes of differing values. This belongs not here, but rather with the exceptions which will be discussed later. Example b is the same, because notes of differing values follow one another. In example c, a half note follows a quarter, and this quarter is not connected with the half note, so it is stated alone with ta, as is the quarter note after the half. In example d, since the quarter note stands alone again, it is articulated with ta, and the following notes are spoken also with ta,

which is understood from the above. In example e, the third note stands alone and has no connection to the notes preceding it, so it is spoken ta. If the composer wishes the notes played together, an arc must stand over them, and this treatment belongs then with the exceptions.

2) On upbeats (see examples f-i).



Note: The small note before the down beat, which is called the arsis, and which is not accented whether it occurs at the beginning or is found in the middle, is spoken with ta, as is the note following it, which leads to another part of the rule.

3) When strokes are written above the notes, and the music has bass notes in similar fashion, they are played thus (see examples k and l):



4) After notes which are dotted, ta is used on the short note as well as the longer note which follows. It is the same when rests precede the short note (see examples m and n).

m)  n) 

Note: You will learn from the following whether the note after the short one must be spoken with ta. For now we will stick with the rule.

5) When the next to last note in the measure is separated musically from the last note, ta is used for the last note (see example o).

[illegible]

6) When three notes of the same value, such as three quarters, three eighths, three sixteenths, make a whole, as in $\frac{3}{4}$ meter, three quarters; $\frac{3}{8}$ meter, three eighths; or a single figure like a triplet, the last note, as the weakest, is always articulated with ta (see example p).

p)

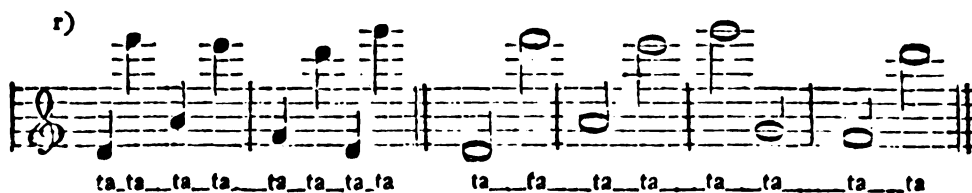
ta ta ta ta ta ta ta

Note: When the first two notes of a figure like this are followed by more of the same figure, they should be played as explained below.

7) When several notes of the same value stand in the same line or space, they all use ta or da when they should be more or less bound together (see example q).



8) Ta is used with large leaps, and especially with long notes (see example r).



9) The note after a trill, the note after a sequence, or a note which makes an ending, even if there is no preceding trill, are all played with ta (see example s).



10) When dots stand over the notes, each note is indeed articulated with ta. However, in order to express the dot most effectively, the t from the following ta must be connected to the present ta, creating the syllable tat, and the tongue will be suspended until the t from the following

note is bound to the present note, and the syllable at follows (see example t).

t)



Note: You must carefully distinguish here between strokes and dots over the notes. Strokes over the notes signify, to be sure, that all the notes are to be especially marked, or spoken with ta, but not articulated shortly; rather, they must be somewhat long, so you always articulate tatata. Dots over the notes, however, must be crisp and performed as above: tat-at-at. If the music copyist does not notice the difference and uses strokes and dots to mean the same thing, the player must be very attentive, so that he does not take one for the other, thereby destroying the intention of the composer.

6.

The examples shown here are the most common, and you can easily see where the syllable ta should be used. It is not possible to single out every example and show it here. The following will clarify everything. We come now to the

Second Rule

When two notes of equal value appear together, the first being accented and the second not, and when they are

7.

Although two notes of equal value can be articulated with *taa* correctly, it does not necessarily follow that when four notes occur, the second two can be a repeat of the first two, because the repetition of *taa* prevents the connection of the last two with the first two. This connection must be preserved, however, if we are to imitate the good singer. You cannot let them smear together, because they should be clear, equal, and articulated like the singer makes them. Therefore another method is necessary here, and you must now articulate the second *t*, which would hinder the connection, as an *r*, and instead of *taataa*, the articulation becomes *taaraa*.⁶ In this way, all notes are articulated, but yet they hang together, and the tongue can move lightly and fluently without tiring. With this method, each note will be clearly performed according to its innate value. It is the method for keeping rapid passages always clear, otherwise the performance would be cloudy or rough.

⁶ See Tromlitz's discussion of the rolled *r*, *infra*, p. 326. North Germans tended to use a guttural *r* produced in the throat, which does not come through as articulation on the flute. Farther south and in parts of France, the *r* is rolled with the tip of the tongue. David Lasocki, in the introduction to his English translation of Hotteterre, gives a thorough discussion of phonetics which links Hotteterre's articulation word "*turu*" quite closely to notes inégales. "The *ru* syllable should be accented--in length especially. This is why it is pronounced on the first of a (long-short) unequal pair of notes in the French style," p. 22.

Third Rule

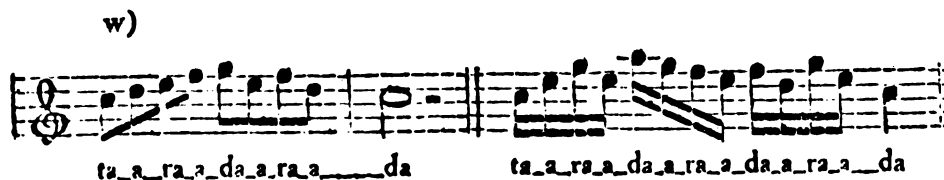
When four equal notes come together, they are articulated taaraa such that the first is ta, the second is a, the third is ra, and the fourth, a (see example v).



Note: Although similarity of tone and figures must be carefully observed in long and sustained passages, it is also necessary that you change the ta to da following the original ta, so that it is as nearly as possible like the ra. Thus originates the

Fourth Rule

When more than four equal notes, or a whole passage of equal figures follow one another, in order to maintain the similarity to ra, the ta in the following example is changed to da (see example w).



Note: Just as here the letters and syllables hang together, so the tones must hang together such that there are no spaces. The breath must always be continuous, and the tongue must move without interrupting the breath. This must be shown then by the composer, either by means of a rest or an ending. Those who cannot make the da gentle and

similar to the ra, can change this da into ra, so that except for the beginning, there is no da. Those, however, who cannot speak a ra into the flute, can reverse it and change the ra into da.*

*Since this connection of letters cannot be expressed by printing, you must make yourself aware of this by making a straight line between the letters. Letters standing quite close together such that no line can be written between them, must be understood by themselves. The student is asked not to leave this note out, which is also applicable to the following section.

8.

In order to use this ta, da, and ra coreectly, it is necessary to have a precise understanding of long and short, or as can also be said, of accented and unaccented notes, so we will attempt to obtain this precise understanding before we go any further. Of two equal notes, the first is intrinsically longer than the second. We will label it long, because the stress or emphasis, or it can be said, the accent falls on it. The other is intrinsically shorter. Ta, da, or ra always come on the long note because of the nature of the situation, and ta then stands alone while da and ra are used in connecting notes, as shown earlier. If I take four notes of equal value, the first is long, the second is short, the third is long, and the fourth, short, so the first is articulated ta (here ta is connected to other notes, but is only used at the beginning), the second is a, the third is ra, and the fourth is again a. Whether the notes are half notes, quarters, eighths, or sixteenths,

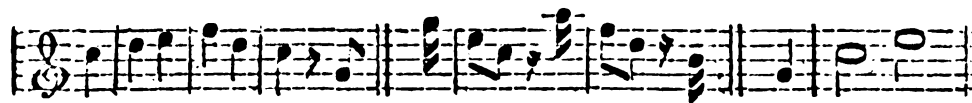
the usage is the same. In the connection shown, the unaccented notes always use a. If an unaccented note stands alone, however, it is articulated ta, whether it appears at the beginning or in the middle, and the accented notes which follow it are articulated ra, as seen in example y. If the phrase, however, begins with a stressed note, it uses ta. From this you learn that the ta can be used on unaccented notes as well as on accented notes. Ra and da, however, are never used except on accented notes, and ta must always be used preceding them, or the tone must already be there if you want to use ra. Therefore da and ra are never used at the beginning. First, look at an example of accented and unaccented, or long and short notes, where the phrase begins with accented notes (see example x).

x)

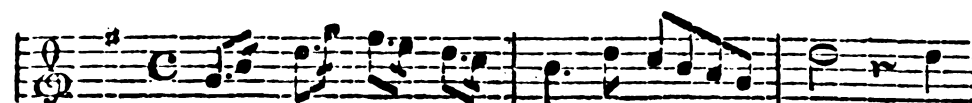
lang kurz, l. k. l. k. l. k. l. k. l. k. l. k. l. k. l.

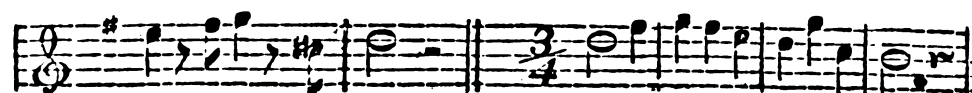
tā-ä-rā-ä tā-ä-rā-ä tā-ä-rā-ä-dā-ä-rā-ä-dā

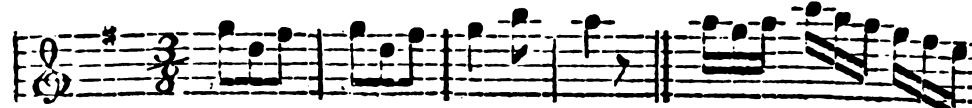
In all of these examples, the strong note is at the beginning, articulated consequently with ta, and then ra appears on the next accented note. When the phrase begins with a short note, ta is always used, to be sure, but the following note does not use a as in the preceding, but rather ra (see example y).

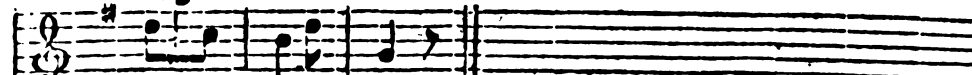
y)
 k. l. k. l. k. l. k. k l. k. k. l. k. k. k. l. k.

 tā_rā_ä_dā_ä_rā tā, tā_rā_ä, 'ä_rā_ä tā tā_rā_ä

From this you learn that ta can be strong or weak, but ra and da are always strong. Unstressed notes are also those which have a dotted note preceding them, or those whose better part is taken away by a rest, or notes in 3/4 or 3/8 meter, or triplets (see examples z, a, b, and c).

z)
 l. k. l. k. l. k. l. k. l. k. l. k.


a)
 l. k. l. k. l. k. l. k. l. k. l.


b) c)
 l. k. l. k. l. k. l. k. k. k. k.


k. k. l.


The short notes described here always use ta, and the following note is spoken ra, as already stated. More about this later. He who cannot speak ra with the tip of the tongue, but speaks it instead in the throat, as do most from

Nedersachsen, must instead make do with da, because the ra spoken in the throat produces no effect on the instrument. This da must be spoken very gently, however, so that it makes the same effect as the ra, because the ra is much preferred, as will be seen in the following.

9.

Sometimes it happens that the word taaraa must also be used backwards, as raadaa. It is noteworthy that the ta can only stand at the beginning, and when it follows ra, as here in raadaa, da must always be used. The reasons for this have already been stated. One can never begin with ra, however; ta must always precede it so that the sound is already there, into which you speak ra. From this we get the

Fifth Rule

When ta comes to stand on a short note, whether at the beginning or in the middle, the following note must always be spoken ra (see example d). If two notes of equal value follow, usee raa (see example e). If four equal notes follow, then use raadaa (see example f). There are times when the following note is a wide leap, in which case ta must be repeated (see example g).

d)

The musical notation for example d) is on a single staff with a treble clef and a key signature of one flat (B-flat). The notes are: G4 (quarter), A4 (quarter), Bb4 (half), A4 (quarter), G4 (quarter), F4 (half), E4 (quarter), D4 (quarter), C4 (half), Bb3 (quarter), A3 (quarter), G3 (half). The lyrics below the staff are: tā_rā tā_rā, tā_rā tā_rā tā_rā dā_rā dā_rā. The first two notes (G4, A4) are grouped under 'tā_rā', the next two (Bb4, A4) under 'tā_rā', the next two (G4, F4) under 'tā_rā', the next two (E4, D4) under 'tā_rā', and the final two (C4, Bb3) under 'dā_rā'.

l. k. l. k. l. k. l.



rāḍā_rāḍā_rāḍā_rāḍā_rā.

e) f)

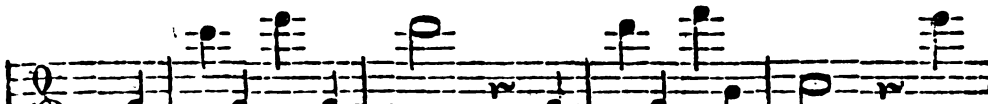
k. l. k. l. k. k. l.



tā_rā_a tā_rā_a tā_rā_da_a_rā tā_rā_da_a_rā.

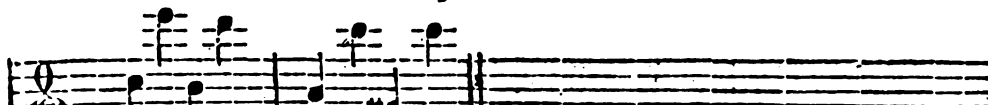
g)

k. l. k. l. k. l. k. l. k. l. k.



tā_rā_tā_rā_tā_rā_tā_rā, tā_rā_tā_rā_tā_rā_rā, tā_rā_tā_rā_tā_rā_tā_rā.

l. k. l. k. l. k. l. k.



tā_rā_tā_rā_tā_rā_tā_rā.

Note: In example d, a single long note follows, which is spoken ra. Farther on, two equal notes appear which are on the same pitch, but which are separated with rests, so they cannot be articulated with taa or raa, but must be spoken separately as in Rule 5. So that the tones retain more similarity, you do best to speak da rather than ta on the short one. In example e, only two equal notes follow the first note in the first two measures, and these are articulated raa. In the remaining two measures (example f),

four equal notes follow the short note, and these use the inverted word raadaa. Example g shows large leaps where the ra is not effective, so in each place as long as leaps occur, ta must be spoken. I remind you once again that the tone must be supported when using ta if ra is to follow. If you do not want to support the tone, you cannot let ra follow, or the tone will not speak clearly, and not to connect the tones would result in a bad performance. Thus originates the

Sixth Rule

The tone on the flute must flow along in a connected manner, and must not be broken except where the phrase ends, by a rest, or where the composer has put strokes or dots over the notes, expressing his desire that the phrase be interrupted, but the tone continues and is connected, and you articulate constantly. Consider the tones as a thread with which you connect the notes, using speech. One more example of the inverted raadaa will make this clearer (see example h).



Note: Here ta stands on the short upbeat note, and raadaa follows so the tone continues without interruption,

and must be supported until the † indicates the end of an idea. So that the following idea can better separate itself from the opening phrase, begin again with taa; otherwise the ideas would run together. Generally you must be very careful that you always alternate da or ta and ra, and only change when the passages and figures demand it. What is observed here in eighth notes applies also to quarters and sixteenths (see examples i and k).

i)



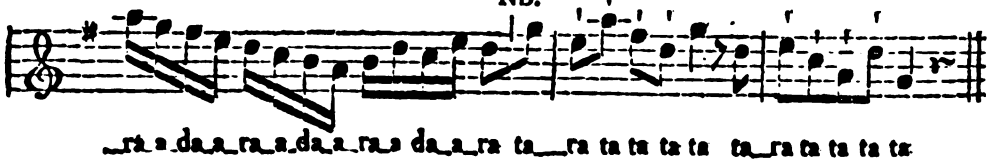
k)



NB.



NB.



Note: In example k, at both points marked NB, the two eighth notes are not handled according to the first rule, which states they should be articulated as two equal notes with taa; rather, the phrase ends there, and the notes must be separated, so the language must be arranged such that the last note is separated from its predecessor by ta. You can see the other places where phrases are ended by the use of rests, and also a phrase ends at the place marked ♪, and there can be a pause. The following section will deal with more of these figures.

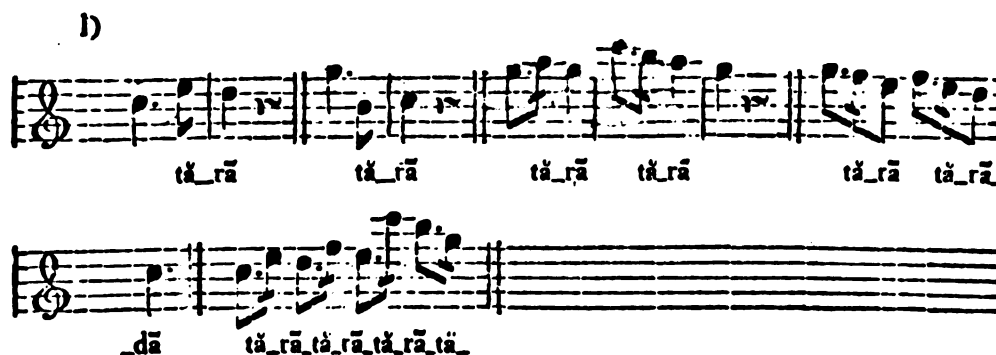
10.

According to the first rule, parts 2 and 4, all notes in the following figures are produced with ta in order to show that these notes, which are not connected to other notes of equal value, should be articulated separately. However, if a good performance depends on the stressed notes being played longer than their real value, and the unstressed notes being played shorter than their real value, it is not possible to give each note a ta, because the tongue, especially in rapid tempos, will not be able to speak quickly enough. If it were possible, it would be unpleasant to hear--stuttering and sounding very bad. In order to manage it properly, the stressed note after the unstressed one must always be given ra, so both notes will be expressed properly.

Seventh Rule

When an unstressed note comes after a dotted note, it receives ta, but the following stressed note receives ra.

From this originates the word *tără*, which will be used as long as the rhythmic pattern continues, even when leaps occur. (See example l.)



Note: These passages and figures executed with *tara* are best applied to lively and quick movements. In a moderate movement, and with gentle and agreeable performances, another usage, which is often shown by the composer, is preferable. Here we come to the

Eighth Rule

When the dotted rhythmic figure discussed in Rule 7 occurs in a moderate movement, and in a gentle and agreeable song, or is denoted by the composer with bowing, it is best articulated with *taaraa*. However, if the first long note with the dot is to be held quite long, and the short note is to be quite short, for the sake of equality, change the *ta* into *da* (see example m).



Note: Although I would prefer to put this figure with the exceptions, where you will also find it, I have discussed it with a rule contrary to its common usage. All of these figures will be played in rapid and lively passages as though the notes with dots were double-dotted, so that the short note is very short. For example, when these two notes comprise a quarter, sustain the first almost as long as a whole quarter, and in the instant that the second quarter should begin, release the short note, as the previous rule states, and both will arrive at the proper time. Notice also that when more notes stand behind the dotted note, these short notes are not especially emphasized, but rather are bound gently to the dotted note (see example n).

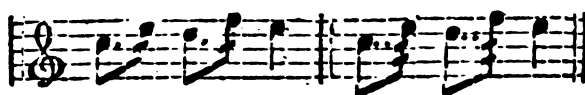


In slow passages, the first notes will also be sustained longer, to be sure, and the short, shorter, but not so distinctively as in a rapid movement; rather, they will be handled more quietly and gently. When a dot stands behind the second of two notes, they will not be separated, and each will not be especially marked, so you articulate them best with $t\ddot{a}\bar{a}$. However, the first may be so short that it seems as if you articulate only ta ; if more follow, use ra . This applies also when more than one short note appears before the dot (see example o).



A proper feeling in all these cases can easily be determined. Certainly the best and surest would be if the composer put two dots after the note if he wanted it very short, and one dot for the opposite, so the player would know what he wanted and would not confine himself to such a weak rule as the one above, whereby much would be ruined, since not everyone has the proper feeling (see example p).

p)



11.

We come now to the manner in which three equal notes and their connection to others should be handled. This was already mentioned under the first part of Rule 6, but it concerned only the third note as the shortest one of three. Whether the notes are in $3/4$ meter, three quarters; in $3/8$ meter, three eighths; or triplets of all values, they are all handled in the same manner.

Ninth Rule

Three equal notes which make a whole, namely a whole measure, as in $3/2$, $3/4$, or $3/8$ meters, or triplets, whether they be quarters, eighths, sixteenths, or thirty-seconds, are articulated with taada. If more groups of three follow one

another, articulate the first three with taada, and the following, to assure evenness and smoothness, with raada (see example q).

q)



Observe triplets in quarters, eighths, and sixteenths (see examples r, s, t).

r)



s)



t)

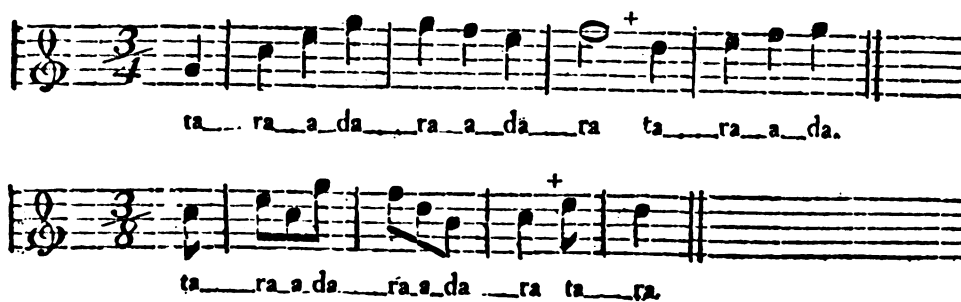


Note: You can see here how similar figures must be handled when they occur in sequences. With this method, the tongue will not tire when many of the same figures follow one another, and you will be able to articulate clearly. Only a new note, a rest, or a large leap will alter the

speech, as we will see in the following. This manner of articulating three equal notes will seldom be handled properly, especially where many triplets follow each other--the first two, or sometimes only the middle one, are frequently too short, and the last is too long, which creates a completely different figure--or the first is too long, the second too short, and the last one is cut off. This sounds very bad in rapid passages. Sometimes there is no articulation at all, and the notes are all slurred together with the stress on the last note. All of these usages are worthless. The triplet, as a special ornament in music, consists of three equal notes, although the second and third are less accented according to their intrinsic value, so you must take the trouble to make them as nearly equal as possible, and this happens best through articulate speech in which the three syllables, taada, are articulated as nearly the same as possible. You must be very careful that you do not let the d from the last syllable of this word taada hang onto the second syllable and change into t, or otherwise ta/a/da becomes ta/at/a, and the triplet will become uneven. To avoid this, do not articulate the d of the last syllable earlier than when the last note of the triplet should begin. Be very careful also not to bring the tongue on or between the lips when speaking d, or the tone, which should be continuous, will be interrupted. On the contrary, the tongue should be held behind the teeth,

and the da should be said very gently. The Nedersachsens can speak this d very well, although many of them have trouble with the r which they speak in the throat, and thus cannot be used here. The r must be spoken with the tip of the tongue if it is to be useful on the flute. Such a person must always use da instead of ra. Because the second group of triplets is not articulated taada, but becomes raada, the ra hinders the breaking off of the third note, and the line flows along more smoothly and beautifully. If you want to separate the third note, however, the proper word is no longer taada, but taadat, and now you cannot speak ra to begin the next triplet, because the separation of the last note from the preceding figure interrupts the tone, and after a separated note, ra cannot be used any better than at the beginning. On the contrary, you must simply speak taadat again, and this will certainly not produce a good effect. Above all, as earlier stated, ra can never be used either at the beginning or after a separated note, but rather there must be a note before the ra enters, and it must join securely with this preceding tone, which is always a shorter note. The variations of this figure will be found later. Now we will set forth a few examples in which the preceding word is interrupted. First of all, by a note of differing value (see example u).

u)



Then by rests (see example v).

v)



Interruption by wide leaps in 3/4 meter (see example w).

w)



And wide leaps in 3/8 meter (see example x).

x)



Note: In the first example, the flow of speech is interrupted at the note F under the +, and the following note begins with ta again. It is the same in the following

example of $3/8$ meter in the third measure at the C. In example v, the articulation is interrupted by a rest, and the following phrase starts again with ta. In the third example, the articulation is interrupted by wide leaps which you can see in the third and following measures. Here, the variation of speech pattern is not arbitrary, but rather is forced, usually by interruptions. However, he who has a firm, sure tone, and complete control over his instrument, does not need speech to vary these wide leaps, for they would then sound very unskilled and much too wide, as many of them now are. One searches for something in here, but I can find nothing. An illustration of the above example without changing the language is found in example y.

y)



You can certainly believe that this is quite good without making changes in the language, although not everyone would advise it. It has a better effect, however, than the foregoing; only in the last leap from D^{'''} to G['] does it not sound good. You would do better there to speak da on the note G['] than ra.

12.

All notes and figures will fit the aforementioned rules of speech. We are only missing the dotted note which, when combined with its followers, constitutes two beats or parts of a measure, and the note bound with a tie. This tied note, or the dotted note previously mentioned, will be spoken with a, h, or hat. This last syllable will be used when a stroke stands over the tied note, or in fast and lively passages when no stroke stands over the tied note. In moderately swift passages, had is better. In adagio movements, the t or d is almost completely left out, and only has or a is used with a very gentle breath.

Tenth Rule

When a dot stands behind a note which, with the following notes, makes a part or unit of the measure, speak hat or at in fast passages (see example z), and in slower places, say had or ad (see example a). This t or d is taken from the following ta or da, so that the following note receives only a. Also, in swift passages when a tied note or a tied note with a stroke above it occurs, hat or at is used (see example b). In slow passages, had or ad (see example c), in very slow passages, only ha or a is spoken with a very gentle breath, and the following note gets a (see example d).

2) *Allegro.* a) *Adagio*

tahat a.ra.a daat a.ra.a daat a.ra.a taad a.ra.a daad a.ra.a

b) *Allegro.*

dahad a.ra.a tahat a.ra.a dahat a.ra.a dahat a.ra.a

c) *Allegretto.* d) *Adagio.*

ta had a.ra.a da ad a.ra.a da ta a da ra a

da ha a.ra.a da a.ra.a da a ra a

Note: This hat, had, or ha will be spoken very gently, and you must allude to the h only slightly, for it is little more than a naked a, and it must be spoken with a very gentle breath, so that it is very like an h. In these examples, therefore, I have occasionally left out the h, because a softly-spoken a gives the same effect. In lively passages, the t comes on the dot, and the a comes on the following note, as already mentioned, and as you see in the first example. In slow passages, the d does not come on the dot, but rather stays with the following da, as seen in the first and second adagios. These triplets must be dealt with differently, as will be seen in the following rule. If similar figures occur in a rapid movement, the dot is

marked very little or perhaps not at all, rather the dotted note at the beginning is articulated with ta, and the following short note also uses ta; then the following long note uses ra (see examples e and f).

e) All. affai. f)

ta ta ra ta ta ra ta ta ra ta ta ra ta ra ta ra

ra ta ra ta ra

Eleventh Rule

When a tied note is the first note of a triplet, articulate the tied note with had or hat, and the two following notes of the triplet with aa. This is not as good, however, as if you retain the proper language of the triplet, which is taada, as much as possible, so that the tied first note of the triplet uses ha, the second note uses a, and the third, da, forming haada, which is more similar to taada and makes a much better effect (example g rather than example h).

g) b)

ta ha a da ra a da ra ha a da ra a da ta hat a a ra a da

ra hat a a ra a da ra

Note: The first example is arranged according to the proper speech of the triplet, and the second according to the given rule.

Twelfth Rule

When two notes of equal value appear, the second of which is tied to a following note, these two notes will not be played with taa according to the second rule, but rather they will be separated, and each will get ta, whereupon hat, had, or ha follows (see example i). When two notes follow a dotted note, everything remains as before, and the two notes following the dot use aa (see example k).

i) 1) 2) 3)

Andante.

ta.da.hat_a_ra_a_dada.had_a_ra_a_da.da_a_ra_a_da_a.

k) 1) 2) 3)

tahat_a_a_ra_a_da_a..ahad_a_a_ra_a_da_a_raad_a_a_ra_a_da_a_ra.ta

Note: Here in the first example, all three types of tied notes are shown. First, the two eighth notes are separated, because the second is tied [to a following note]. The tied note immediately following has a stroke over it, and therefore is articulated with hat. In example i (2), there is no stroke over the tied note, so you say only ha, and da comes on the following note. In example i (3), the

tied note gets a very gentle a, and the following note also gets a. In the second example, the dotted note is stopped somewhat with hat, followed then by a. In example k (2), the dotted note is already gentler, articulated with only ha, and followed then by daa. When these examples lie in connected and flowing movement, and when the note following the dot goes up or down stepwise, you would certainly articulate a soft ha on the dot, leaving out the t or d on the following two notes, and you would speak aa, which must come a little from the chest. In example k (3), the speech pattern just mentioned does not fit well, because the note following the dot moves by leap, and must therefore be spoken with daa. I remember instances, however, where the breath, or the ha, had, or hat had to be made very quietly, only slightly noticeable. Here is one more example of this last type (see example 1).



As is the nature of slurred, connected music, begin with ra in triple and in other meters, as the previous rule stipulates, and then when the ra is properly spoken, the note on which it comes will not be separated from its predecessor, and this is the advantage in using ra.

13.

In the previous section, most examples belonging to a proper rule were specified, and now we are missing only the rhythmic pattern we call "syncopation," with which we cannot use ra, and to which no other syllables than ta and taa are proper. Syncopation occurs when half of the second note belongs to the first note, and the remaining part of the second note similarly belongs to the first half of the third note, as seen in the examples below. In these figures, only the first and last notes use ta, while the notes between use taa, although the a must not be too strong, or it will produce a bad effect. From this we get the

Thirteenth Rule

When the middle of three notes is as long as the other two together, as seen in example m, and which is called syncopation, the first is articulated ta, or when two notes stand in that place, as in example n, tǎǎ is used. The second note, being in two parts, must be divided so that the main stress is on the second half of the note; therefore tǎ̃ is used, or in serene passages, dǎǎ, as in example o. Use tǎ on the shorter part, and ā̃ on the longer part, and on the third note, use ta or da again, or if there are two notes following the syncopated one, use tǎǎ, and if triplets follow, tǎǎǎ. When more notes equal in value to the syncopated note follow it, as in example p, they all use the same tǎ̃, and the final note is again ta.

m) n)

o) p)

ta_tāā_tāā_tāā_tā_ā_tāā_tāā_tā_tā

Note: In lively passages, use ta, and in more lyric passages, da. When this figure is written as in example q, you can see the short and long parts of the note more clearly, and the use of tāā is better understood.

q)

ta_tā_ā_tā, ta_tā_ā_ta, ta_tā_ā_ta

In this example, it is clear that the first part of this "fused" note is unstressed, and that the following ā should be emphasized more. You must be careful, however, that the two parts of the note flow together so that it sounds like one note. The beginner would do well, however,

to distinguish the two parts of the note clearly, so he becomes comfortable with the syncopation, and so he learns this means of articulation better.

14.

These are what I call rules of playing. You can certainly see that I have been quite brief with the examples in order not to run too far afield. However short the examples are, I think they are clear and instructive to the student, and while not every situation is exemplified, similarities are there which are sufficient to help overall. In the following, the exceptions to the aforementioned rules are given. Before I continue, however, I would like to try to bring everything heretofore discussed into one single example (see example 1).

Allegretto.

1) 16) 6) 5) 5) 10) 6) 5) 7) 10) 7) 13)

raat_ä_rä_ä_dä_ä_rä_ä tää_ä_rä_ä_dä_ä_rää_tä_rä tā_ä_dää_tä

13) 10) 7) 5) 10) 6)

rä_ä_dää_tä_rää_tä_rä_ä_dä_ä, taa_ta_raa_ta_raa_ta_raa_ta

6) 3) 1) 13)

_ra_a_da_a_ra_a_da_a_ra_a ta_a_ra_a_da_a_ra_a_da_da_a_ra_a_daa_ta

6) 1) 5) 10) 2) 6) 5)

_ra_a_da_a_ra_a_da_a_ra_da_ra_a_ta_a_ta_a_ra_a_da_a_ra_a,

1) 2) 6) 1) 2) 1) 10) 2) 6) 1)

ra ta a ra a da a rat at at at at at a a ta a ta a ra a da a rat at at at

a) 1) 13) 13) 10) 5) 1)

at at a a ta ta a daa ta ra a daa ta ra ta ra ta ra a da a, ta

(6)

ra a da a ra a da a ra a da a ra a da a ra a da a ra a da a ra a da a

13)

ra a da a ra a da a ra a da a ra a da a ra a da a ra a da a ta a

1) tr 1) 3) 3) 1)

ra a da a ra a da a ra ta ta da a ra a da a ra a da

1) 1) 6) 1) 13) 13) 12) 5)

ta ta ta ra a da a ra ta a daa ta ra a daa ta ra a da a ra a

9) 13) 6)

da a ta a da ra a da ra a da ra a da ra a daa ta ra a da a ra a da a

1) 2) 6) 1) 3)

ra_a ta_ta-ra-ra-da-a-rat-at-at-at_a-a-ra-da-a-ra-a-da-a-ra-da-a-ra-a

da a ra a da a ra a da a ra a da a ra a da a ra a da a ra a

da a ra a da a ra a da a ra a da a ra a da a ra a da a ra a da a ra a

da_a_ra_a da_a_ra_a da_a_ra_a da_a_ra_a da_a_ra_a da_a_ra_a da_a_ra_a

1)

A musical staff in treble clef with a key signature of one sharp (F#). The melody consists of eighth notes and quarter notes. Above the staff, there are four vertical stems, each topped with a small circle, indicating fingerings or accents.

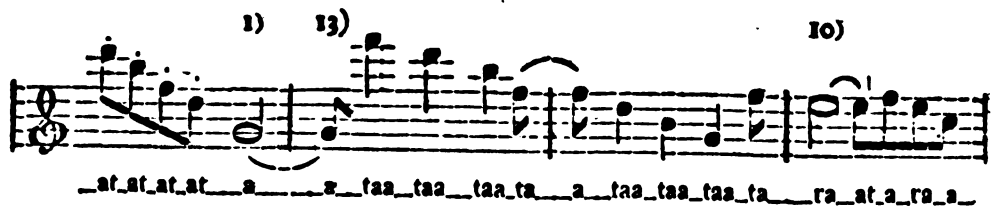
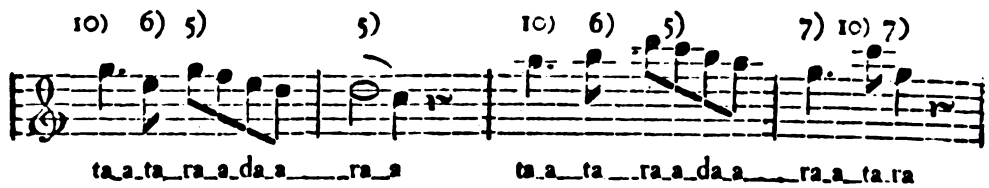
ta ta ta ta ta ta ta ta ta ta ta ta ta ta ta ta

3) 1) 9) 1)

ta ta ta ta ta ta ta ta ta a ra a da a ra a fa ta ra a da raf at at a a da raf at at

13) 13) 13)

da ra ra da ta da ta ra u da ta a da ta.







Before I proceed to clarify this example, I will quickly repeat once again the use of the aforementioned rules in proper language. A single note which is not connected to another of equal value, when it occurs at the beginning or at the beginning of a new phrase, will be articulated with ta, or, according to the nature of the music, with da. Such a note can be either accented or unaccented. A note of this kind in the middle of a phrase, connected to notes preceding it, will be articulated with ra or da. That I leave a single note, whether it appears at the beginning or starts a new phrase in the middle, to be articulated with ta, which would appear to be self-explanatory, cannot appear strange when I say that it does happen that many merely breathe on the note, or articulate it with bi. This bi occurs when you press the lips together, open them again letting the wind through, and proceed thus with each note. This procedure separates the tones from one another, but results in an odd and very

laughable manner of performance. Two notes of equal value, the first of which is accented, and the second of which is unstressed, will be articulated with $t\ddot{a}\ddot{a}$ or $d\ddot{a}\ddot{a}$. Four notes of equal value, the first of which is stressed, the second unstressed, the third again stressed, and the fourth unstressed, will receive $t\ddot{a}\ddot{r}\ddot{a}\ddot{a}$, or $d\ddot{a}\ddot{r}\ddot{a}\ddot{a}$. Three equal notes, as three quarters in $3/4$ meter, three eighths in $3/8$ meter, or triplets in any meter, are articulated $t\ddot{a}\ddot{a}\ddot{d}\ddot{a}$ or $d\ddot{a}\ddot{a}\ddot{d}\ddot{a}$. If more notes in the same metric pattern follow one another without large leaps, they are all articulated $r\ddot{a}\ddot{a}\ddot{d}\ddot{a}$. If ta or da comes on an unstressed note, ra will always follow. Unaccented notes are those in upbeats, the notes after dotted notes, the second note in $2/4$ meter, the second and fourth notes in C meter, the third note in $3/4$ meter, the third eighth in $3/8$ meter, or the third note in any triplet. Above all, you must use ta or da as often as possible, alternating with ra [$tara$ or $dara$], and the da and ra must always make the same effect when they stand in connection with one another. You can also repeat ra in the place of da if you cannot articulate da softly enough, so that $daaraadaaraa$ yields eight equal notes; but if the second da is changed to ra , creating $daaraaraaraa$, and so forth, the notes will be completely equal, as seen in the fourth rule. Now come those who cannot articulate r with the tip of the tongue, but rather speak it in the throat, which has no effect on the tone. These players must articulate such passages entirely with da . They lose a big

advantage, and without it, their playing will remain defective.

In this example [p. 286], the first note is a note which does not occur in connection with notes of the same value, and consequently it will be articulated with ta. The following dotted note will be articulated according to the tenth rule with a, but only very quietly. The following unstressed note, according to the sixth rule, uses ta, after which ra must follow. However, because four notes follow, the word taaraa from the fifth rule is turned around to raadaa--the ta changes to da, so that it sounds more like the ra. The two following notes are of equal value, and because of their positions, the first will be stressed, and the other, unstressed, like the fifth rule states, tāă; in slurs, dāă; and when dāă precedes it, rāă, as in this instance. The treatment of the measures following is like the first part. The fourth measure is also like the first, until the last note. The fifth and sixth measures are syncopated, and will be handled according to the thirteenth rule. The seventh and eighth measures are like the first. The following four measures are recognized from the preceding. Then come four equal notes in one beat, which are articulated tāārāă, and the following four are dāārāă--then comes a single note, da, and the last two equal notes, dāă. A syncopation follows, explained in Rule 13, and the following measure begins with ra, because ta is used on the last

quarter note of the measure, as the unstressed note. Now in this measure, the last two notes are equal in value, and they should be articulated tāǎ according to the second rule, because even if the first of these two quarter notes ends an idea, the last is separated from the first by means of ta, and then ra comes on the first note of the next measure, and a comes on the second, thus: rāǎ. The following half note, a single note, uses ta. The tied note, like the tenth rule states, uses a; the following two eighths, taa, and the remaining four, according to the sixth rule, rāǎdāǎ. The two final quarters in the next measure use raa, like the fifth rule. To go through and clarify this whole example in such a fashion would tire teacher and student alike. You can readily see from this little explanation how you should analyze this; you need only to look back at the rules to help yourself.

15.

We now come to the exceptions to these rules. These have no fast definition, rather they spring out of the imagination of the player, and are called arbitrary changes in phrasing or separation of the tones. Everything here depends on the right feeling and the right judgment, so that these changes occur in the right place, and more damage than usefulness can be avoided. With weak and immature judgment, it is better to stick to the rules than to ruin the entire piece with such incorrect and broken

rules. Custom leads the performer to believe indeed that playing in this style of altering or changing things is the right one and is beautiful, but leave the impartial and informed listeners to judge. The performer's only and perpetual endeavor to make his performance colorful and correctly phrased can cause him to accustom himself so to his own changes that he will not tolerate anything else, and only he is guilty if the entire piece becomes disfigured, or if little or nothing remains of sensitivity. Actually, these exceptions or changes consist of the following: notes which do not belong together according to the rules, are slurred together by changing the language, and notes that should be connected are separated. 1) Thus two notes on different scale steps and of differing value can be articulated with *tăă* or *tăă*, or in conjunction with *raa* (example a instead of example b).

a)

tā-ā-dā-rā-ā tā-ā-dā-rā-ā tā-ā-da

b)

tā-ā-rā-ā-dā tā-ā-dā-ā tā-ta-a-ra-da

ta-ta-a-ra-da, ta-ta-ra ta-tā-rā-tā-rā

tā-rā-ā-dā

Although the figure under the asterisk has already been discussed in the preceding rules, it also properly belongs to the exceptions, and for that reason I have repeated it here. The reasons for this are found below.

2) Two equal notes which normally would be articulated with *tǎǎ* or *rǎǎ*, can be separated when the situation demands it, so that you say *tata*, *dada*, or *tatat*, as though a stroke or dot stood above (see examples c, d, and e).



The notes in example c are held as long with da as the value of the note requires, so that they are very connected. Those in example d will also be held their full value, to be sure, but they are stopped a little, or separated. In example e, the notes are stopped abruptly such that when you have said the first *tat*, you have stretched your tongue up behind your teeth, holding the wind back so that when you take away the tongue, the wind comes forth, presenting the second note. If more similar notes follow, then the tongue must spring to its place very quickly, harnessing the wind for the following notes, and it must be released again at the proper time.

3) Four equal notes which normally would be spoken *tǎǎrǎǎ*, can be altered by the removal or changing of syllables (see example f).

f)



Although I have written the marking above the notes here, it is not to be understood that you must always perform this way. However, if the composer has designated these exceptions or changes himself, the performer does not need to search, but rather may play according to the composer's marks, leaving the composer to answer whether they are in the right places or not.

4) You can also expand these changes to include more notes (see example g).

g)



The last variation in example g can be used occasionally in adagios, but never with allegros. Here it is to be seen that these changes, as exceptions from the rule, can be used in many ways. A mature judgement must decide how, when, and where.

5) Similar variations are found with leaps (see example h).



In this and similar ways, you can alter single figures and whole passages. You must only, as often stated, be sensitive to whether it suits you well, otherwise you are better off sticking to the rules.

I have shown the language of stressed and unstressed notes in different situations, so you can see the inner value of outwardly similar notes, and not put the emphasis on the unaccented note, but rather on the accented or stressed note. Thus you do not leave yourself open to error, believing the letters with the - strokes must be quite stressed, and those with the ^ mark must be played very short; this would give a lame performance. Try to play notes of equal value as nearly the same as possible. You must perceive their inner value, and feel clearly enough that the first of two equal notes has the stress and must have it; otherwise everything becomes unclear.

6) Three equal notes, such as three quarters in $3/4$ meter, three eighths in $3/8$ meter, or triplets, which are articulated taada, with following notes using raada, according to the rule, submit to their place, and according to the nature of the situation, they abide by their exceptions as well. See the changes in example i.



As it is in this example of quarter notes, so it is also in $3/8$ with three eighths (see example k).



Here I have purposely not marked the stressed and unstressed notes, so that I do not cause the student to err, and mislead him to a bad performance. With three equal notes, especially in quick movements such as $3/8$ and $6/8$ meters, and in triplets, always seek to create a good effect, making the notes as nearly equal as possible, even though their inner values are not naturally equal, but are so constituted: -vv. If you trouble yourself to try to make the notes exactly even, however, you will feel that the second and third are not as long as the first, upon which the stress will always remain. However, he who

purposely makes the first note longer and the other two shorter, brings into his performance a figure which does not have three equal notes, that is not a triplet, and that therefore cannot bring forth the effect that a figure with three equal notes should create.

7) You can use the variations mentioned above on more figures here, too, and even on whole passages as you see fit.

8) The rule in which I stated that the main stress must lie on the long or good note also tolerates an occasional exception, although seldom, when the emphasis or stress lies on the short note, as with two or four equal notes, or with syncopation (see example 1).



The marks written over the notes indicate the intensification of each note over which the thick side of the mark stands. Here it is always the short note on which the emphasis lies. You must deal very carefully with this exception from the rule, and I remind you once more that if you cannot trust your judgment, it is far better to play everything according to the rules than to ruin everything with incorrect variations, or alter things just a little. To use these changes in the right places certainly

creates a good effect. There is, of course, an occasional rule, especially in places which frequently recur, to which you must apply these exceptions if you do not want to be monotonous in your performance. If the composer himself put in phrase marks, dots and strokes over the notes, the performer is obliged to play it that way if he wants to present the composer's thought. When no marks stand above the notes, it is a sign that the composer wants it played according to the rules, and the player must be very careful not to stray too far from the composer's intention and feeling, for each change brings forth its own effect, and you must be careful that these variations correspond to the main idea if a twaddle is not to be created.

16.

In playing these variations, we want to look at previous examples to see how the places here can be altered (see example m).

m)

Allegro.

The musical notation consists of three staves, each with a treble clef and a common time signature (C). The notes are connected by various slurs and accents. Below each staff is a line of rhythmic markings using 'ta' and 'da' with horizontal lines indicating duration.

Staff 1: *ta_a_da_a_a_ta_ra_a* *ta_ta_a_a_a_ta_ra_a_a*

Staff 2: *ta_a_da_a_a_ra_a_daa_a_ra_a_da_a_ra_a* *ta_a_ra_a_a*

Staff 3: *da_a_ra_ta_ra_a_a_da_ra_a_da_a_ra_a* *ta_a_a_ta_ra_a_a_ta_ra_a_a*



ra da ta ra a fa ra a ta ra ta ra a ta a tat at at at at at



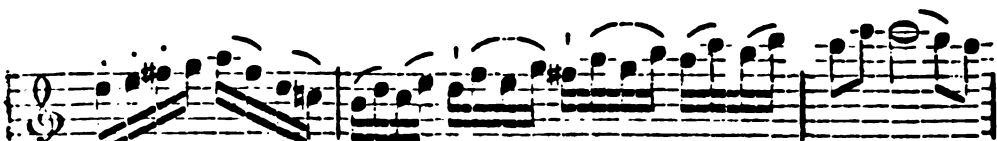
a a ta a fa ra a a at at at at a a ra a ta a da a ra a a at at at at



a a ra a ta fa a da ta ra a da ta ra a da a ra a da a ta



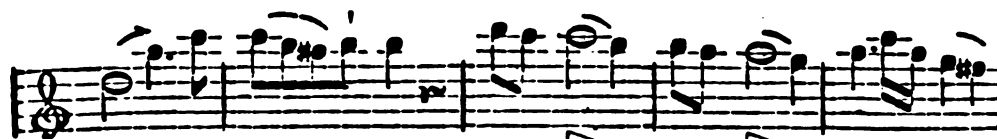
ra a fa ra a ta rat at a a ra a at at a a a a a at at



at at at at a a ra a da a ra a da a a da ta a a da a ra a da a da a da



ra a a da a ra a ta da ta a a ra a da a ra a da



ta a ta ra a a ta ra ta a ta a ra a ta a ra da a ra a

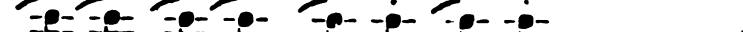
da a ta e da ra at at at a o da a da ra a da ta ra a a da ra a da a

_ a da _ a da _ a da _ a da _ ra da _ a da _ a da _ a da _ ra _ a da _ a da _

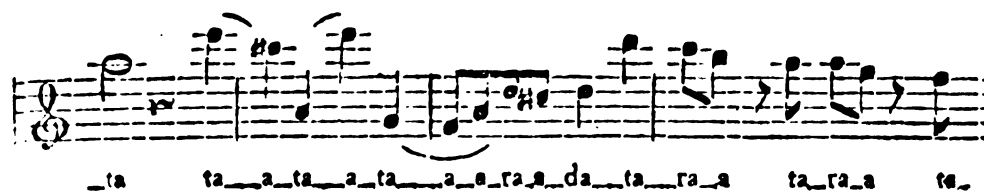
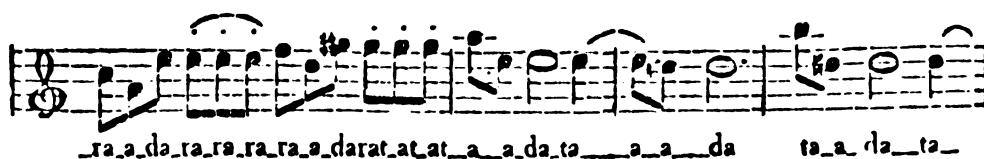
ra a a da ra a a da rat a a a a a a a rat a a a a a a a

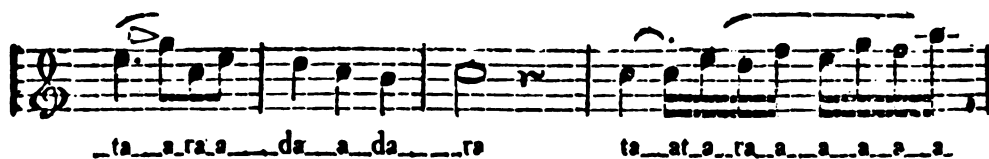
ra a da ra da a ra da a ra a at at a a ra a da a rat at

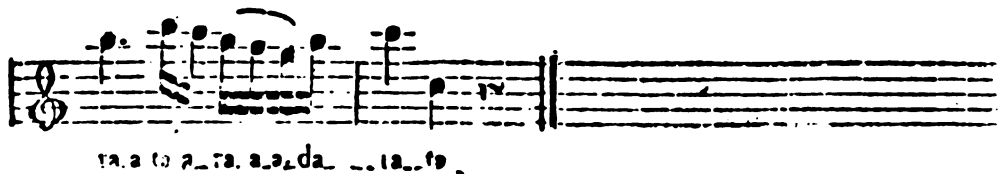
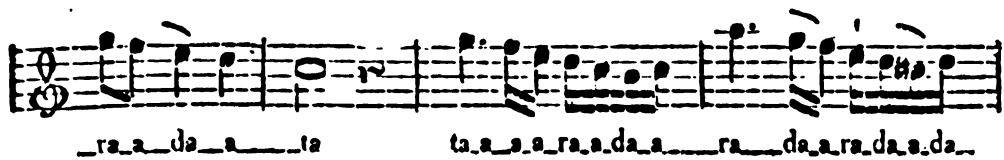
a a ra a da a ra at a a dat at a a dat at a a dat at at at at at



 a a da a da a da da a dat at a a dat at a a ra a dat at a a da ta







In this example, nearly everything is altered. It is not my intention, however, that you must so thoroughly change things, for that would disfigure everything. On the contrary, I only want to show how you can vary passages. It is also not intended that you must alter this movement, or rather this particular spot, in just this manner, or that you cannot or must not alter it in other ways. No! This

can be done in many different ways, in individual figurations as well as in slurred phrases and in the whole movement. You must seek only to preserve the sense of the main idea, so it is better if you make changes only here and there when you think such changes fit well into the music. The fewer changes, the better, for the further you stray from the rules, the further you stray from the intention of the composer, and the less you are able to retain his ideas. Otherwise it would be as though the player were himself the composer, and had created the whole thing without rules, and now he will also play it without rules. Always keep the good singer in mind, and try to imitate his beautiful performance, and above all, seek to bring out the artfulness of the singer in places where the music is no longer singable, but rather is proper only for the instrument. Each incorrect and wrongly-placed alteration destroys the whole. If you want to change a figuration or a passage, find exactly which alteration fits best and corresponds to the main feeling of the composer, or, if played by the rules, which makes the best effect, for each individual figuration makes a different effect with each change. When you put together such different alterations with such varied effects, you can readily see what a confused and adverse effect must be created. It is also not enough that you alter only when you want to; the musical situation must demand it, or you are better off, as is often said, by staying with the rules.

17.

In the preceding section, many monotonous repeats were made, to be sure, for which you will hopefully forgive me when you think about the importance of the matter. This very same importance induces me to make still another alteration in the previous example, and when I make my choice, you should not look at it as a rule; on the contrary, it should be left up to the skilled player to choose the changes according to his own feelings, in order to create the best performance. Do not shrink from the effort you make, for certainly without this awareness, no good, beautiful, and interesting performance can exist. The beginning of example n shows how this should be played according to the rules. The other ten numbers are exceptions to the rules--ten variations of a single passage, and each variation makes a different effect (see example n).

n)

1) fa ta ra da ra

2) ta ta a rat at a

3) ta a da a ra a da

4) fa ta a da a da ra

5) fa tat a a a da



There can be still other changes, but enough are shown here for you to see the different effects each variation has. He who does not wish to play this according to the rules, must choose an alteration appropriate to the mood of this passage. It is better, however, or much more important, that you leave the beginning of the theme untouched in order to seize the mood of it better and more securely, and to place its influence more securely on the changes following, and try to use these alterations or exceptions from the rule only with repetitions of the theme.

18.

We will now proceed to the two measures below, and examine their variations. First of all the rule (see example o), and then the exceptions following it are numbered.

o)

1) ta_a ta_ra_a da_a ra_a ta_ra ta ta_a a a da ra_a da

2) ta_a da_a a da ra ta_a ta ta_a da_a da_a ta_ra

3) ta_a at_a a a da ta_ra ta_a a a at_at_a a da

4) ta ta_ra a a a da ta_ra

5) ta ta_ra a a a da ta_ra

6) ta ta_ra a a a da ta_ra

To put all the possible exceptions and alterations here would involve too much detail; he who has the breath to practice, will find the rest of the exceptions himself, or with further help, and can then choose the most useful and best. Those most suitable to the song deserve priority.

19.

If, in the preceding and also in this example, I have occasionally put a under the dot of a note, it is not my intention that this dot, through the use of the a, be strongly marked. I have only put it there so that you do not leave the dot off, as I have sometimes heard, but rather that you accustom yourself with the time that note deserves. Thus the dot will be just held, or only very lightly marked.

This applies to syncopation, too, where I have written *dāā* under the note that must be separated, so that you do not merely hold the note with *da* without especially marking the other half of it--you must mark it very lightly. It is very important for the student.

20.

We are going to examine exceptions still further. In this example, we have the case of syncopation (see example p and its exceptions).

p)

ta_a_daa_ta__ra_a_daa_ta__ra_a_ta_ra_a__da_a ta_a_da_ta__

__ra_a_da_ta__ra_ta_ra_a__da_a ta_a_da_p__ra_a_da_a

__ra_a_da_a__ra_a (ta_a_da_ta__a_a_da_ta__a_ta_ra_a

__da_a ra_a_ta_a__a_a_ta_a__a_ta_ra_a__da_a

For the sake of clarity, I have shown syncopation with *daa*, according to the rule, but I have left it out in the exceptions, and it will be played as I already reminded you.

In the fourth example of exceptions, the mark which stands over the syncopated notes and is shaped like a wedge, will be handled like the strong and weak parts of the note. Where the stress is, play strongly, and the tone will fade toward the unstressed part. More about this later.

21.

The following example again has dotted notes, and could be omitted because it has been discussed previously, but in order not to break the continuity of the song, and for the sake of better understanding, we will look at it again (see example q and its two exceptions).

q)

ta ta ra ta ra ta ra ta ra da a ra a da a ra a

1)

ta a ra a da a ra ta ra a da ra a da a ra a

2)

ta ta a ta a ta a ta ra a a da a rat at a a

Because of the dotted notes, I remind you that here, as well as in rapid passages, the dots must not be marked, but rather merely held; the rest of it has already been said.

22.

Now it is time for the arrangement of consecutive passages. Example r shows the rule with three changes or exceptions.

r)

Example r shows the rule with three changes or exceptions. The musical notation consists of seven staves, each with a treble clef and a key signature of one sharp (F#). The lyrics are written below the notes, with some words underlined. The notation includes various rhythmic patterns, such as eighth and sixteenth notes, and rests. Some staves have additional markings, such as '1)' above the notes.

ta_a_ra_a_da_a_ra_a_da_da_a__ra_a_da_ta_ra_a_da_a_ra_a_da_a_ra_da
 _ra_a_ta_a_ta_a_ra_a_da_a__ra_a ta_a_da_ra_a_a_da_ra_a_da
 _ra_a_da_ta_ra_a_a_da_ra_a_da_ra_da_ra_a_ta_a_dat_at_at_at_at_at_a_a
 ta_da_a_a_da_ra_a_da_a_ta_ra_a_da_a_ra_a_a_a_a_a_a_da_ra_a_ta
 _a_a_da_ra_da_a_a_ra_a ta_da_a_da_a_da_ra_a_da_a_ra_a_da_ta
 _ra_a_a_a_at_a_a_da_da_ra_a_ta_a_da_ra_ra_ra_ra_ra_a

Here I have again presented only a few exceptions, because you can do as much with it yourself as you want to.

If you only put together from this what you find becoming, you will have received several ideas. Example s shows figures from the composer which have already appeared as exceptions; therefore I do not count them among the rules, but rather example s follows the rule while the rest comprises the exceptions.

s)

_ta_a_ta_a_da_a_ra_a_da_a_ra_a_da_a_ta_a_ta_a_ra_a_da_a_ta_a_da_a_

1)

_ra_a_da_a_ta_a_ta_a_da_a_ta_a_da_a_ra_a_da_a_ra_a_at_at_at_at_

2)

_at_at_a_a_ta_a_da_a_ra_a_ta_a_ra_a_at_at_at_at_at_at_a_a_ta_a_da_a_ta_a_

3)

_ta_a_ta_a_ra_a_a_a_at_at_at_at_a_a_ra_a_ta_a_da_a_ra_a_a_at_at_at_at_

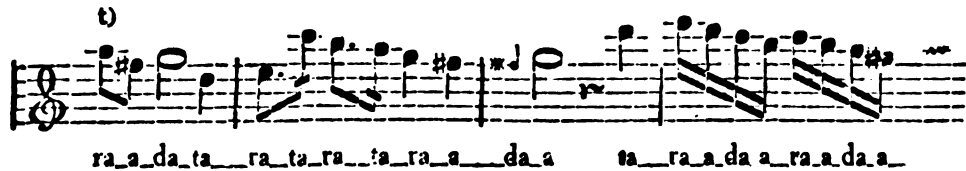
4)

_a_a_ra_a_ta_a_da_a_ta_a_da_a_da_a_da_a_da_a_da_a_da_a_da_a_da_a_da_a_

5)

_a_da_a_ra_da_a_da_a_da_a_da_a_da_a_da_a_da_a_da_a_da_a_da_a_da_a_

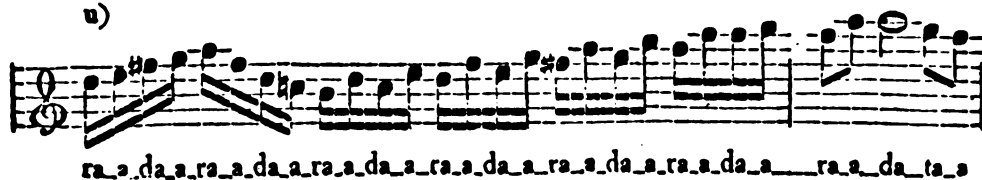
The following passage has nothing in its three variations that has not already been seen, or that does not have similarity to the preceding (see example t).





I will go on, then, to example u, where there are again three exceptions or variations.

u)



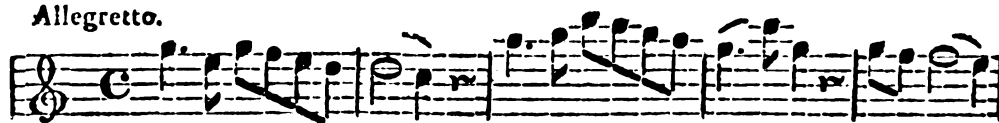
In order not to stray too far afield, I will end this search for exceptions from the rules. I certainly think they will be sufficient to lead the student down the right path. Dots and strokes over notes can be precisely differentiated--the strokes will be long, and the dots are made short, as you can see from the syllables under the notes. Thus strokes and dots are not taken as one and the same, as is customary. Upon first glance, these changes appear to have a strong resemblance to one another, but their inner effect is different. Each must search for his own feeling. I have shown the way, but you must always search for the right and most appropriate changes, or otherwise you will ruin the whole performance.

23.

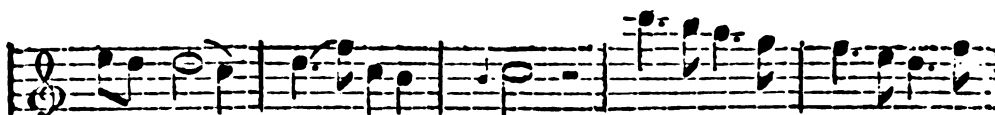
Because too much cannot be said about this, I want to go over the preceding example once more, to show how you can tie rules and exceptions together, making a useful whole out of it. Everything is admittedly done according to my feeling. He who feels otherwise does something else, but only such that the listener can understand it. I will take only the part in which the preceding exceptions or changes have been made. The other part can be arranged by the student after strict examination of the aforementioned rules and their correct usage (see example v).

v)

Allegretto.



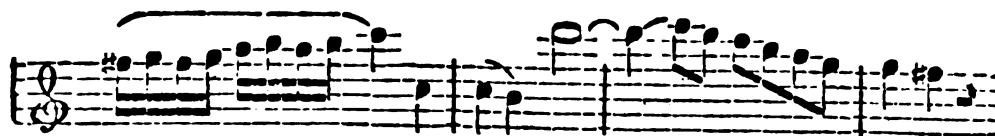
ta ta ra a da a ra a ta ta ra a da a ra a da ta a da a



ra a da a ra a da a ra a ta ta ra ta ra ta ra ta



ra a da ra a da a ra a ta a ra a da a ra a da a ta a ra a da ta



ra a a a a a a a da ra a ta a a ta ra a da a ra a



ta a ta ra a da a rat at at at a a ra a ta a ta a ra a da a rat at at at



a a ra a ta a a da ta ra a da ta ra ta ra ta ra a da a ta



ra a da a ra a da a ra a a a a a da ra a da a ra a da a



This has been just a small part taken from the preceding, from which you can see clearly enough how you must proceed if there is to be order in the performance. Order in the performance, which is so seldom heard, can help a piece so much that any deficiency in it is cancelled. Do not look at this chapter, then, as completely unimportant, and pass lightly through it as over a thing that deserves no closer observation. Do not think, if you do not look into it at first glance and understand it, that it is pedantic--oh no! It truly has great value; therefore read through it often. Many experiences over a long time have taught me to handle things this way, and I have arrived at this method which I recognize as proper through much thought and diligent work.

24.

There is a fixed manner of playing almost every instrument except the flute. Everything that has been said up to now is only bits and pieces, not a whole, and consequently a firm and fixed handling of this instrument

has not been attained. I have tried to lay the groundwork so that everything fits and is usable, come what may -- in short, so that it is a whole. Stick by the rules, and do not change anything until you are thoroughly convinced that the whole will be made better by it. To be sure, I have said much about this method, about the correct language of the flute, but it still seems to me that I have said too little, and that you will not understand me entirely. I know that there are many who have no knowledge of this matter, and to whom much is met with laughter when they are told they must speak into the flute as they blow. They cannot understand, and take it for a trick, because they think the tongue should be left to lie still in the mouth like a stick of wood, and the tone should be ground out like a bagpipe, or an occasional note deserves a thrust with the tongue, which they take care to squeeze out. And with all of this, they think they have delivered a fine performance. How easy it would be to play the flute if this were allowable! The violinist would be better off if he did not study bowing, but pulled the bow as long as he could, turned it around occasionally, and shoved it gently ahead again. Would it not be the same on the flute if one did not use the tongue, but rather just let the wind pass through without directing it properly? I have already spoken about this elsewhere. No one else, to my knowledge, has treated the language of the flute so clearly and so completely suitably on the whole

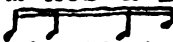
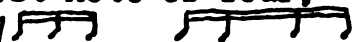
as I have done here. Search industriously and you will find that I have spoken the truth, and no one who does as I have said will work in vain, and his attention to the matter will be richly rewarded if he does it without prejudice. But certainly much patience and time belong to it. He who plays the flute without the proper speech, plays without order, and playing without order always brings forth a bad performance and a poor effect. Therefore when you speak clearly, with order, and expressively, you will be understood, and you will reach your goal. More about this in the next chapter.

Chapter Nine

About the Means of Performing Very Fast Passages Clearly, Which Is Also Called Double Tongue, Although Improperly.

1.

There has been much arguing about this method of articulation on the flute. Some accept it, and others reject it, but without enough inspection or reason. The former say that without this articulation, rapid passages cannot be produced clearly. The latter affirm the opposite. In this chapter, we will try to see who is right. Quantz was the first to write about this publicly.¹ However, those few who have learned this articulation according to his instruction, and can use it properly, have rejected it, certainly too hastily, as a superfluous thing, and they do without it as best they can. That few have learned it correctly is certain, but whether the fault lies with the teacher, the student, or both, will be judged at the end.

¹ Quantz describes the so-called double tongue using the word "did'll" (see pp. 79-85). This word is the opposite of his word "tiri," used with dotted notes: tiri did'll. Quantz's only deviation from did'll is if the last note of four makes a large leap, that note will be tipped with ti: 
did'llditi
or if a rest takes the place of the first note of four, the next two notes are tipped with ti: 
titid'll did'lldid'll.

2.

Although Quantz was the first to make this articulation publicly known, I do not believe he was the first, at least not alone, to have invented it. I have long been groping in the dark about the use of the tongue, and could not find anyone who could help me to certainty and lead me in the right direction. I felt definitely that there must be a definite method, an indispensable aid, as [there] is with the single tongue, to performing rapid passages clearly, and that one must not and need not learn the notes simply with a still tongue.

3.

At that time, Quantz had not quite come to the light with his book. Always with the good singer as musician in mind, I sought a movement of the tongue that would give me the flowing, light, harp-like clarity of rapid passages which the singer produces. I speak here of good and masterful singers, for not all can be taken as musicians, even if they are good singers--there is always a difference between good and good here. The first [who are also good musicians] are indeed rare, but are the more to be sought--for example, in the beautiful and slow song and expressive performance, a Concialini in Berlin,² and in the rapid and artful song,

²G. C. Concialini (1742-1812) was a renowned castrato and the primary soprano in the Berlin Hoftheater from 1770 to 1780. (Demmler, p. 101, footnote 3.)

and the beautifully clear intonation, the very famous, and rightfully so, Mara.³ Although she is also in the position to perform a slow piece beautifully, her performance in rapid and artful songs is unsurpassed. There are certainly others, but I mention these two because I know them well. One wonders indeed how this woman has risen so high in this art without any instruction. [Mara is] a clear example of a good singer who, when nature has given what is necessary, and when he only occasionally finds the opportunity to hear a good model, educates himself entirely. I have already seen many examples of the same, and I have seen also that a mere dry mechanical instruction is completely useless. He who will teach a good singer, must be a good singer himself. I have had the good fortune to play in an orchestra with Mara for five years, and I have often been present at her private practicing, where I then saw and learned that she is completely self-taught. With practice and from hearing good models, she is what she is today, whereby she has astounded the world. She had only some instruction in basic harmony from the late Löhlein, but none in singing. Excuse this small deviation. The truth and her merit

³Gertrude Elisabeth Schmeling is meant here. Her biographer, Friedrich Rochlitz, tells that he was acquainted with the best musicians in Leipzig, especially Tromlitz. (Demmler, p. 28)

Charles Burney, in his The Present State of Music in Germany, noticed that although Leipzig possessed no first-rate performer on any instrument, Mara was highly praised (even by Burney), and she sang beautifully for him in spite of a bad cold, p. 80.

seduced me. Now back to the matter at hand. I have found from much searching that the movement of the tongue when I try to regulate the airstream, creates syllables or words, as with the single tongue, and so to be certain always, and to make it clear and comprehensible to the student, I invented a proper word for each passage. These multiplied so that soon I had hundreds of them. Because I found that they had many similarities to one another, I tried to merge them little by little to make fewer words. Then I had about eight, the primary word being tar'll with equal notes, and with triplets, tar'llda. However, if two triplets follow each other, I said tar'lldarar'llda, etc. While I was busy finding a fixed and sure tonguing pattern, Quantz appeared with his book in which he says tid'll, and with triplets, tid'lldi, which actually creates the same effect as my syllables, except that I have substituted a for Quantz's i, because it produces a fuller tone, as said earlier. When you take a instead of i, the similarity becomes even more conspicuous: tad'll, tad'llda, and mine is tar'll, tar'llda. With practice you will see that if you can do each properly, they create nearly the same effect. Since two people who know nothing of one another find so much similarity with this invention, it is proof that this language must be rooted in the nature of the matter.

4.

Since the r in my flute language, and the r of the repeated words in triplets, is not spoken with the tip of

the tongue by everyone, but is spoken in the throat by many, which has no effect, I would advise those people to use d rather than r. Indeed it is a great loss for the flutist if he cannot speak the r properly with the tip of the tongue, for it appears everywhere, as much in the single tongue as in the double tongue. He who cannot use r, however, should use d, as just said, and try to make it as gentle as possible, so it has the same effect as the r.

5.

So we will take tid'll, or, for those who support me, tad'll. It is not wholly an a, indeed, for it retains a little from o. You must take the trouble to produce as nearly an a as possible, because it has a great influence on the tone; i produces a pointed tone, a, a full tone.

The use of this language finds its place only in fast and very fast passages. It is therefore an aid to performing fast and very fast passages fully, clearly, and fluently, without which it would be impossible to play faster than the single tongue allows. That which is possible to play with the single tongue should not be played with the double tongue, as it makes a bad effect. It is a big mistake of those flutists who do not know the actual purpose and the actual use of the so-called double tongue to try to use it in all pieces and all tempos, thereby producing a wretched effect. These people are among the misinformed.

6.

If you have this language completely in your control, and use it as explained above in the proper places, it is then a pleasure to hear the double-tongued passages where everything is full, clear, and flowing. Indeed, it demands much long practice before you become a master, and do not use it before you can produce it properly, or otherwise you will do yourself harm. I have had many disputes on this account. Some think everything can be played without this language, but when it comes to the final diagnosis, they find that it is not possible and could never be possible. I have found only a few who can do this correctly. Most produce passages that are uneven, clumsy, and muddy, as I did for a long time before I discovered the right formula, because I had no one who understood articulation to advise me, and I had to teach myself. I have heard no one play with better articulation than the young blind Dulen, whose technical playing is very even.⁴ I will truthfully report in the following all of the advantages and everything else proper to this matter that long practice and years of experience have taught me, and I sincerely advise that when you have this in your power, you will certainly rejoice heartily, and the skeptics may say what they will. Now to the matter at hand.

⁴See translator's introduction, p. vii.

7.

Thus tad'll produces two equal notes. The second syllable, d'll, is difficult to speak into the flute so that it produces just as bright a tone as the first syllable. I will try to make this clear and understandable, because for the most part, beginners are faced with creating this d'll. Failure is due to the fact that for many, this language will not produce the proper effect, and also, if one does not succeed according to his wishes, he often quits. However, do not rush, but examine the following carefully. When you have said ta, and while the ta is still sounding (for this sounds until the second syllable is spoken), place the tip of the tongue, which must be somewhat bent, on the palate and, speaking d'll, press the wind out both sides, keeping the tip of the tongue on the palate. This produces the second note. The pressure must have strength, however, so the wind goes into the instrument; otherwise there will be no sound, and you will hear only the ta, and not the d'll. Therefore you must practice this on two even notes that stand on the same line or space until both notes are heard evenly. Then practice on two notes that are a step apart, and finally on two notes making up a larger interval (see example w).



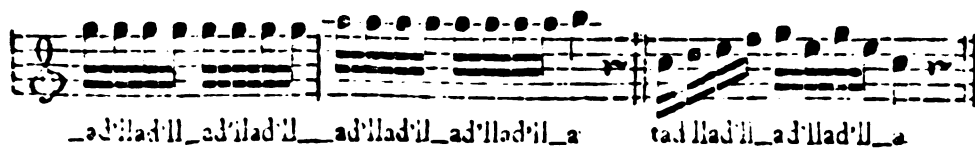
At the beginning, speak all of these syllables very clearly into the flute, even though they sound harsh. Keep in mind that too harsh is better than too weak. When the tongue is able to do this fluently, then you can easily soften it again. If you speak too softly in the beginning, the second note will always be too short and not clear enough. In the end, the tongue might adapt itself to that weakness, so that it would not be possible to change it, and all passages would be uneven and ruined. When you are done with this, proceed with the rest, but do not be in a hurry. Play slowly at first, then faster bit by bit, always from one step to the next. And you must have each in your power before you take up the next. This is the way for this language to become powerful, and not vice versa as often happens, for that would be running before you have learned to walk.

8.

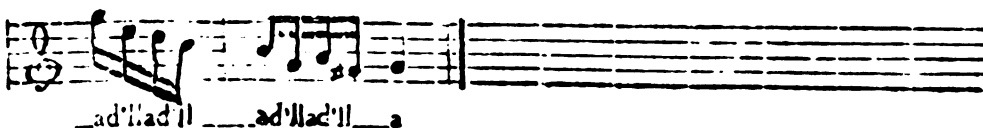
Now we will observe how four even notes must be handled. Quantz repeats the word did'll, namely did'll-did'll. That is difficult for some, if not impossible,

especially in very rapid passages. In some figures it is always admissable, but not in long passages; try it and you will see. I will show a method here which will greatly help the clumsiness and make the language easier, and in long passages, the tongue will retain its fluency. With Quantz's method, the tongue soon becomes rigid and lame, and stutters. The first exercise devoted to this speech repeats the word tad'll, articulating two notes until you can do it quite easily, correctly, and clearly. However, if you then want to use this technique in long and fast passages, instead of repeating the whole word, tad'lltad'll, take the d away and connect the a to the preceding, creating four equal notes with the word tad'llad'll. The tone, however, must always be supported, and must not fall off after the first tad'll. Now many figures can follow one another without tiring the tongue or causing it to stutter; rather, everything will be made smoothly and fluently, because it is now very easy to say tad'llad'llad'llad'll, etc. Now first a trial of four notes (see example x).





Presto.



From this example you see that the language may not be altered with the connection of figures and passages. The figures where several notes stand on the same line or space are the best for practicing. Therefore stay with them until you are in the position to make them clear and beautiful, and finally, very fast. Then take the other places, and you will soon perceive how much the tongue has gained from the first exercise. In these exercises where the passage involves steps and leaps, watch carefully that

the fingers move at the same time as the tongue, because it is difficult to move the tongue and fingers together in very fast places, and if one comes earlier or later than the other, the result is garbled. Indeed it takes a long time, and requires day-long practice before you become a master of it. Only diligent practice will conquer the difficulties.

9.

Experience teaches that you must have a great deal of patience with these exercises. You must not be discouraged, however, if something does not go right--it will in the end. So it was with me once until, in order to become a master, I made a rule: I chose a concerto of Quantz with many passages of so-called double tongue, and made myself three solos with a great deal of such articulation. Without thinking I could play these pieces, I wanted to see whether, and what a difference there would be if I played these passages two hours a day for half a year, always paying close attention to each note, examining and studying, so that everything would be beautiful and clear. I kept my word. I did it, although it became distasteful to me, and I was disgusted after playing for a long time when I saw the music just lying there. Nevertheless, I overcame it, and played two hours a day until the half year had passed. Then I left others to judge, and they found far more security, clarity, and facility in my playing. Although I could not notice myself right away what I had gained, I felt clearly that my

fingers and tongue had become far more fluent, my lips and breath stronger, more flexible and pliable. The proper expression fails me when I talk about the feeling, the flexibility of the lips, the throat, and the breath. There is a delicacy in the handling of these parts which one gets from extraordinary diligence and practice, but also, without continuous pursuit, one can lose it again. From this you can see how much is involved in becoming a master of this instrument, and that a concerto and concerto playing are two different things.⁵ Where, then, are those who do not give this a single thought, and yet believe they understand everything? And they further imagine themselves to be concert artists if they have learned to play more than one wind instrument, and that they are more valuable than one who possesses the above qualities, but is master of only one instrument. Simple-minded haughtiness! How much work and trouble is involved with only one instrument, especially with the flute, in order to achieve the goal, when it is possible to spend a lifetime and still not come to the end? Bear in mind that your imagination can be blamed, but cannot make it better. After this long practice, I played the concerto publicly, and it aroused general wonderment.

⁵"Concert und Concertspielen" probably refers to the difference between playing a solo line and a ripieno part. For further discussion of this, see p. 529, and in Quantz, p. 205-294.

This is not intended to promote my fame, but rather to show what a constant consideration combined with practice can produce.

10.

This has been about the use of this language in running passages and places with small leaps. Now we will see how to use it in figures and passages consisting of large leaps (see example y).

7) 1) Musical notation for example 7) 1) in G major, treble clef, 2/4 time. It consists of two measures of eighth-note runs. The first measure contains the notes G4, A4, B4, C5, B4, A4, G4. The second measure contains the notes F#4, E4, D4, C4, B3, A3, G3. Below the staff is the Persian text: _rad'llad'll_dadarad'll_ad'llad'll_dadarad'll_a

2) Musical notation for example 7) 2) in G major, treble clef, 2/4 time. It consists of two measures of eighth-note runs. The first measure contains the notes G4, A4, B4, C5, B4, A4, G4. The second measure contains the notes F#4, E4, D4, C4, B3, A3, G3. Below the staff is the Persian text: tad'llad'll_dadarad'll.

3) Musical notation for example 7) 3) in G major, treble clef, 2/4 time. It consists of two measures of eighth-note runs. The first measure contains the notes G4, A4, B4, C5, B4, A4, G4. The second measure contains the notes F#4, E4, D4, C4, B3, A3, G3. Below the staff is the Persian text: _ad'llad'll_dadarad'll_a

4) Musical notation for example 7) 4) in G major, treble clef, 2/4 time. It consists of two measures of eighth-note runs. The first measure contains the notes G4, A4, B4, C5, B4, A4, G4. The second measure contains the notes F#4, E4, D4, C4, B3, A3, G3. Below the staff is the Persian text: {tad'llad'll_adarad'll_ad'llad'll_adarad'll

5) Musical notation for example 7) 5) in G major, treble clef, 2/4 time. It consists of two measures of eighth-note runs. The first measure contains the notes G4, A4, B4, C5, B4, A4, G4. The second measure contains the notes F#4, E4, D4, C4, B3, A3, G3. Below the staff is the Persian text: _ad'llad'll_adarad'll_a

6) Musical notation for example 7) 6) in G major, treble clef, 2/4 time. It consists of two measures of eighth-note runs. The first measure contains the notes G4, A4, B4, C5, B4, A4, G4. The second measure contains the notes F#4, E4, D4, C4, B3, A3, G3. Below the staff is the Persian text: _ad'llad'll_adarad'll_a

7) Musical notation for example 7) 7) in G major, treble clef, 2/4 time. It consists of two measures of eighth-note runs. The first measure contains the notes G4, A4, B4, C5, B4, A4, G4. The second measure contains the notes F#4, E4, D4, C4, B3, A3, G3. Below the staff is the Persian text: _ad'llad'll_adarad'll_a

8) Musical notation for example 7) 8) in G major, treble clef, 2/4 time. It consists of two measures of eighth-note runs. The first measure contains the notes G4, A4, B4, C5, B4, A4, G4. The second measure contains the notes F#4, E4, D4, C4, B3, A3, G3. Below the staff is the Persian text: _ad'llad'll_adarad'll_a

9) Musical notation for example 7) 9) in G major, treble clef, 2/4 time. It consists of two measures of eighth-note runs. The first measure contains the notes G4, A4, B4, C5, B4, A4, G4. The second measure contains the notes F#4, E4, D4, C4, B3, A3, G3. Below the staff is the Persian text: _ad'llad'll_adarad'll_a

10) Musical notation for example 7) 10) in G major, treble clef, 2/4 time. It consists of two measures of eighth-note runs. The first measure contains the notes G4, A4, B4, C5, B4, A4, G4. The second measure contains the notes F#4, E4, D4, C4, B3, A3, G3. Below the staff is the Persian text: _ad'llad'll_adarad'll_a

7)



8)



All of the examples added here have a very fast tempo, and must be played according to the rule, as shown here. There are places in these examples where you cannot always speak tad'illad'ill, because it seems to hinder the leaps that come between, making a change in the language necessary. However, it is possible to play these passages, interspersed with leaps, like the running passages, if you have this language well under control. However, you must be master over it, or otherwise it would be better to play it according to the prescribed rule here, so that you do not make a mess of it, but rather play it well. It is true there are some who use this altered language quite fluently, but you can clearly hear where the language has been altered, because it breaks the flow and evenness of the passages, and this is conspicuous and not for every ear. I confess that it is indeed difficult to deal with these

changes, but I can give solemn affirmation that it is possible, although many do not want to admit it. Just a few places from the above example (see example 2).



Here the language remains the same as in stepwise passages. Study these places, and practice them until you can play them. However, if you would rather alter the language, and you find more places [where altered language can be used], then do it, although I believe that very fast passages must be played flowingly if a good effect is to be produced. Try both ways, listen, judge, and choose, or delegate it to a listener.

11.

Now the figures consisting of three notes remain--very fast 6/8 and 9/8 meter, or triplets in fast and very fast tempos. These figures are produced with the word tad'llda; ta gives the first note, d'll, the second, and da, the third. Notice here also that the repetition of the word in sequence causes still more difficulty than with four equal notes, because both the last note of the triplet and the

first note of the next triplet use da, so da is used twice in a row. This will tire the tongue quickly, making a faltering and rough performance which will in turn hinder the full, smoothly-flowing passages. Look at the example and try it, first with only a single triplet (see example a), and then in sequence (see examples b, c, and d).

dad' lla dad' lla dad' lla dad' lla dad' lla dad' lla

c)
Presto

d)
Presto.

dad'lida dad'lida dad'lida dad'lida ta da dad'lida dad'lida

dad'illa ta da dad'illa dad'illa dad'illa da dad'illa da dad'illa

dad'lida_dad'lida_dad'lida_dad'lida_da-ra-da-da

You will quickly see, especially in very fast tempos, that the flow of the passages becomes harsh, bumpy, and uneven, and the tongue becomes stiff and tired through the repetition of the whole word. If, however, you incorporate the syllable *ra*, and you can speak it clearly and smoothly, this passage becomes far more clear and flowing with far less trouble, and long passages can be played without tiring the tongue. If you speak *ra* in place of the second *da*, which tires the tongue so quickly, creating the word *rad'llda* instead of the repeated word *tad'llda*, and in sequence, *tad'lldarad'llda*, you will find that the tongue will be able to speak much more easily, evenly, and continually. And this series of syllables will be retained even during many successive triplets, and only very large leaps would make a change necessary. Examples will help to make this clearer (see examples e, f, and g).

e)



f)



g)
Presto.

ta-da-rad'lida-rad'lida-rad'lida ta-da-rad'lida-rad'lida

rad'lida-rad'lida-rad'lida-rad'lida-rad'lida-rad'lida-rad'lida-rad'lida

ra-ta-da-da

I am thoroughly convinced that after diligent practice, you will find this language, as I said above, true and unfailing. You must take the trouble, however, to make the notes of the triplet as nearly equal as possible, for the beauty of the triplet consists in the evenness of the notes, and not in the accenting of the first note, or the holding of the last note too long. In either of these cases, the middle note would be too short, making the whole figure uneven, and the beautiful effect of this figure would be defeated.

12.

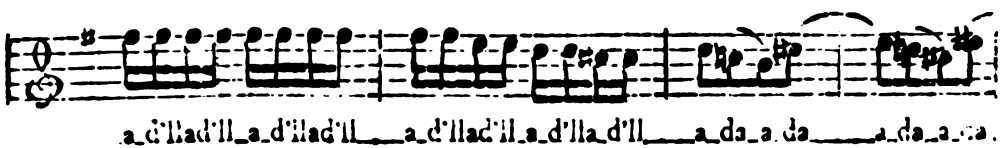
With leaping triplets, the language is usually changed, but I believe that what I said above about four equal notes can be applied here, too, namely that after the first figure,

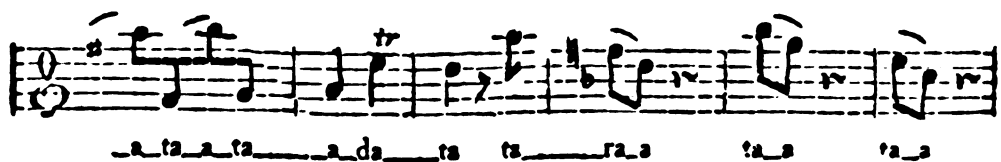
is short? Just take a triplet with the usual tad'llda and one altered with tadad'll and see whether they do not sound like two kinds of figures. In order to avoid this evil, it is better and more proper not to change the language, and consequently the essence of this figure, but rather to practice it until you can do it without changing the language. Another way is to use the single tongue in moderately fast tempos where you have the time, an exception from the rule, but this is unacceptable in very fast running places done with the double tongue (and this discussion concerns the double tongue). Only when the last note of a triplet follows a large leap, as in the third figure of the second measure and others, can you use ra, which otherwise would be used instead of da to aid the connection. However, since this leap is difficult and not usable to everyone, repeat da in this place: tad'lldadad'llda, instead of tad'llda-rad'llda. In order to avoid becoming entirely too detailed, I will leave the student to put the correct unaltered language in this example himself.

13.

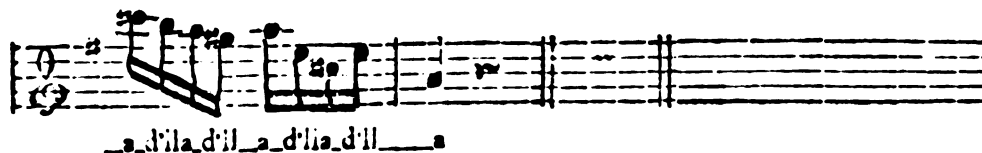
In my opinion, another example is necessary for clarity, along with an accurate summary in which single and double tongue are combined, so you can see how and where this language should actually be used, so that it does not appear at the wrong time. Look at this example from the last movement of a solo concerto (see example i).

i)
All. affai.









This is surely proof enough. The tempo in this example is fast, and you will meet it best if you play it fast enough that the single tongue is not able to produce the passages contained in it. Rule, exception, and language constantly

alternate with one another here, and if you take the trouble, you will be able to apply this example easily to other pieces. The reason that some passages in the middle begin with rad'll instead of tad'll is rooted in the line of the music, as is the use of the single tongue as well, and the triplets spoken with ta or da after a short note, will always be followed by ra, as has already been shown.

14.

This now has been what I generally deem necessary to say about the language, about both the single and the double tongue, and what many years of experience have given me. There is still more to say, but to avoid extensive detail, I will let the matter rest, because I am satisfied that this is sufficient. The examples are indeed few, but are constructed such that they can easily be used in all other situations. It is unnecessary to seek out and set down here all situations, since this language is suitable on the whole, and all situations can be clarified by the preceding, and can be performed properly with the rules given. If you disagree with my opinion that a should be the primary vowel of this language instead of i, I can tolerate it, but it is certainly true that the tone will be fuller with a than with i. Should the arrangement of this language and its use not be met with approval, I ask you not to find fault with it or throw it away before you have examined it carefully, and are in a position to declare another and better method. If

you can convince me otherwise in a reasonable and polite manner, I would certainly be the first to accept another method. But spare me if you want to assert that you can play all fast passages without proper and correct movement of the tongue, namely without language. Playing fast passages without the tongue or without language is truly in poor taste. Arpeggiated or stepwise running passages are easily produced without the tongue, but they sound just like that. With altered figures, it is not passable, and makes a bad effect. Quantz calls this a "bagpipe." I think he is right. One does better with this method of playing if he does not study or work too much, but an industrious man who does not shrink from hard work makes himself learn to play with the proper language. It is excusable for those who play this instrument for enjoyment, but certainly not for those who would be masters. I will carry the comparison a little further. What would be said of a string player who played as many notes as possible with an up-bow, then as many as possible with a down-bow in fast passages? I think he would not get much applause with that. Therefore I repeat once again that he who wants to play fast passages clearly and distinctly must have a means whereby each note can be heard clearly by the listener, but the player must be able to hear it himself, too, otherwise the listener certainly will not hear it. I side with those who proceed fundamentally, leaving nothing to mere chance.

Many play at random--as it comes, so it comes--not concerning themselves with any set rules. This you will find if you hear such a piece played once, since the performer will certainly play it differently each time without wanting to, and must leave it to chance, because he lacks the rules of performance. Once again, he who knows a better method, share it with me. I have tried everything that seems possible to me for forty-some years, but I have found nothing better. Perhaps someone else is more fortunate. One person cannot discover everything.

Chapter Ten

About the Affections

1.

Affections are modifications and ornamentations in music which add beauty and are pleasing when they are used carefully. These affections are necessary, and can never be left out. If the composer has written in affections abundantly, the performer must be careful that he does not do more harm than good with his additions. These ornaments are either essential or arbitrary. The essential ornaments, which are actually the life of the song, cannot be omitted and are therefore necessary. They are written as small notes before or between the primary notes, or in the form of a particular sign over a note. They can also appear as regular notes, arranged in different ways in the measure. If the composer has not written them in, it is left to the reflection of the player to add them. To this end, a knowledge, which can be obtained only through long practice, and which must always be ruled by musical sensitivity, is essential. Since each person responds differently to music, each will direct his affections according to his own feelings. However, if a piece is supposed to be played the same by several performers, it is necessary for the composer to write out everything. It will still be difficult enough for the player who has accustomed himself to ornamenting

each note. In order to learn generally where and how these essential ornaments must be used, it is necessary often to hear players whose interpretations are well respected. Or, if you can find a good one, I say listen to good singers. Good singers will create the proper musical sense, so that even if no affections are written in, a piece can be ornamented and performed well. Rules cannot be given for this. However, be careful not to misuse ornaments, thereby overwhelming the song with them. Proper feeling and good judgment will decide. Choose the middle road; better too few ornaments than too many.

2.

The arbitrary affections, which are nothing more than when several tones emanate from one, are often written by the composer himself, but the player creates them, also, if he is in the position to do so. If the player does not know how to ornament, he should just play what the composer has written. These arbitrary affections will be discussed later in Chapter Fourteen. For now we will stay with the essential ornaments, because although a song will be clumsy and trite without essential ornaments, it can be played without the arbitrary ornaments.

3.

The essential ornaments which we make use of today are:

Bebung (Vibrato)
 Vorschlag (Appoggiatura)
 Nachschlag (Termination)
 Doppelvorschlag (Double Appoggiatura)
 Schleifer (Slide)
 Doppelschlag (Turn)
 Pralltrill and Schneller (Inverted Mordent)
 Mordent
 Battement (Prepared Mordent)
 Forte and Piano, and Crescendo and Decrescendo
 Durchziehen (Portamento)
 Trill

We will examine these one after the other, and observe their nature and their use. First, vibrato.

4.

Vibrato is an undulating, swaying motion on a long note; this can be slow or fast, uniform or changing. It originates on the flute when you move your finger on and off the hole below the long note you are playing. According to the situation, only a little or half of the hole may be covered, or you may use another hole altogether, and cover it completely each time your finger moves. Do not use the breath to produce vibrato, because it does not create a good effect. He who uses it destroys his breath support, and ruins his whole performance because he loses evenness, and therefore cannot maintain a firm and clear tone. It is often advisable not to use this affection at all.¹ However, it can be used

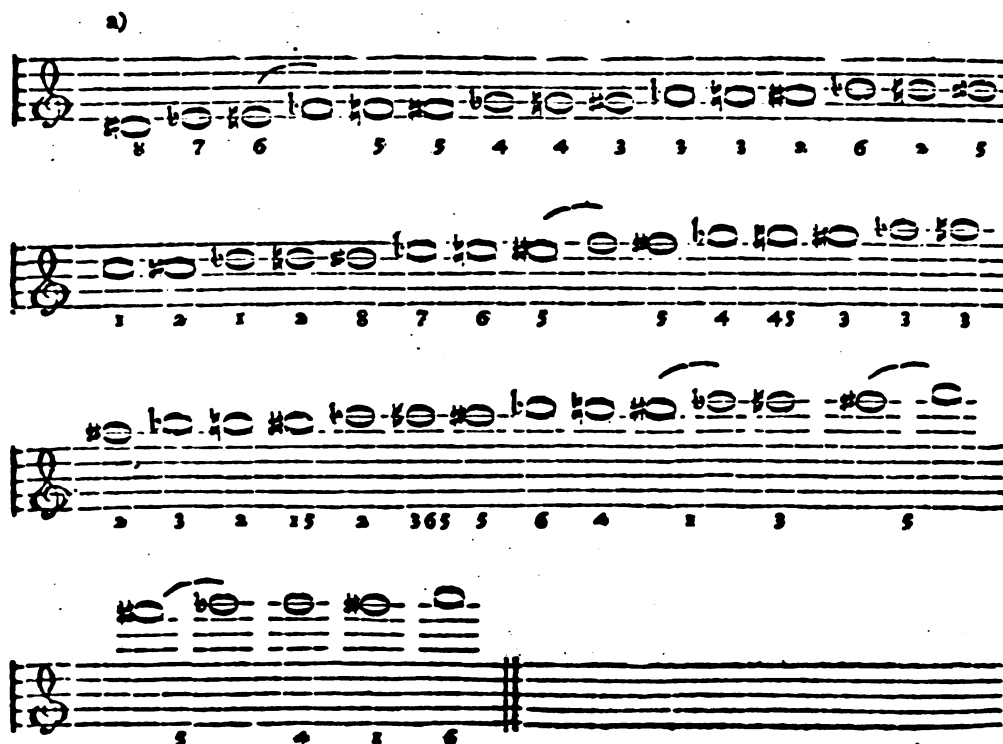
¹ The "vibrato" of the eighteenth and early nineteenth centuries (flattement in French and Bebung in German) was actually almost an inverted trill. In fact, Hotteterre refers to it as a "lesser tremblement," p. 66. The

on held notes, fermatas, and on the note that stands immediately before a cadenza. Very fast vibrato is a wretched ornament, in my opinion. Although examples of this mannerism are not easily shown on paper, I will try my best to show how vibrato is produced on each note in the range of the flute (see example a).

tremblement or trill rises a half or whole step from the principal note, whereas the flattement or Bebung is produced by partially covering one or more holes below the principal note. Corrette calls this a "softening of the tones and semitones" which is done "to swell and diminish the tone," p. 43. Quantz differentiates three types of vibrato: 1) movement of the chest, 2) pulling back and forth with the lips, 3) using the finger. (Gustav Scheck, Die Flöte und Ihre Musik [Mainz: Schott, 1975], p. 79.) A. B. Fürstenau names these same three types of vibrato, but uses the term "Kinnlade" (jaw) instead of lips for the second type. (Die Kunst des Flötenspiels [Leipzig: Breitkopf und Härtel, n.d.], p. 79.)

Vibrato at this time was really considered an ornament, as Tromlitz states, and was not to be used at all times. Although vibrato appears to be a relatively new ornament to wind instruments, it was described by string players as early as 1542 in Ganassi's Regola Rubertina. (Robert Donington, The Interpretation of Early Music [New York: St. Martin's Press, 1963], p. 167.) Various musicians writing about stringed instruments in the eighteenth century mention vibrato, and Leopold Mozart perhaps describes it best when he writes "the tremolo (meaning vibrato) is an adornment which arises from Nature herself..." (Versuch einer gründlichen Violinschule [Augsburg: Lotter, 1787], translated by Editha Knecker [London: Oxford University Press, 1951], p. 203.)

Vibrato also became part of clavichord technique. As C. P. E. Bach writes, "a long, affettuoso tone is performed with a vibrato. The finger that depresses and holds the key is gently shaken... The best effect is achieved when the finger withholds its shake until half the value of the note has passed." (Versuch über die wahre Art das Clavier zu spielen [Berlin: G. L. Winter, 1759], translated by Wm. J. Mitchell [New York: W. W. Norton, 1949], p. 156.)



Although vibrato is not used on all notes, I have written them here anyway to help, should they occur. The number under the note signifies the finger which should be used to make the vibrato, according to the fingering chart appended to this work. A precise description of how much of the hole the finger should cover is not possible here. Since the tone, through the use of vibrato, must be kept moving up and down a little, the ear will easily be able to discern how much should be covered with each movement of the finger. Some tones will require only a fourth, others a half, still others three fourths, and for some, the entire hole will be covered. To this last group belong B flat', B sharp', C sharp", D", C""--this last fingered with 2, 4, 5, 6, 7, with the third finger creating the

vibrato, and if played with 2, 4, 5, the sixth finger creates the vibrato--D flat^m, D sharp^m, E flat^m, and A^m.

5.

May I remind you once more that vibrato on the flute may not be made with the breath, or otherwise one could easily become accustomed to shaking, which would create a miserable performance.² If you want to use the breath to help, it must happen at the same time as the movements of the finger, so that as the finger rises, the breath becomes stronger, and as the finger lowers again, the breath is reduced. This helps the vibrato become a little stronger and more distinct. A special beauty of the flute is a firm and even tone. Although this firm tone is difficult to bring to this instrument, and thus is seldom heard, you must take pains to obtain it, thereby helping the breath to be firm and supported so that it does not shake. Also, I remind you to use this affection only seldom, so that it will not affect your good performance adversely. But if it appears too often, it will certainly arouse disgust.

²It is interesting that with Tromlitz's interest in imitating the good singer, and with his acquaintance with fine contemporary singers like Mara and Concialini, he still insisted upon the mechanical finger vibrato, refusing the diaphragm vibrato found naturally in the voice.

6.

The appoggiatura is a note leaning from its predecessor and resolving into its successor.³ This is a small [grace] note which takes its value from the following note onto which it is slurred. Generally an eighth or sixteenth note is used, but for the sake of clarity it would be better if the value the note should have were always written.

³ E. R. Reilly, in a footnote to his translation of Quantz, notes that "the German term for appoggiatura, Vorschlag, means simply 'fore-beat,' and thus does not have the connotation of 'leaning' found in the Italian word," p. 91.

Tromlitz does not go into why appoggiaturas exist, but rather spends his time analysing the performance of them. Leopold Mozart, however, notes that appoggiaturas are "demanded by Nature herself to bind the notes together," and that in his opinion "the descending appoggiaturas are the most natural, for according to the most correct rules of composition, they possess the true nature of an appoggiatura," that is, they lean. (p. 166.)

Quantz looks at their use this way: "If music is to have a galant air, it must contain more consonances than dissonances; but if many of the former occur in succession, and several rapid notes are followed by a long one that is also a consonance, the ear may easily be wearied by them. Hence dissonances must be used from time to time to rouse the ear." (p. 91.)

C. P. E. Bach takes it one step farther when he says, "Appoggiaturas enhance harmony as well as melody. They heighten the attractiveness of melody by joining notes smoothly together and, in the case of notes which might prove disagreeable because of their length, by shortening them while filling the ear with sound... Appoggiaturas modify chords which would be too simple without them. All syncopations and dissonances can be traced back to them. What would harmony be without these elements?" (p. 87.)

If the appoggiatura should be a half note, write a half note; if it should be a quarter, write a quarter, etc.,⁴ (see example b).

b)



If the note should be short, write it quite short so that if several people have to play it at the same time, they will play it in the same way at the same time. However, several players together do not always observe it in unison.

7.

The appoggiatura can be taken from below as well as above, and is on the same pitch as the note preceding it (see example c).

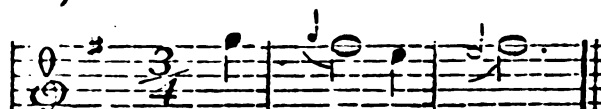
⁴ C. P. E. Bach concurs, stating that variable appoggiaturas, i.e. those of varying duration, are written in their real length "of late," but that earlier they were all written as eighth notes, probably because appoggiaturas were not as diverse then. "Today, we could not do without the notation of their real values, for the rules covering their length in performance are insufficient to cover all cases, since all types appear before every kind of note," p. 87. The last clause of this sentence is certainly worthy of note.

It is interesting to note that Quantz realizes the last measure of Tromlitz's example b in this way:



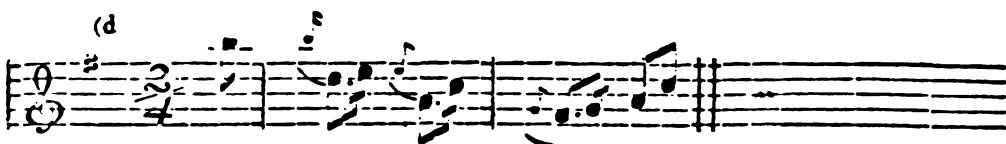
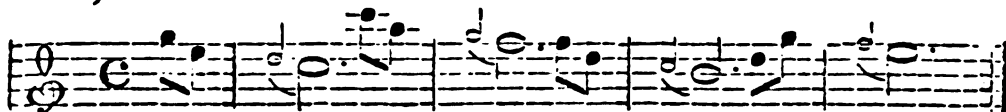
with the appoggiatura taking time from the note preceding it. This interpretation may be equivalent to Bach's invariable appoggiatura, but Bach states that that appoggiatura should be played quickly on the beat, whereas Quantz says it should take time from the preceding note. Quantz justifies himself by saying that playing the notes equally, as is the general interpretation in the twentieth century, is contrary to the French style and to the intention of the composer, p. 228.

c) 5



However, appoggiaturas can be freely placed, appearing on all scale steps (see example d).

d)



They are long or short. The value of the long appoggiatura varies: when it stands in front of a simple note, it is worth half the value of that note (see example e).⁶

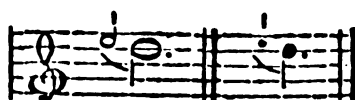
⁵ The French separate appoggiaturas from above and below. The appoggiatura from below is termed port-de-voix, and the appoggiatura from above, that is, the descending appoggiatura, is labeled coulement, "and is rarely used except in descending intervals of a third," (Hotteterre, p. 64). Hotteterre also makes the comment, "These little notes which mark the port-de-voix and coulement are counted for nothing in the bar. Nevertheless, you articulate them and slur the principal notes to them."

Comparing these brief comments to later writers, it is interesting that the descending appoggiatura, which Corrette and Hotteterre find little use for, is the more important usage for Quantz, Leopold Mozart, C. P. E. Bach, and Tromlitz.

⁶ L. Mozart's reasoning as to why these notes are not written out and divided up into the measure: "If a violinist does not know the appoggiatura is already written out and who is accustomed to ornamenting every note, happens onto the passage, he will add yet another long appoggiatura, which will sound exaggerated and confused," p. 167.



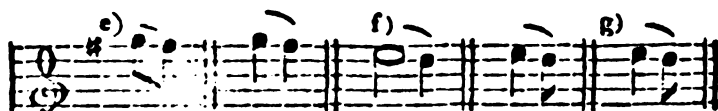
However, if the appoggiatura stands in front of a dotted note, the appoggiatura receives the value of the whole note, and the dot only is played, and is slurred to the appoggiatura (see example f).⁷



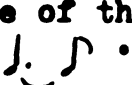
The same procedure is also followed when a rest follows the note instead of a dot (see example g).



These appoggiaturas will be played as follows:



If a second voice, imitative or contrapuntal, should enter where the rest stands, or if you need time to breathe, you would not play into the rest.⁸ It is better if situations like these are written out in regular notes, so that no mistake or bad effect occurs.

⁷L. Mozart writes, "If, however, one desires to play a minim with an appoggiatura...then the appoggiatura receives three parts of the minim note, and only at the fourth part is the note of the minim taken," p. 168. Thus, .

⁸C. P. E. Bach, Quantz, and L. Mozart all agree that the rest should be filled in, although, as Tromlitz, Mozart, and Reilly note, there are harmonic and structural reasons, as well as reasons of breathing, which might prevent this.

8.

The appoggiatura must not be stressed too strongly or played too weakly, but yet it must be clearly separated from the note it precedes. In practice, the accent should always fall on the long appoggiatura, and if you have time, begin it gently and let it grow on the strength of the tone. Then slur into the following note gently, fading away as it were. This is called resolution (Abzug).⁹ Whether the appoggiatura is short or long, it must fall on the beat. When another voice is involved, the appoggiatura must fall together with the primary note of the second voice, and you slur into the note of resolution. Some performers maintain that the long appoggiatura from below, when it is a whole step from the following note, is not as important as the appoggiatura from above, because [appoggiaturas from below] are generally dissonant, and dissonances in this style, like fourths and ninths, should resolve downward and not upward. (See example i.)



⁹For a detailed discussion of Abzüge, see Quantz, Table IX, p. 140, with his explanations in Chapter XIV, p. 173. This discussion gives precise dynamic indications. L. Mozart also discusses this concept, saying "the accent must always fall on the descending appoggiatura, and softer tone falling on the melody note," p. 171. He also mentions growing on the appoggiatura, and relaxing into the resolution.

In order to resolve dissonances downward where they are written with upward resolutions, some performers play as seen below (see example k),



namely they put two grace notes between the appoggiatura and the primary note, the first of which is supposed to effect the correct resolution (see example l).¹⁰



If this pleases you, you can play it this way. I prefer the simple appoggiatura of example l. The song is more pleasing that way. The two added notes seem to alter the song, and its effect is no longer the same.

9.

Because appoggiaturas always cause so much confusion, since one person plays it so and another plays it differently, it would be better if composers were to change all long appoggiaturas into regular notes and distribute them properly in the measure, so that those who do not know the

¹⁰ L. Mozart insists this is the only correct method of resolution, since the ascending resolution is "not natural," p. 173. He does mention, however, that an ascending appoggiatura of only one note should be a half step, so he inserts the half step.

C. P. E. Bach, however, finds it difficult to use except when it repeats the preceding tone, p. 90.

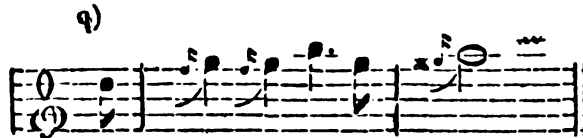
rules about appoggiaturas would be able to produce the composer's intention without the necessity of learning a multitude of rules which might be forgotten in performance, resulting in a different performance than the composer intended. This is even more important if several players are to perform the same line of music, because each has his own set of rules, or no rules at all, and all clarity would be lost, resulting in a confused noise instead of proper music. You hear examples of this daily. Some players would fill all places that seemed empty to them with ornaments, creating a piece as gaudy as possible, thinking they had played very handsomely. These players do not consider that when they play without thorough understanding, that when these ornaments are not played in the right place, or if they create mistakes in the harmony against the bass voice, they have created something more pitiful than useful.

10.

In section 6 of this chapter, I said that an appoggiatura before a dotted note is valued as much as the note it precedes, and only the dot is played, as seen in the examples therein. However, in 6/8 or 6/4 meter, the rule has an exception. For example, when the figure below appears, the appoggiatura does not conform to the rule about dotted notes (see example m).

11.

Now we come to the short appoggiatura, which falls on the beat together with the note it precedes. This is used in lively passages where several quarter or half notes on the same pitch follow one another (see example q).¹²



If a note with a short appoggiatura stands in front of a dissonant note, it must be played quite short, so that the dissonance is not changed into a consonance, and so the dissonance does not enter without preparation, like the tied seventh, thereby destroying the beautiful harmony. The dissonances before which this appoggiatura can stand are the seventh, the diminished fifth, the augmented fourth, and the second. The tied seventh, where the second voice imitates, is shown below in example r.

-
- ¹²1. Mozart lists the uses of this short appoggiatura as
- 1) when several minims follow each other, of which each is marked with a little appoggiatura note
 - 2) if only one minim be present which occurs in such a passage as is imitated immediately by a second voice a fourth above or a fifth below
 - 3) if the regular harmony, and therefore also the ear of the listener be offended by the use of a long appoggiatura
 - 4) in an allgro or other playful tempo where notes descend in consecutive degrees or thirds (p. 171)

C. P. E. Bach adds that short appoggiaturas appear most frequently before quick notes, and are played so quickly that the following note scarcely loses any of its length. They also appear before repeated and unpeated long notes, in caesurae before a rapid note, and in syncopated, tied, and slurred passages. His examples can be seen on pages 91 and 92.

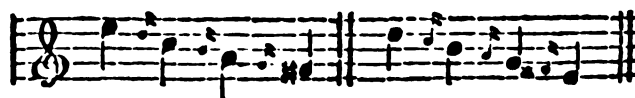
r)

If these were long appoggiaturas, the appoggiatura would have to be a half note value, and the following eighth note, as the [suspended] seventh would enter against the bass voice without preparation. What abominable harmony the long appoggiatura would create! In the second measure of example s, you will find an example with the augmented fourth. A diminished fifth is found in measure four, and a second is in the fifth measure (see example s).

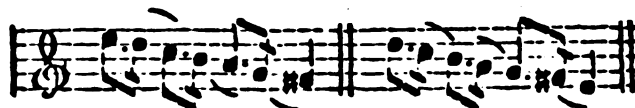
s)

There is still another type of appoggiatura, which we call a passing appoggiatura. This takes its value not from the following note, but from the preceding note, although it is slurred to the note following it. It is used primarily in passages descending in thirds (see example t), and is played as shown in example u.

t)



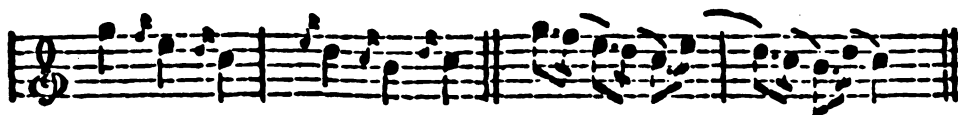
u)



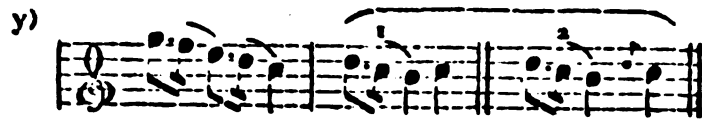
Not everyone is of one mind here. Quants wants these passing appoggiaturas played like example u, but it seems to me that his given example does not properly correspond to the rule that these short appoggiaturas should be set only between descending thirds, a rule which he sets elsewhere. The interval from the last quarter note of the first measure to the first quarter of the second measure is not a third, nor are the last quarter notes of either measure, so this passage cannot be played like example u, either. Here is his example (see example w), and its realization (see example x).

w)

x)



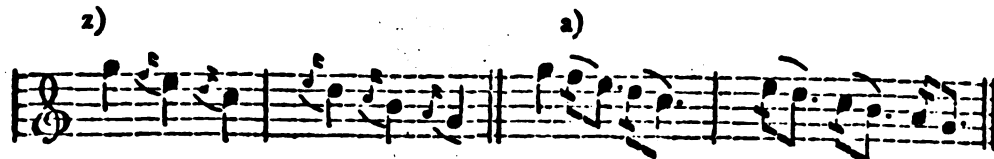
The first appoggiatura takes its value from the first quarter note, the second from the second quarter, and the first appoggiatura in the second measure should take its value from the third quarter of the preceding measure--but this interval is not a third. The oddity that the appoggiatura should take its value from the previous measure accounts for the fact that this first appoggiatura of the second measure by rights should be completely omitted according to the rule, because it cannot take its value from the following note since the appoggiatura following that note also gets its value from that note. The appoggiatura before the last quarter, which is the same situation, must then either also be omitted, or it must be changed into a long appoggiatura (see example y).



13.

Quantz sought to affirm this manner of playing by appealing to its finders, the French. He gives it as a rule, but does not use it as such himself. Look at his book, Table XIX, the first, fourth, and last lines. Marpurg rejects it because he affirms that all short appoggiaturas

must fall directly on the beat, just as long appoggiaturas, and feels, therefore, that example 2 must be played like example a.¹³



He cites the French writer Boivin, who says in his 1690 book about the organ, that "this small note must fall directly with the harmonic note in the bass," and gives the following example:

¹³Quantz, p. 93. It is true that opinions differ regarding the execution of these descending thirds. Quantz's position is stated above by Tromlitz. C. P. E. Bach agrees with Marpurg, and wants the appoggiaturas performed quickly on the beat, like the Lombardian Snap ♯], except in Adagios, where they take one-third of the following note's value. Quantz feels that this Lombardian manner of execution is too bold and brisk, maintaining these appoggiaturas require a "flattering expression." He does not want them played equally with the principal notes, however, because "the melody would be completely altered ... and opposed to the French style of playing, to which these appoggiaturas owe their origin."

Corrette does not discuss this type of appoggiatura, but Hotteterre labels it coulement, and associates it with descending thirds, but does not comment as to its length or placement, just that "these little notes are counted for nothing in the bar," p. 64.

L. Mozart writes that these passing appoggiaturas find their customary usage in descending thirds, but can also be used with notes which ascend or descend by step. They are played in the time of the preceding note, thereby causing the accent to fall on the principal note (p. 177).



Now who is right? The music is good in both examples, but the effect is different; however, I agree more with Marpurg. If it were not good, would the composer not write the same song with regular notes, leaving less to chance? Then all doubt would be removed. If passages appear written in the above manner, I know of no other means than to examine the content of the song, and then choose the appropriate usage. Both methods are appropriate in slow passages, but the second way is more proper in fast passages.

14.

Observe this in passages that ascend in thirds (see example c which can be played like examples d or e).



Take the aforementioned rule, and disregard any other sayings. One plays it one way, and another, a different way. It only confuses the beginner, and he will never be certain.

15.

There are still other types of short appoggiaturas which take their value from the preceding note. They appear in places where the appoggiatura has already been written in with a regular note, and yet another grace note appears (see example f).



This would be played like example g:¹⁴



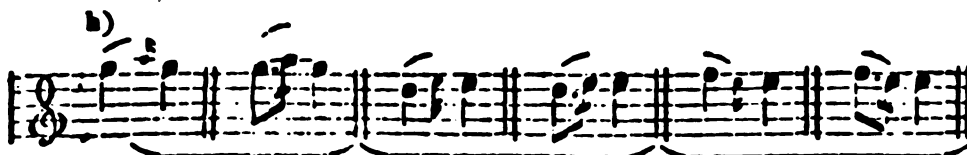
Indeed you can let these appoggiaturas fall on the beat, but it creates a different effect that is not so good. Since each person performs differently, the content of the piece must be examined, and each player must choose according to his own feeling. Short appoggiaturas are used more in lively pieces, and long appoggiaturas are used in slower,

¹⁴ The is Quantz's interpretation as well. C. P. E. Bach agrees that descending appoggiaturas written in large notes may be decorated by another appoggiatura, but he says "as with all embellishments, the introduction of an appoggiatura must not corrupt the purity of voice leading," (p. 95) so he qualifies the addition of this extra appoggiatura by saying, "Descending appoggiaturas written in large notation may be decorated by another appoggiatura, long or short, when they repeat the preceding tone or when they do not lead into closing tones. Ascending appoggiaturas in large notation do not take another appoggiatura either from above or from below. They may, however, be followed by one." (p. 97.)

or cantabile places. Tread carefully, and try always to play them in the right place if they are left up to the player and are not written out. This must be learned through extensive experience.¹⁵ The arbitrary procedure is admissible only for concerto and solo players; in full-voiced places where more than one voice plays, the music must be played as it is written, so that no confusion results from the realization, because certainly no one would realize ornaments the same as another.

16.

The termination [Nachschlag] is a small note which stands either a step above or below, or also on the same pitch as the primary note, and which takes its value from and is slurred to the note preceding it (see example h).



It can also be used in upward and downward leaps (see example i).

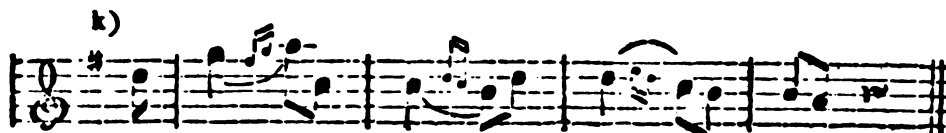
15 Quantz has a rule for adding appoggiaturas where they are not indicated by the composer: "If a long note follows one or more short notes on the downbeat or upbeat, and remains in a consonant harmony, an appoggiatura may be placed before the long note, in order to constantly maintain the agreeability of the melody. The preceding note will show whether it must be taken from above or below," p. 97.



The leap occurs on the following note. If the termination is supposed to be slurred to the following note, a slur mark must stand over it. But it is better, as already stated, to write these ornaments in ordinary notes if the intention of the composer is not to be defeated.¹⁶

17.

There is one other termination, consisting of two small notes which take their value from the preceding note. The first of these two notes stands a step higher or lower than the preceding note, and the second is in the same place as the preceding note (see example k).



and is played like example l.



¹⁶ As Fromlitz shows this ornament in the first part of example i, it is really a free-standing, unaccented appoggiatura, but the second and third parts of example i are described by Marpurg in Principes du Clavecin, 1756, Tab. IV, as anticipatory notes (see Donington, p. 205).

The termination which belongs with a trill is somewhat different, and will be discussed with trills in Chapter Eleven.¹⁷ This example should not be viewed as a good model, because these ornaments would not be used so often in such a short phrase. It is only shown so you can see how these ornaments can be used.

18.

The slide [Schleifer] consists of two small notes which are slurred to the following note in the space of a third, either up or down (see example m).

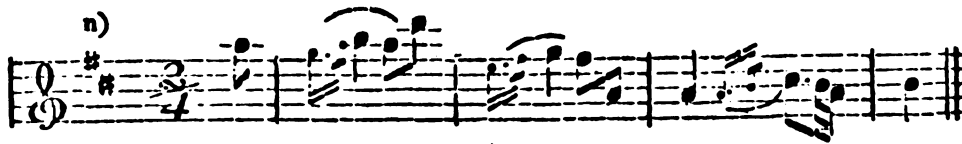


They are very similar to the termination described in section 17. However, the slide falls on the beat, whereas the aforementioned termination takes its value from its predecessor.¹⁸

¹⁷ This type of ornament is more what we think of as a Nachschlag or termination. Quantz does not discuss this embellishment except in conjunction with a trill (p. 103). C. P. E. Bach does not use the term Nachschlag, but he does show the ornament in his discussion of mordents, again following a trill (p. 131). Hotteterre and Corrette refer to this as a "double cadence," also associating it with a trill (pages 65 and 36 respectively).

¹⁸ Here, Tromlitz shows a two-note slide filling the interval of a third. C. P. E. Bach maintains this two-note slide is always used to fill in a leap (which is not always the case in Tromlitz's example), and must always be played quickly (p. 137). He uses this symbol to notate it: . He also writes about a three-note slide whose pattern is the exact inversion of a turn, and which he notates , a symbol not widely adopted. This three-note slide is "equally at home in very rapid and very slow tempos," and usually appears over a repeated tone, although it may appear after an ascending step or leap (p. 138).

There is also another slide in which the first note is dotted and held longer, and the second note is short and slurred quickly to the following primary note.¹⁹ This ornament creates a completely different effect from the former (see example n),



and is played like example o.



However, because the performance of the slide, when it is written in this manner, is hard to know, it would be better, as it would be better in every section here, if all such ornaments were written out in regular notes. The first manner of performance is used only in fast and very lively places; the second makes a better impression in lyric places.²⁰

¹⁹ L. Mozart agrees with Tromlitz when he says this ornament, which he calls an ascending appoggiatura, is made from the third below, "even if it should appear to flow from the neighboring tone," p. 173. Quantz and Mozart both agree essentially with Tromlitz's realization, although Quantz and C. P. E. Bach both double-dot it, and Quantz adds, "you must take the first double-dotted note with a down stroke, allowing the tone to increase, slur the two following notes to it with a diminuendo, and stress the last short note with an up-stroke." (p. 228.)

²⁰ C. P. E. Bach writes, "while the three-tone slide is effective in portraying sadness, the dotted two-tone slide is equally effective in awakening more pleasurable feelings," p. 139.

The double appoggiatura is an affection consisting of two small notes of a different sort that precede the primary note, one standing below it and the other above. It is shown with small notes (see example p),



and is played like example q.



You can see from this example that this ornament can occupy different degrees of the scale, but that usually when a primary note precedes it, the first note repeats that pitch, and the second note takes the step higher. This ornament can also be played in the following manner, however, not in association with a previous note, but freely, as though no regular note preceded (see example r).²¹

²¹

Quantz does not show this ornament in intervals wider than a third, although L. Mozart and C. P. E. Bach do. Quantz tells us that this ornament is "used by singers in extended leaps to hit the high note surely. It may be introduced in rising intervals before long notes on the upbeat or downbeat," p. 159. He maintains it will make a better effect if the first little note is a half rather than a whole step below the principal note.

C. P. E. Bach shows two ways of using the double appoggiatura, both of which are shown in Tromlitz's example p. Bach states that the use of the wider interval demands a slower tempo than the use of the third, but that the third may also be used in slower tempos. It is generally agreed



If the first note is dotted, few understand it. It looks like example s,



and is played like example t.



The stress comes on the first note of the ornament, and the primary note is delayed.²²

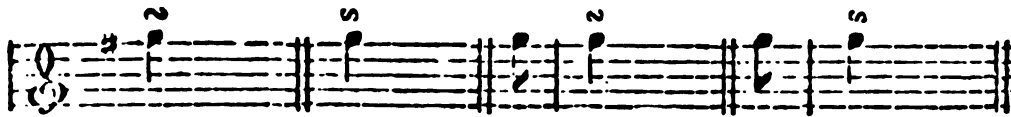
that the ornament is to be played softer than the principal note. Bach gives the following places to use this ornament: before notes isolated by rests, on the repetition of a tone followed by a descending second. He says the latter usage is better than ornamenting with a turn, just as the turn is better used before an ascending second, although the double appoggiatura may be used within an ascending second. It is also better than a turn when placed between tones which are an augmented second apart (p. 134).

L. Mozart terms Tromlitz's example r a mordent, knowing that some will not agree with him. His justification is that the two little notes have the same characteristics as a mordent (p. 207).

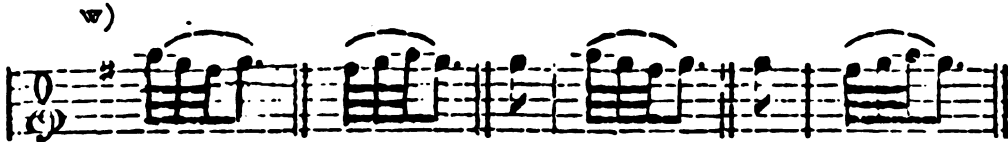
22

C. P. E. Bach adds that the dotted double appoggiatura is used before the repetition of a tone, or in an ascending step, both of which are followed by descent (p. 135). It is common agreement among L. Mozart, C. P. E. Bach, and Tromlitz, that the dotted note is stressed. Quantz and the early French writers do not mention its usage.

The turn sometimes consists of three and sometimes of four notes, and can be played freely or when the same note or an ascending long appoggiatura precedes it, or it can be set between two notes of equal value, or between two notes, the first of which is dotted. It is played from above or below, and is signified by the sign $\sim$ when played from above, and the sign $\smile$ when played from below. When it is to be played freely, or when a short note precedes it, it has only three short notes, and the fourth is the primary note (see example u),



and it will be played like example w.²³



²³ C. P. E. Bach is the only one of the treatise writers under consideration here who writes about the three-note turn. The only real difference in execution is that with the exception of presto tempos, Bach prefers that the turn be played  in adagios and, in accordance with Tromlitz,  in moderatos. In a presto tempo, Bach's execution is , four equal notes (p. 113). Thus, Bach distinguishes the turn from the trill by saying that "since the final notes of the turn are played less rapidly than the preceding ones, there is always a small space between them and the following tone. Second, the turn occasionally lays aside its brilliance for a purposely broad execution in slow, expressive movements," p. 118.

When it is affixed to a long appoggiatura or between two equal notes, the second of which is a step higher, or when the first is dotted, the turn involves four notes (see example x).



as it does when it stands between two equal notes (example y),



and when the first has a dot (example z).



21.

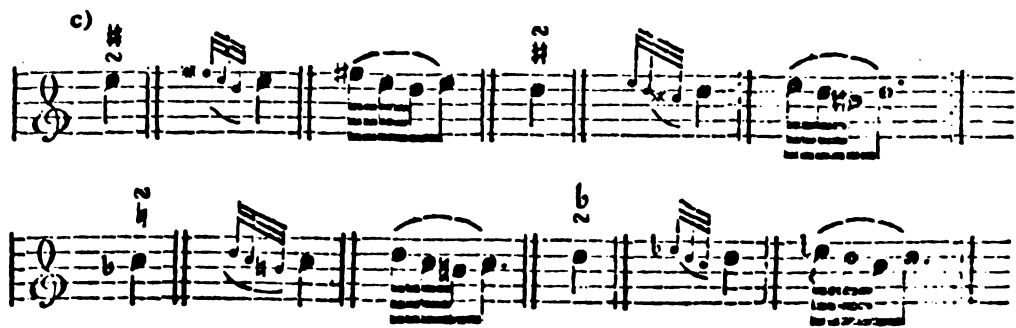
The turn can also be used between notes which are more than a step apart (see example a).



Bach augmented this ornament with another small note which he placed before the turn (see example b).



Should the turn involve an accidental, that also must be written in. If the accidental affects the first note, it appears above the sign  ; if it affects the last note, it appears under the sign  (see example c).



All of the examples here show first the sign, then the small notes, and finally they are written out in regular notes so that you can learn to play these beautiful and customary ornaments correctly. They can be used in slow and fast pieces.²⁴

22.

The pralltrill is an ornament consisting of two, or occasionally four notes, that is affixed either to a descending appoggiatura or to the primary note preceding it. The pralltrill with two notes is heard descending stepwise to the primary note in fast movements.²⁵ It can also be used freely on a stressed or unstressed note, a mannerism called Schneller [inverted mordent]. This ornament is shown by the mark $\diamond$. First I will show an example with a long appoggiatura (example d), how the sign looks, then how it looks

²⁴For a thorough discussion of the various uses of the turn, see C. P. E. Bach's Essay, p. 112-121. Especially important are the circumstances under which the turn is not used: appoggiaturas which do not repeat the preceding tone are not turned, although the following resolution may be, and the turn should not be used in rapid descending passages.

²⁵Tromlitz did not discuss turns followed by a descending note in section 21, because the pralltrill is the appropriate ornament in descending passages.

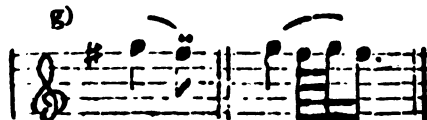
written out in small notes, and finally how it will be played with four notes (see example e),



with a primary note preceding (see example f),



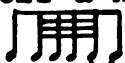
with three equal notes (see example g),



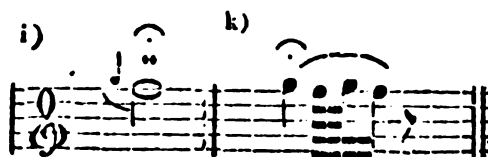
or after a dotted note preceded by an appoggiatura (see example h),



and after a note with a fermata over it, preceded by an appoggiatura (example i), which is played like example k.²⁶

²⁶ Notice that all of Tromlitz's pralltrills fall on the beat. C. P. E. Bach's execution of Tromlitz's two-note pralltrill, which Bach labels a half-trill or short trill, falls just after the beat:  (p. 110). And Bach's

four-note pralltrill, which he labels as a trill allied with a turn, and which he notates  (p. 123). L. Mozart shows the turn on a note followed by a descending note, too, calling it a Doppelschlag inverted, but it falls after the half beat (p. 185).



Here, not the note with the fermata, but rather the appoggia-
tura is held, and the pralltrill is attached quickly and
shortly so that it stops short and you hear nothing more.
After you have waited a bit, continue playing.

23.

In stepwise descending passages, when it falls on an
accented note (see example l), the Schneller or inverted
mordent is played like example m,²⁷



or in stepwise descending passages where it falls on an
unaccented note, especially if several descending steps
precede it, the variation of it makes a good effect (see
example n, played like example o),



²⁷

Here, C. P. E. Bach and Tromlitz agree on interpreta-
tion. Bach's pralltrill-turned-schneller falls directly
on the beat (or half-beat) as Tromlitz's example shows.
Bach notates it by placing a small thirty-second note
before the turned note (p. 125).

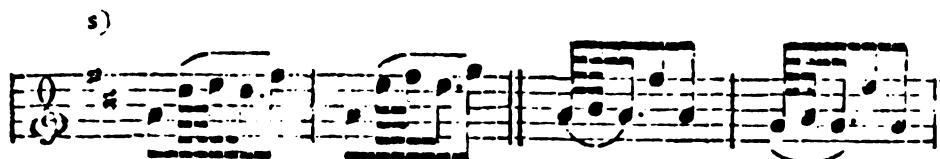
or in this manner (example p), which is played like example q.



The Schneller can be used completely freely (see example r),



and will always be designated with small notes and played like example s.

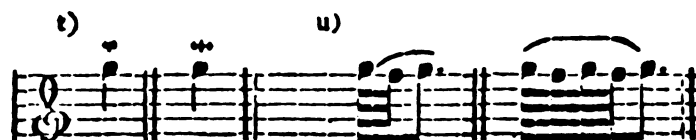


The pralltrill will make its effect as a special affection, especially in lively places, if it is not heard too often. A mordent or a batement will make the same effect in similar situations. The pralltrill is best used in lively passages, but it can also serve well in cantabile places when performed with deliberation.

24.

The mordent consists of two small notes like the pralltrill, except reversed. The pralltrill starts on the primary note, goes to the upper neighboring tone, and returns again to the primary note. The mordent begins also

with the primary note, but goes to the lower neighboring tone before returning to the primary note again. It is played very quickly, and the accent falls on the primary note. It is short or long--or as we say, simple or doubled--according to circumstance. The short mordent falls with the note, and the long mordent, consisting of four notes, takes its value from the note on which it stands (see example t), and is played like example u.

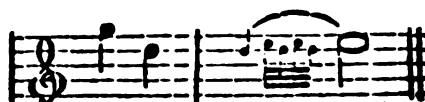


It can be free, without a preceding note, or it can be used after a leap (see example w), played like example x.



25.

Quantz calls these short mordents battements, and he uses the long mordents after an appoggiatura from below (see example y).



See how he plays this within a measure (see xample z).²⁸

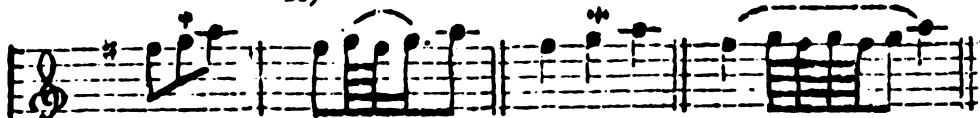
z)



In previous examples, the ornament fell on the accented beat. Here, it falls on the unaccented beat. Also, the mordent is used on a step-wise ascending note, falling on an unaccented beat (see example aa), and is played like example bb.

aa)

bb)



²⁸Quantz, p. 98. L. Mozart lists three types of mordents: the first is as Tromlitz describes; the second, as mentioned in footnote 21 of this chapter, is a double appoggiatura; and the third is a three-note grace, the middle note of which is on the pitch of the principal note. He writes in the 1787 edition of his *Violonschule*, "I know full well that as a rule only the first kind ... has the real right of citizenship as mordent, but as these, my second and third kinds, also have the characteristics of a mordent, why should they not be allowed to run with and among the mordents?" (P. 206)

C. P. E. Bach makes a few comments not covered by Tromlitz. He says that when the tempo is so slow that even a long mordent will not fill out the notes adequately, the notes may be shortened, repeated, and performed thus (P. 129):



Bach also notes that the brilliance of the mordent is often increased by raising the lower tone, that is, adding an accidental so that the interval of a half step is used. He adds a clarifying statement about the mordent versus the short trill: "The one element which they have in common is that both may be applied to the interval of a second; ascending in the case of the mordent, and descending in the case of the short trill." (p. 131.)

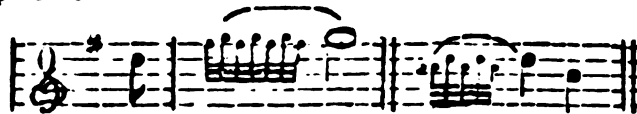
All of these usages are fine when they are handled carefully. They make the music lively, and through sensible selection of ornaments, the music gains variety. But not all ornaments belong with all pieces. Affections must act according to the tempo and mood of the piece. You must not imitate those who believe that a good performance depends on using many of these ornaments, and therefore ornament each note, because a good piece will then be totally bungled. Do not fall into the opposite mistake, however, and grind out the music completely plain--commonplace--which would make it wretched. All of the ornaments shown in the preceding sections can undoubtedly beautify a piece when they are used in the proper places, but they can also distort when used improperly. Quantz says, "a magnificent, exalted, and lively piece can be made simple and base through badly attached ornaments, and a sad and tender song, on the contrary, can become too lively and saucy through overwhelming trills and other small affections, and the meaning of the composer will be mutilated."²⁹ An irrefutable truth! Each gives freely only of what he has. If you cannot give much, it is wiser not to risk using ornaments which are beyond your capabilities and which you cannot comprehend, although you may think otherwise. He who has never learned the rules of ornaments and has no educated sensitivity, but rather has spent his lifetime whistling and fiddling with base musicians and has never

²⁹Quantz, p. 99.

learned to think, and who also possesses no theoretical knowledge of music, will always remain dull and wooden, without order in his performance. Imagination does not get him much further.

26.

Now only the battement remains, which is of two types, namely short or long. Since the short one is constituted like the short mordent, I will not discuss it further. The long battement is different from the long mordent in that it begins a half step below the primary tone, whereas the long mordent begins on the primary tone. The long battement is found in example c.³⁰



There is a multitude of such little trimmings where the one should be played thus and the other so, and they all have different names: Ribattuta, Groppos, Tirata, Halbzirkel, Überwürfen, syncopations, and the like. These I will not discuss, because I believe that they may be omitted. They confuse the beginner and make selection of

30

Corrette and Hotteterre each discuss the battement briefly, describing it as a short trill made by beating the finger once or twice on the next lower hole, thereby sharing the lower sound (Corrette, p. 44, Hotteterre, p. 66).

Quantz, p. 98, gives two examples, the second of which agrees with Tromlitz, but the first of which is akin to Tromlitz's Schneller.

Mozart agrees with Tromlitz's execution, and mentions that a half step is always used, p. 209.

ornaments difficult. The composer has a duty to write down what he wants. He who studies diligently and thoughtfully will find everything he needs.

27.

Since the difference between loud and soft is a principal part of good performance, I am putting it here with the essential ornaments. Both are shown by the following words, kept in Italian, or also by just the beginning letter:

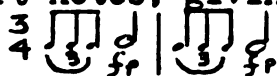
forte, loud, f.
 poco forte, somewhat loud, poco f.
 mezzo forte, moderately loud, mf.
 piu forte, louder, puif.
 fortissimo, very loud, ff.
 fortissimo assai, as loud as possible, fff.
 piano, soft, p.
 poco piano, somewhat soft, poco p.
 mezzo piano, moderately soft, mp.
 piu piano, softer, piup.
 pianissimo, very soft, pp.
 pianissimo assai, as soft as possible, ppp.

The remaining gradations in dynamic level are subtleties which can only be defined actually by feeling, and are therefore not to be seen much in the rules, and cannot be observed on all instruments. It is difficult enough to observe all of the aforementioned dynamic gradations on the flute. There are many flutists who give no thought to this, and play loudly most of the time, the more so if they have a thin and weak tone with which they can do nothing, even if they want to. I have discussed elsewhere how the strength of the tone must be produced to ensure the proper exchange of loud and soft.

The piano and forte always begin on the note under or over which the letter p or f stands. Dynamic markings are used on single notes as well as on whole passages, especially such passages as have already appeared once. Loudness and softness are so constituted that they are cut off from one another.³¹ That is, they do not always flow into one another, increasing and decreasing, which will be discussed in the next section. I put no example here, because I would play the f and p according to my feeling, and another player would rather manage in his own way. In performing, find out where these alterations and shadings make the best effect, and you will be on the right path. You will find that other players feel differently, and therefore ornament differently when playing one and the same piece. Therefore an example here is of little use. My reasons for this can be seen in my Essay on Flute Playing, Breitkopf, 1786. If you believe

³¹ Probably this is a reference to the Baroque practice of "terraced dynamics." Quantz writes, "in the repetition of the same or of similar ideas consisting of half or whole bars, whether at the same level or in transposition, the repetition of the idea may be played somewhat more softly than the first statement," p. 277.

L. Mozart maintains that it is customary to accent half notes and even quarter notes strongly when they are mixed with short notes, giving the following example (p. 219):



C. P. E. Bach writes that "complete passages, including their consonances and dissonances, may be marked first forte and, later, piano. This is a customary procedure ... But in general it can be said that dissonances are played loudly and consonances softly, since the former rouse our emotions and the latter quiet them." (p. 163.)

otherwise, you will find the arbitrary notations f, p, cr, and decr in the brief example in the following section, and you can make use of them. Everything I have said here and will say in the following applies only to the soloist. Ripienists have other rules, which they can learn from Quantz.³²

28.

I also count growing louder and softer among the essential ornaments. This is shown by the Italian words crescendo and decrescendo, or the first is shown by the sign < , and the second by > . It can also be used on a single, especially long note, as well as on several notes together.³³ Because it is often used on single notes in songs, and on ornamental notes of different types,

³²See Quantz, On Playing the Flute, Chapter XVII, section vii.

³³Although shaded dynamics are not found much before the time of Tromlitz, Quantz writes that a soloist may decide to swell and moderate his sound in an Adagio (p. 276).

L. Mozart points out that "notes raised by a sharp and natural should always be played rather strongly, the tone then diminishing again during the course of the melody... in the same way a sudden lowering of a note by a flat and natural should be distinguished by forte." (p. 218.)

William Mitchell, translator of C. P. E. Bach, notes that modern signs for graded dynamics were only evolving in Bach's time and that he used graded dynamics only sparingly in his later compositions. Indeed, Tromlitz is the only one of the treatise writers under consideration who uses the terms crescendo and decrescendo, and who shows the signs < and > .

and because it would be impossible to present all circumstances of its use here, I will present only one small example from which you will be able to learn enough about the use of this ornament (see example d).

Un poco adagio.

The musical notation consists of three staves of music in G major (one sharp) and common time. The first staff begins with a half note G, followed by a half note A, and then a half note B. Below the first staff, there are dynamic markings: *p. cresc.* under the first measure, *f.* under the second measure, *pp mf* under the third measure, *f. decr.* under the fourth measure, and *p* under the fifth measure. The second staff continues the melody with a half note C, followed by a half note D, and then a half note E. Below the second staff, there are dynamic markings: *f. decr.* under the first measure, *p. cr. f. decr.* under the second measure, *p. cr.* under the third measure, and *f.* under the fourth measure. The third staff continues the melody with a half note F, followed by a half note G, and then a half note A. Below the third staff, there is a dynamic marking: *m. f. decr. p* under the first measure.

Growing louder or stronger starts on the note under which *cr* stands, or on the narrow end of the sign. It is self-explanatory that you attack the tone at the beginning of the *cresc.* with a strength from which a growing sound, which is appropriate to the nature of the instrument, can be derived. If you begin too loudly, the following tones will not be able to grow louder, especially with the flute, on which it is more difficult than on other instruments to play loudly. Those who have no knowledge of the flute believe that only with a more forceful breath can the tone become stronger. It will become stronger indeed, but also sharp if you do not know how to control it. Therefore when you

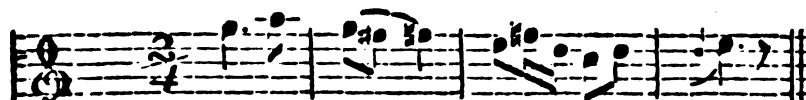
want the tone louder, you must also turn the embouchure hole in toward the mouth little by little, so that the opening becomes smaller and the stronger force of the breath still retains the proper pitch. The decrescendo is handled in the opposite manner. If the cresc. is shown with the sign , you see where the soft part begins and the loud ends. This you see also with the decresc. However, if the word crescendo, or the letters cr are shown, you can see where to begin, indeed, and sometimes a p is found there, too, but you do not see where the loud stops, and that must therefore be shown with a forte or f. It is the same with the decresc.; the beginning is shown with f, and the end with p, as you can see in example d above. Crescendo and decrescendo add shade and light, and consequently belong in a good performance.

29.

Just a few words now about a very practical ornament from the present day. I mean the interlacing of one or two tones, which happens when you pull your finger off the hole little by little, or push it over the hole little by little, or cover it from the side a little at a time, and likewise open it. I have presented this ornament here because it is so much in vogue at this time that it must be endured constantly. Otherwise it is more arbitrary than essential, and can rightfully be omitted quite often. Some do not analyse where it is suitable, and do not realize

that it must be heard only very seldom if it is not to arouse disgust. Rather, these players use it ten times in a piece, howling up and down at every opportunity until it is hardly to be tolerated. Many use this "device" not so much for the sake of a good performance as only to show that they can handle this monster. I call it a monster, and that it is in the hands of most of our so-called concert players. If it is used at the right time in the right place, it makes a good effect, but it must be heard only seldom, because it is a mannerism which easily becomes intolerable if it appears too often. It is used in scales that ascend or descend a half step, although it is more useful descending. Both are shown in example e.

c)



In the second measure of this example, this mannerism is produced in the following way: as soon as you play the G, the first note of the second measure, place the two fingers necessary to play F, namely 4 and 6, somewhat stretched out by the sides of the holes, directly across from them, but yet very near. Now cover in this manner: slide the fingers little by little toward the holes, and the tone will be pulled unnoticed and without pause down to F. This procedure is better than setting the tips of the fingers on the holes and pushing over the holes little

These few examples are enough for you to recognize where these mannerisms can be used. I remind you once more, however, that this should be used only seldom, so that the howling does not become overwhelming. You will find more about this in the fifteenth section of Chapter Fifteen.

Chapter Eleven

About Trills

1.

Writing a whole chapter about trills may seem superfluous to those who think there is no more to this art than shaking the finger on the instrument, and the faster the better. I am certainly not the first to write a whole chapter about trills--others have already done it--but since I am writing about it, I would also like to impart my opinion about this ornament. If you agree, accept it; if you do not, you may omit it.

2.

Since the trill is one of the most magnificent, but also one of the most difficult ornaments, and since, like the other essential ornaments, it is indispensable, it is necessary that you constantly seek to perfect it. Music is greatly enhanced by it, so it is a great loss for both the instrumentalist and the singer if they cannot produce a correct and beautiful trill, or if they are unable to trill at all. If an instrumentalist or singer performs beautifully otherwise, the performance will lose a great part of its beauty if this ornament is missing, especially if the piece ends with a poorly executed trill, or no trill at all. A good trill is seldom heard; for some, it seems to be physically impossible to do. I believe, however, that the

reason for this failure lies in poor execution rather than physical handicap. Some do not take the trouble, and believe trilling should come naturally.

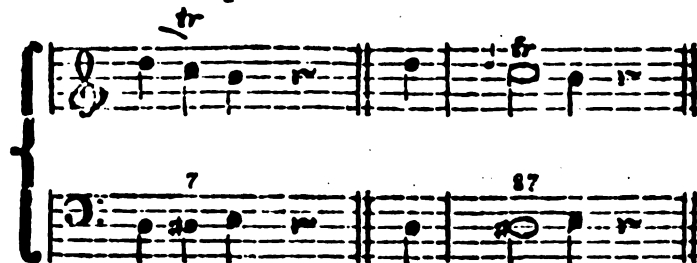
3.

On the flute, all fingers (even the little finger, and on flutes with many keys, even the thumb) must be able not only to trill well, but also to trill at various speeds. You can see from this the great difficulty and the great amount of sustained work it takes to reach this goal. Would not all the work of a lifetime be for nothing if you thought trills originated simply at random and through a casual movement of the fingers, without taking into consideration evenness, beauty, and the appropriate speed of the trill for the passage in which it stands? All fingers would be spoiled and could scarcely, or perhaps never, be brought back into order. Therefore, if you want to be sure, you must practice slowly with each finger until you feel certain that each movement is exactly the same. Then practice faster in the same manner until the finger is capable of making all movements perfectly. When you are finished with one finger, go on to the second, and so proceed until with a common flute all seven, and with a keyed flute, all ten fingers are fully controlled. If you are a master, which can indeed happen only through continuous daily practice, you will be able to produce a beautiful trill appropriate to the tempo of the piece in any circumstance, and then you will have

achieved a beauty that many are lacking. This comes only with diligent and untiring work, not with sleeping. Indeed you are better off when you have only two fingers established, than the poor flutist with his tortured wood, especially if you want to be a true flutist.

4.

The trill consists of a specific number of small notes in which the note over which the trill sign stands is altered so that the trill is to the upper neighbor, either a half step or a whole step, depending on the key signature. The good trill, then, consists of either a whole or a half step. The trill of a third is worthless, and no thorough, well-educated flutist must and will use it if he can avoid it. The diminished seventh is also worthless, but if you trill diminished sevenths and diminished octaves, it is better than rewriting the music in order to avoid trills which, in the opinions of some, are false. But can a trill really be rewritten? To rewrite a trill means to me inability to execute the trill, or not knowing how it should be done. A trill written in a song belongs to the mood or character of the musical line, and therefore must remain a trill. A rewritten trill is not a trill. A trill of the diminished seventh is seen in example 1.



In both cases, the anticipatory note, or the note appearing opposite the bass note, makes an octave; in the first case, a perfect octave, and in the second, a diminished octave, and in both cases it is D, although D sharp stands in the bass. So the trill on C, as the diminished seventh, must be made with C and D (see example 2).



However, I do not understand why one would not want to make this trill with the assistance of the diminished octave, since it has a place in the harmony. But you must make the trill as it stands above in example 2, and as the following will show, namely that the stress comes on the C, as the primary tone, and not on the D, a neighboring tone. If you begin with the D, and lay the emphasis always on the D during the trill, the trill against the bass D sharp will certainly sound very bad. This is avoided, however, if you lay the stress on the primary note C, and the D then, as a passing tone, is tolerated very well against the bass.

5.

The sign found in example 3 is set above a note which is to be changed to a trill. These notes can be of any kind, namely whole notes, half notes, quarters, eighths, and sixteenths, and the trill has the value of the note

over which it stands. However, how many small notes a trill should be divided into is not exactly defined, although it is agreed that trills must have different speeds. More about this below. Thus the notes of the trill look like example 4.



The upper note of the trill must lie in the key in which you are playing, as here in example 4, the A belongs in the scale of G. Example 5 shows a trill on D. This D can belong to the B flat scale according to the key signature: B flat, C, D, E flat, etc., or to the key of G minor. Thus the upper note of this trill will be E flat, just a half step higher than D, and you cannot trill with the sixth finger, because that would produce E natural, and if you lift the finger even just a little, you will still hear the E natural, which makes a bad effect.¹ To avoid this, you must trill with the little finger on the key, which will produce a beautiful trill if the key is correctly placed and the spring underneath it is properly placed. (See example 6.)

¹ Quantz trills this D[♯] in this manner, not using the key to trill, but rather the sixth finger (p. 104). Corrette and Hotteterre are of the same mind as Quantz (p. 38 and 74 respectively).



You must help yourself when you can; there are enough cases where you cannot, and you must worm your way through miserably.

6.

The main attribute of a good trill is that each note of it is as nearly equal as possible with the other notes. Thus the finger does not rest longer on the instrument than above it, and vice versa, and the trill is proper to the tempo of the piece--that is, it is neither too fast nor too slow. Because several trills appear in one piece, you must see to it that they remain the same in tempo, and that one is not slower or faster than another. This precaution is all the more important since so many different fingers must make the trills. In order to be sure, and so that you can always make a trill proper to the tempo of the piece, I believe that it is necessary to establish a definite measure to each trill. I do not understand why anyone would leave to chance, for example with a quarter note, the number of notes to be used for this trill. With such a procedure, the trills will certainly not all be the same as the first one, the less so since other fingers must always be used, each of which makes a different trill if no definite number of notes has been established. By measuring the trill, the fingers would be properly prepared for all circumstances.

This is why such an indefinite trill is seldom proper to the time of the note on which it is made; it has either a few notes too many or too few, and thus becomes either too long or too short. If you have not heretofore troubled yourself to take a definite measure, you are failing to make the same trill with each finger; or if the pitch is too high, your finger has accustomed itself to only one method, which now must suit all cases--either you make a trill too slow or too fast, and use it for each movement. The first is a lazy, sleepy trill; the other is a quivering, bleating one.² Both are mistakes, and a beginner must be careful not to imitate these, even if they are made by a so-called virtuoso. A beginner would accustom himself to a mistake, and would then be able to get rid of it only with the greatest of effort.

7.

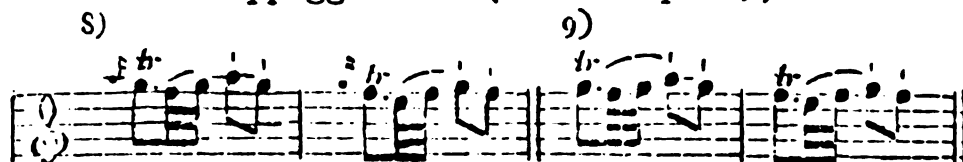
The trill, when it appears in a song, is always preceded by an appoggiatura from above or below, or by a note which takes the place of the appoggiatura (see example 7).



If the piece, or an intermediate phrase of the piece, begins with a trill, it can also be given an appoggiatura.

² "Bockstriller," or as Quantz tells us, "chevrote" in French. Quantz, L. Mozart, and C. P. E. Bach all refer to the rapid "bleating" trill and have no use for it, although Mozart notices that a very rapid trill can be executed on a high note (p. 189).

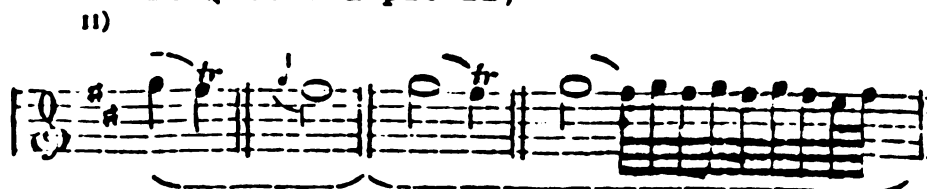
but only a short one (see example 8), although it can also begin without the appoggiatura (see example 9).³



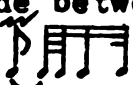
When an appoggiatura precedes a trill, it takes its value as usual from half of the note before which it stands, and the other half is trilled. Or, if the note is dotted, the appoggiatura takes two parts, and the third part is trilled, but such that immediately after the appoggiatura, the trill starts on the note over which the trill sign stands (see example 10).⁴



More often a regular note, instead of an appoggiatura, stands before the trill (see example 11).

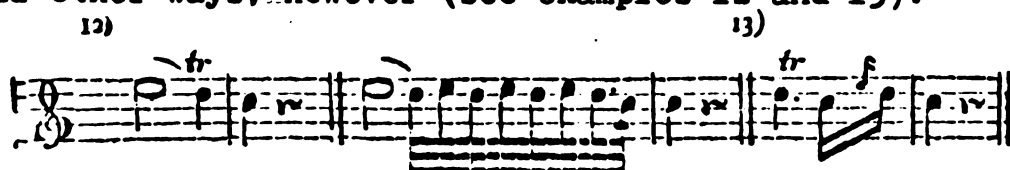


³Perhaps this shows the beginning of trilling without an appoggiatura. Previously trills were generally preceded by an appoggiatura.

⁴C. P. E. Bach writes that "when dotted notes are trilled, a very short separation must be made between the last tone of the suffix and the following note:  ." (p. 103.)

8.

Two small notes are added to the end of the trill, the first of which is a half or whole step below the primary note, and the second of which alludes to the primary note. This is called the termination, which each trill must have (see examples 8-11). Sometimes the two small notes which make up the termination are written out in ordinary notes (as in examples 8 and 9). The termination can be made in still other ways, however (see examples 12 and 13).



The first way is actually only an anticipation of the final note. The second is the usual termination, except that the last note has still another grace note above it. The first execution (example 12) is too simple and not even very practicable anymore; the second is too gaudy, but is used frequently. The two simple notes of which I have previously spoken are always the best for singers and instrumentalists.⁵

9.

Some prefer that the trill should begin from above, and that the upper note in this fast movement be viewed as a

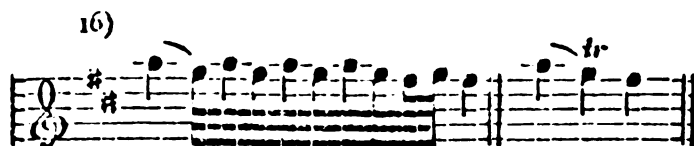
⁵ L. Mozart writes that "in long, descending intermediate cadences, it is always better to fall directly to the closing note by means of a...turn which is played somewhat slowly, than to make the performance sleepy by playing an appoggiatura before the closing note," p. 191. However, he continues by saying it sounds "more beautiful and cantabile" if an appoggiatura is added to the two notes of the turn, and he gives an example paralleling Tromlitz's example 13.

clear appoggiatura. In that case the stress would be on the appoggiatura, and the second note, which should be the primary note, would be handled as a passing tone on which, according to my feeling, the stress should be placed. If you wish to do this, you may. It is impossible to me, and for my feeling it is unnatural. The primary note over which the trill stands must clearly be proper to the good and expressive song, just as though the trill were not there. In this reversed manner, however, the primary note would be displaced or omitted, the flow of the song would be disrupted, and the actual melodic line would become unrecognizable (see example 14), instead of the following (see example 15).



10.

I know well that with a very long trill, it seems occasionally as though the accent lies on the upper note. However, that is not due to the nature of the trill, but rather to uneven movement of the fingers. If you play example 14 as a simple line without a trill, like example 15, you will see that the second quarter note is clearly heard, and the trill on it must be so constructed that you hear this quarter note just as clearly as if it had no trill:



But can that be done when you begin the trill from above and lay the stress on the upper note, thereby displacing this quarter so that it is hardly heard?⁶ (See example 17.)



If you have not spoiled your ear too much, you will certainly hear that you must reject this repetition of the appoggiatura. The beautiful effect of the appoggiatura, which must always be slurred to the following note or trill, would be lost, since in this way you must omit the appoggiatura. If the trill is to make a good effect, it must never be separated from the preceding appoggiatura or note representing the appoggiatura. However, if you wanted to tie the first note of the trill (see example 17) to the appoggiatura, it would always be the appoggiatura on which the emphasis would lie. And this note indeed should be

⁶Tromlitz's example 17 is the first of L. Mozart's three ways of beginning a trill (see p. 187). The other ways are with a descending appoggiatura as preparation, and an ascending appoggiatura with Überwurf (beginning a note below the principal note and ascending to a note above, then trilling).

C. P. E. Bach rules that virtually no trill begins on the principal note, and therefore the inclusion of a grace note appoggiatura is superfluous. All of his written-out trills begin on the upper note (see p. 99-112).

slurred, but not tied, because slurring and tying are two different things. Slurring occurs in a good trill a step up or down, and tying on the same step has no place in a good trill. Also, this procedure causes an uneven trill, because when you place the emphasis on the upper note, and always hear it before the second note, it will become longer, and consequently the trilling finger will rest longer either above or on the instrument.

11.

The speed of the trill is always dependent on the tempo of the piece. Upper and lower registers have nothing to do with it; the upper is trilled the same as the lower.⁷ Larger instruments demand a little consideration in the production of trills if the composer has taken a fancy to placing trills in the lower register. There is an exception, however, for actually it is allowable only for concerto and solo players. If an entire orchestra should make a trill together, in which case trilled octaves would appear, the trill must be appropriate in all instruments to the tempo of the piece. Think of the opposite. Then, too, the placement must not create any exceptions. It is true that Quantz said, "if you play in a large room where sound rings a great deal, you must not trill fast, because otherwise the

⁷Quantz, L. Mozart, and C. P. E. Bach all agree that notes in the high register will tolerate a faster trill than notes in a lower register, especially where the keyboard and low stringed instruments are concerned.

tones would smear together."⁸ I say, however, that if the tones of a fast trill smear together in a large room, so also do the tones of a passage in a fast piece. To avoid this, you must not play fast pieces in large rooms; if you play no fast pieces, you also use no fast trills which would smear. In small rooms, on the contrary, you can play fast pieces, because the sound does not ring, and consequently you can make the trills fast. Thus if each trill stood in its proper place, the effect would be right, and you would not need the exceptions to this rule. Nowadays one plays what he can, be where it may, and troubles himself little with this rule.

12.

Here, a definite tempo of a trill proper to each piece will be established. I must confess, however, that this is a difficult thing. Since so many great men have already investigated this and have failed, I should indeed not presume to say anything definite about this, but hopefully you will allow me an attempt. Quantz made an attempt, and determined the parts of a trill according to the pulse.⁹

⁸Quantz, p. 101, qualifies this statement by saying one must also take into consideration the character of the piece he is playing. In melancholy pieces, the trill is slower, and in lively pieces it is faster.

⁹Quantz writes, "I believe that a long shake which prepares a cadence will be neither too slow nor too quick if it is so struck that the finger makes not many more than four movements in the time of a pulse beat (previously established as 80 per minute), and thus makes eight notes... In fast and gay pieces, however, brief shakes can be struck a little more quickly." (p. 102.)

This seems very artificial to me. I have never been able to execute it, because when I am too deeply involved in the music I am playing, I forget the pulse when the trill comes, and if I thought about the pulse, I would forget the trill and lose the feel for the piece. However, those of you who can, conform to this. The recommendation I make is easier, more certain, and safer. Whether all musicians hold my same opinion is, of course, another question. At the very least, I think it is a way to approach this thing more closely.

13.

It is indisputably a great art to produce a trill properly, suitable to the meter, and with the appropriate tempo for each piece, and to retain this tempo for all trills appearing in the same piece, especially on wind instruments where many fingers must make a good trill. On a common flute, you use seven fingers already, not to mention a flute with many keys. You should be able to establish the correct movement of the trill, proper to each piece, on the third diminution of a prescribed beat of the measure. For example, if the beats of the measure were quarter notes, the trill would be in thirty-second notes; if the beats were eighth notes, the trill would be in sixty-fourth notes. However, in very fast tempos where you cannot achieve the third diminution, you must be satisfied with the second, or if this seems too slow, instead

of playing sixteen notes, take twelve to a half beat, and the six notes on the primary tone will be observed as two triplets. To a quarter note, of course, you would take only half of this. An arbitrary sign added by the composer will help the player. In slow pieces where the third diminution of the trill seems entirely too slow, you can use this same method in reverse. Instead of playing eight notes, play twelve. With this arrangement, the trill would always conform to the tempo of the piece, from slow pieces to fast, and if it were always measured, the confusion of an orchestral trill, where several trills are often made at one time, would be lifted, and a correct whole would result. When one occasionally makes a beautiful trill, it is noticed at once without knowing the reason, which is certainly no other than that the trill is proper to the tempo of the piece and the finger trills the tones evenly. Because so much is dependent upon it, hopefully you will excuse me if I dare make this attempt at explanation, for more depends on the unity of the trills to each tempo. That it is difficult but not impossible, I certainly believe.

14.

In this way, you have something definite on which you can rely. Should you not agree with me, it can nonetheless be an opportunity to reflect on the matter; therefore I call it only an attempt at explanation. I have always gotten along well with it, and generally have been assured

that my trills were good and proper to the piece. I gave what I had. Since the trill is one of the most fashionable, beautiful, and indispensable ornaments, it deserves a closer scrutiny than it has previously had, and this, plus the everlasting improper trills and grumbling, causes me to make the present attempt. My explanation is worth more than the methods contrived for that purpose, and the other already specified means. If I am wrong, correct me. I do not want to instruct those who already know everything; only those who do not know it and have only one trilling speed which must fit all tempos. I set here only one single example from the end of a song, to make my opinion clearer and more intelligible (see example 18).



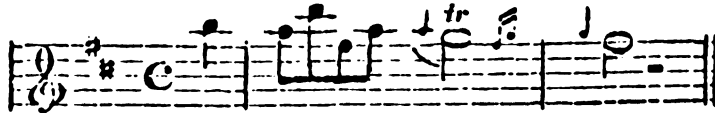
If you play this short example in a slow tempo, you will find that the trill, too, with this arrangement, is appropriate to the pleasant tempo. Each of you will perceive that this manner of trilling must be studied diligently, because one never has been accustomed to fitting a trill in the measure with a definite number of notes, thereby effecting a correct movement suitable to the piece. I think you will understand me; therefore I will continue.

15.

After the termination of a trill, sometimes when time permits, and especially at mid-points, an appoggiatura is

added to the following note (see example 19),¹⁰ but never before the final note of the piece (see example 20).

19)



20)



Nowadays one trills so much stepwise up and down the scale, with half and whole steps, and even by leaps, on accented and unaccented notes, that it seems the trills have no end.

16.

Now I will present a table from which you can learn how all trills must be executed on the flute. Many are false due to the nature of this instrument, and some of them have always been done falsely in the past, although they could have been altered. I will therefore pass them on according to this table, and according to the fingering chart shown earlier [p. 118], along with improvements for the false trills where possible. The following table is arranged according to the letter names of the notes as they succeed one another. Everything can be found through the use of accidentals (see example 21).

¹⁰ Quantz does not permit an appoggiatura between the closing note and the termination of the trill at mid-points or at the end of a piece. Reilly mentions it is possible that Quantz is referring only to full cadences which conclude a major section of a piece (see p. 108). L. Mozart has the opposite opinion from Tromlitz (see footnote 5 of this chapter).

6) $\bar{d}$ 1) 2) 3) 4)

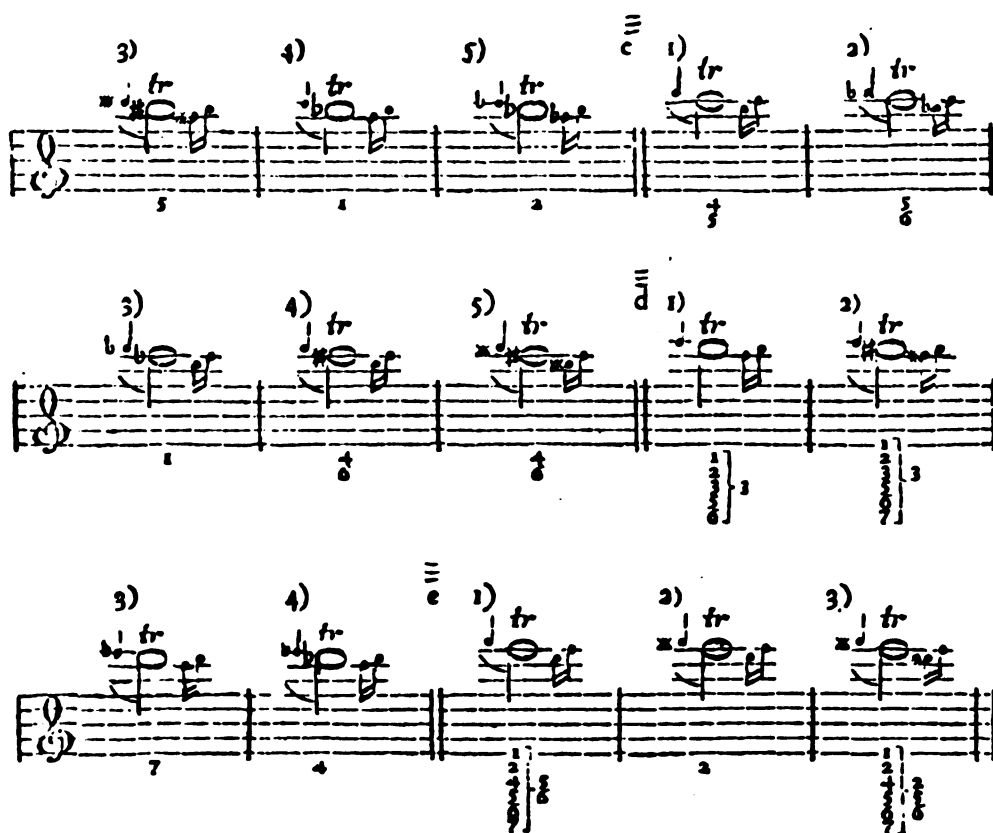
5) $\bar{e}$ 1) 2) 3) 4)

5) $\bar{f}$ 1) 2) 3) 4)

5) 6) $\bar{g}$ 1) 2) 3)

4) 5) $\bar{a}$ 1) 2) 3)

4) 5) $\bar{b}$ 1) 2)



17. D'

The trill under no. 1 on low D' with the sixth finger is a good one, but it has no termination, since D' is the lowest note on the flute. Under no. 2, E flat' is the appoggiatura and cannot be trilled with the sixth finger, because not E flat', but E' natural (or a whole step instead of a half step) would result. Thus this trill with the sixth finger would be false. It can be improved, however, by trilling with the seventh finger on the E flat key. It makes an especially good effect in the second octave where it often appears, but it very seldom occurs in the lower octave. Since this mistake can be avoided, it would be folly not to

do it correctly, creating the right interval for the trill. This trill sounds even better in the second octave, as already said, because it also has a termination. Do not think it impossible to produce a good trill with the little finger on the key; I assure you that it is indeed possible, and a very good trill can be made. The key must not have an overly strong spring, however, so that the little finger can open it comfortably. When the spring just closes the key securely, it is strong enough, and the little finger can make a good trill without any trouble.

18.

The trill under no. 3 on D sharp', which has E' as an appoggiatura, is made well with the sixth finger, although the E' is a little too high because the D sharp key must remain open. Nevertheless, the ear receives it easily. No. 4 is a false trill, first because the E sharp', fingered like F', is a comma too high, and then it becomes still higher because the D sharp key remains open. Also, the D sharp is a comma lower than E flat, and consequently farther from F, taken as the E sharp, and the trill becomes one of almost a third, and makes a very bad effect. Since nothing can improve it and you must retain it as it is, you would do best to avoid it as much as possible. It can be made very easily and well on a flute which has a long F key for the little finger of the left hand. It appears very seldom or not at all in this octave; it comes more easily in the second octave.

19. E'

Of the trills on E', no. 1, which has F' as an appoggiatura, is false, because by lifting the trilling finger, which is the fifth, F' is changed into F sharp', even if you raise the finger only a little. This results in a whole step instead of a half step. However, if you have an F key for the sixth finger on your flute, this trill is made very beautifully and correctly. The no. 2 trill on E' has F sharp' as an appoggiatura. When trilled in the usual way with the fourth finger, a false trill in the interval of a third results, which is worthless; its effect, especially in the low register, is wretched. With the fifth finger it is good. This trill with the fourth finger is an old mistake which has been kept because no one thought of anything better. The no. 3 trill on E sharp' with F sharp' as an appoggiatura is executed with the fourth finger, but it is also bad. However, it is passable when you try to play the E sharp' as low as possible. This trill can be made quite good with the help of a long F key for the little finger of the left hand. The no. 4 trill on E flat' with F' as an appoggiatura is also not completely accurate; it is made with the fifth finger. Since the E flat' is often too low and the F' too high, and since the E flat key remains open during the trill, making the F' even higher, this trill always sounds bad, but there is no alternative, and one must play it the best he can. With a long F key it is very nice. The trill under no. 5 is good.

20. F'

The no. 1 trill on F' with the appoggiatura G' is good, but faint. On a flute with an F key, it is good and beautiful. The trill under no. 2, on F' with G flat' as an appoggiatura, is false, because by lifting the fourth finger, a whole step results where only a half step should be. Here perhaps lifting the trilling finger only a little would help, but not much. With the help of a long F key, it is good. The trill on F flat' with G flat' as an appoggiatura, under no. 3, made with the fifth finger is still tolerable, although the G flat' is changed to F sharp'. No. 4 on F sharp', trilled to G', is good. But the trill under no. 5, from F sharp' to G sharp', cannot be tolerated with the third finger; with the fourth it is more bearable indeed, but the G' which results from lifting the trilling finger is too conspicuous, and spoils the trill.¹¹ Since there is no alternative trill, you would do best to avoid this trill altogether. If you wanted to take G flat' instead of F sharp', the trill would indeed be more tolerable, but too high, and by making it lower, the G flat' becomes too feeble. On a flute with F and G sharp keys, this trill can be executed quite well. Under no. 6, the trill on F double sharp' up to G sharp', with E sharp' as a termination, is trilled with the third finger, but is

¹¹

Quantz maintains the third finger is the only usable trill. For the upper octave, however, he holds the F sharp down with 1, 2, 3, 5, 6, 8, and trills with 3 (p. 107). See Tromlitz, p. 423, paragraph 27.

false, however, because by raising the third finger, G sharp' is changed to A'. It can be made clearly on a flute with F and G sharp keys.

21. G'

The trill on G' up to A', no. 1, is very good trilled with the third finger. The trill after the appoggiatura A flat', no. 2, is false, because lifting the third finger changes the A flat' into A'; it is hopeless. On a keyed flute it is good. The trill under no. 3, on G flat' up to A flat', made with the third finger, is also false, since the A flat' is changed to an A' with the raising of the third finger. There is also no help for this trill except that with a keyed flute, it is possible to play it very well. No. 4 from G sharp' to A', made with the second finger, is a deplorable trill of a third, and consequently is false. If you want to play it with 4 and 5, leaving the sixth finger on the hole, it would certainly be more in tune, but faint and unclear. Here again there is no remedy, and you must put up with it if you will not accustom yourself to a flute with keys, on which this trill is good. The trill no. 5 on G sharp' up to A sharp', trilled with the second finger, is tolerable.

22. A'

The trill on A' up to B', no. 1, is very good with the second finger. No. 2 on A sharp' up to B' is false, since it is a trill of a third, and it cannot be improved. On a

flute with G sharp and B flat keys, it can be produced very well. The trill under no. 3, on A sharp' with B sharp' as an appoggiatura, is not much better, but it is easier to tolerate. On a flute with G sharp, B flat, and C" keys, it is indeed beautiful and correct, but difficult to produce. No. 4 on A' up to B flat' is again a false trill when made with the second finger, because it produces a whole step when it should be only a half step. It must remain this way, too, because lifting the trilling finger only a little improves the trill just a little or not at all. However, on a flute with a B flat key, it is indeed somewhat artificial, but yet very good and clean. The trill under no. 5, on A flat' with B flat' as an appoggiatura, made with the second finger, is more tolerable. Also, here, lifting the trilling finger just a little helps somewhat. However, on a flute with G sharp and B flat keys, it will be very good, but also artificial.

23. B'

The trill on B' with the appoggiatura C", no. 1, is false, because trilling the first finger creates a whole step from B' to C sharp". How beautiful it would be with a C" key! But you would have to be able to trill with the thumb. No. 2 on B' up to C sharp" is made very well with the first finger. The B sharp' trill to C sharp", no. 3, is made with the second and third fingers together, and the

termination is A sharp' - B sharp', and is tolerable.¹² On a flute with a C" key, this can be played exquisitely well. The trill on B sharp' up to C double sharp", with the termination A sharp' - B sharp', is played by some as though C double sharp" were D", B sharp' were C", and A sharp' were B flat', thus taking the tones D", C", and B flat' instead of C double sharp", B sharp', and A sharp'. Now you make the trill on the C" with the fourth finger, but all of the holes except the first are covered. However, since A sharp' and B sharp' are lower than B flat' and C", and thus must be fingered differently, they cannot be taken as being the same. The D" is also too high to be C double sharp", but it cannot be lowered by any means except turning the flute inwards, and must therefore remain as it is. However, to make the trill and its primary note more perfect, finger B sharp' and trill with 5 and 6, using A sharp' and B sharp' as the termination. In this manner, the scale A sharp', B sharp', and C double sharp" is more suitable. Although with this procedure the C double sharp" is still sharp, it can be made somewhat lower, as already said, by turning the flute in. The trill on B flat' with the grace note C", no. 5, is done with the first finger, but is also the trill of a third, and therefore false, because the C" is changed to a C sharp". This trill works

¹²Quantz describes a trill here which will sound like a C sharp-D trill with a B-C sharp termination. He leaves 2, 3, 4, 5, 6, down, and trills with 4, lifting all fingers to make the termination (p. 107).

very well on a flute with a B flat key. Under no. 6, the trill on B flat' up to C flat" is done with the first finger; it is also a false trill, because it should be only a half step, but the C flat" changes to a C sharp", creating an augmented second, which sounds like a third. With the help of a C" key, it is very good.

24. C"

The trill from C" to D", no. 1, would be good if the C" were not dull and faint next to the D". When you finger the appoggiatura D", trill with the fourth finger while holding the others down, and B flat' and C" make up the termination. It can be improved if, when holding the D" fingering, the third finger is used to trill. You must turn the flute in a little, however, thereby covering the embouchure hole more, so that the C" is flatter, which would otherwise be too high, making the trill false. I think this last way is the best. Even on a keyed flute where you can trill with the help of the C" key, I like the other better. But you must not forget to lower the C". No. 2, with the grace note D flat", is done the same way as no. 1, but it is false because D flat" changes to D". If you proceed cautiously, it can be made more correctly if you finger D flat" with the fourth finger, and trill with 2 and 3, the B flat' and C" coming after. However, you must be careful; otherwise a foul trill results. What I mean here will be understood when you try this trill. On a flute with a C" key, it is very nice. No. 3 on C flat is an incorrect trill when the C flat"

is fingered like B', because the B' is flat. If you finger it with 2, 3, 4, 5, however, like C flat', and trill with 2 and 3, B flat' and C" following, it becomes cleaner, but dull; however, it is more tolerable than the trill on B'. With the help of C" and B flat keys, it becomes very nice. The trill in no. 4, from C sharp" to D", is good if the C sharp" is correctly tuned. Finger the D" and trill with 2 and 3, and B' and C sharp" are the termination. The trill under no. 5 is not so good, because the second, C sharp" - D sharp", is commonly too wide, and the D sharp", when trilled, does not speak very well. Quantz maintains you should cover the first hole a little on the D sharp.¹³ The D sharp" certainly speaks better that way, but the interval becomes even larger in that the C sharp" becomes flatter, and the trill then is not improved. There is no other aid, however, and you must be satisfied with it. Avoid this trill when you can. The trill under no. 6 is good with the help of the breath or a D sharp key, but you must try to make the C double sharp" a little flatter by turning the flute in a little.

25. D"

The trill on D", under no. 1, with the appoggiatura E", is good when done with the sixth finger. The trill with the

¹³

The trill Quantz actually describes is his D flat - E flat trill, which he trills as Tromlitz does, with 2 and 3. For the trill Tromlitz describes here, Quantz recommends using the large (E flat) key instead of the small one, lifting the little finger slightly so the key is closer to the hole (p. 107).

grace note E flat", done with the seventh finger on the key, is also good and correct. No. 3 on D flat", with the appoggiatura E flat", is a wretched trill, because the D flat" is much too low against the E flat".¹⁴ Handle it the same as the trill from C sharp" to D sharp", except that the D flat" must be higher. Since you must accept this trill as it is, because there is no alternative, avoid it as much as you can. The trill on D sharp" up to D", done with the sixth finger, is good; after the appoggiatura E", finger D sharp", and while you trill with the sixth finger, keep the D sharp key open. C sharp" and D sharp" make up the termination. The trill at no. 5 on D sharp", with the appoggiatura E sharp", is done with the fifth finger just as it was in the lower octave. It has the same problem, however, in that the E sharp" against the D sharp" is much too high, and becomes even higher through keeping the D sharp key open, so it sounds similar to an interval of a third. With an F key it becomes a good trill.

26. E"

Since the trills on E" and the tones resulting from accidentals are mostly the same as the lower octave, I could leave out discussion of them for the amateur if I did not fear that turning the pages back and forth would cause confusion and, finally, annoyance. Therefore I will

¹⁴

Quantz, p. 106. Quantz shows this trill without an appoggiatura, and claims that it and the trill on E" should be used "only in cases of necessity since they both consist of semitones rather than whole tones."

proceed in order, even though one or another has already been explained where I discussed the lower octave. The trill on E" with the grace note F", no. 1, done with the fifth finger, is a false trill, because raising the fifth finger produces F sharp", or a whole step where only a half step should be. With an F key it can be done well. Under no. 2, from E" to F sharp", the trill with the fifth finger is good, but with the fourth it is worthless and is a mistake. E sharp", with the appoggiatura F sharp", no. 3, trilled with the fourth finger, is passable if you attempt to make the E sharp" as low as possible, but it is false nonetheless. Since there is no other, however, you must make do with it as best you can. It becomes very good and correct with the help of a long F key. On E flat" with the appoggiatura F", no. 4, the trill is made with the fifth finger. It is not pure, however, because the F" against the E flat" is much too high, since the E flat key must also remain open. With the help of a long F key, it becomes better, but also more difficult. No. 5 from E flat" to F flat" is very good with the sixth finger.

27. F"

The trill on F" with the appoggiatura G", no. 1, is good when made with the fourth finger. No. 2 on F" up to G flat" is false when done with the fourth finger, since the G flat" changes to G". With the help of a long F key it is good. No. 3, on F flat" up to G flat", is good with

the fifth finger. No. 4, on F sharp" with the appoggiatura G", is good with the fourth finger. No. 5, on F sharp" up to G sharp", is horrible with the third finger. With the fourth finger you hear the G" too much, and if you want to take G flat" instead of F sharp", you must turn the flute in, since the G flat" is much too high as an F sharp". Turning the flute in will lower the pitch of the G flat", but the tone will then become so thin that it only whistles. It will not be low enough anyway, and is also much too weak in relation to the other tones, so it is best to avoid this trill. It can be produced well on a flute with G sharp and F keys. No. 6, on F double sharp" up to G sharp", is a bad trill with the third finger, but with a G sharp key it is fine.

28. G"

The trill on G" with the appoggiatura A", no. 1, is fine with the third finger. No. 2, with the appoggiatura A flat", is false, because in trilling, the A flat" changes to an A". There is no way to improve this, even by raising the trilling finger just a little. On a flute with a G sharp key it is fine. No. 3, from G flat" to A flat", done with the third finger, is also false; however, it is more bearable in this octave than in the lower one, because one does not hear the A flat"-turned-A" so much. When a G sharp key is used, it is much better. The trill on G sharp" with the appoggiatura A", no. 4, when done with the second finger, is

a false trill, the interval of a third, and is worthless; the F sharp" termination, which is generally too low, makes it even more conspicuous. It is a little better when the fourth and sixth fingers are used, if the G sharp" is not tuned too high, as it usually is, but rather is clear enough. No other means is possible here except a G sharp key, and if you will not accustom yourself to that key, you must put up with this trill as it is. So where now lies the reason for not being able to play cleanly on the flute? No. 5, from G sharp" to A sharp", can be endured when made with the second finger, although the A sharp" is a little too high. It is better on a flute with keys, but is still artificial and difficult.

29. A"

The trill under no. 1, from A" to B", is fine made with the second finger. At no. 2, from A to B flat", the trill is false when made with the second finger, since the half step A"-B flat" becomes a whole step, A"-B". Also, it cannot be improved by raising the trilling finger just a little; because of this, similar forced trills sound quite jittery. Thus it must remain as it is. However, you can help it if you finger the B flat" with 1, 2, 4, 5, 6, 7, as should actually happen, and trill with 4 and 5, leaving the other fingers down. This will make the trill clean, but somewhat harsh. With a B flat key, it will be correct and fine, but somewhat artificial. On A flat" with the appoggiatura

B flat", no. 3, the trill again is not right trilled with the second finger, because the B flat" will be too high, and lessening the motion of the trilling finger helps less here than in the lower octave. If, however, you proceed as in no. 2, namely keeping the whole fingering for B flat", and trilling with 5, the A flat" will certainly be a little too low, which can be rectified by turning the flute out a little, but the sound will be cleaner, although the trill will be a little harsh. Moreover, with B flat and G sharp keys, it will be produced even better. The trill under no. 4, from A sharp to B, will certainly be clean with the third finger, but not lively enough, and with the first finger, which is commonly used, it is worthless. If, however, you finger the A sharp" like B flat", with 1, 2, 4, 5, 6, 7, and try to make it a little lower, then trill with the second finger, leaving it down at the end of the trill, and raise the fifth finger for the termination, you will have a correct and good trill followed by a correct termination, G sharp"-A sharp". If you have B flat and G sharp keys on your flute, this trill will be even better. No. 5, from A sharp" to B sharp", also produces an impure trill if trilled with the first finger, because when trilling, the B sharp" is too high. However, it must be good. You have another option: namely if you finger B sharp" with 1, 3, 4, 6, 8, trill with 5, and place the second finger such that the hole is nearly covered. You must be careful

with this procedure that the A sharp" does not become too high. You can make it cleaner on a flute with B flat and C" keys, but it is artificial; it is tolerable if you have the time for it.

30. B"

The trill on B" with the appoggiatura C", no. 1, is false with the first finger, because the C" becomes a C sharp". However, if you finger the C" with 1, 3, 4, 6, 7, and trill with 5, it will be clean. No. 2 from B" to C sharp" produces a good and correct trill with the first finger. The trill under no. 3, from B sharp" to C sharp", is good if B sharp" is fingered with 2, 3, 4, 5, 6, 7, and trilled with 5, and if the termination is made through the exchange of the first and third fingers. That is, if the first finger is put down and the third raised, then the third is put down while the first is raised quickly. No. 4, from B flat" to C", is a good trill with the first finger. Notice that I always mean B flat" to be fingered 1, 2, 4, 5, 6, 7. No. 5, from B flat" to C flat", will be a good trill with the second finger; A flat" and B flat" are the termination.

31. C"

The trill from C" to D", no. 1, belongs to the artificial category. You play the D", and trill with 4 and 5 while covering the first finger hole as much as necessary to get a clean C". If you do not do this, the C" will be too high

and the trill false. Or, when you have played the D[♯], add the fifth and sixth fingers, and trill with the fifth finger, taking care that the C[♯] does not become too high. The trill on C[♯] with the D flat[♯] appoggiatura, no. 2, is best executed with 5 and 6, although the C is a little too low. You can easily help it by turning the flute out a little, or by pulling the third finger a little off its hole, making a tiny opening. After the trill, leave the fingers down and exchange the third with the first to get the B flat[♯] termination. Here, the trill with 4 and 5 cannot be used in any way. No. 3, from C flat[♯] to D flat[♯], is a good trill with the first finger; B flat[♯] and C flat[♯] are the termination when you leave the first finger down after the trill, and make the B flat[♯] termination with the second finger. The trill under no. 4, from C sharp[♯] to D[♯], is fine with 4 and 6. The trill on C sharp[♯] up to D sharp[♯], no. 5, is wretched; it is done with 4 and 6, but the D sharp[♯] changes to D[♯]. B sharp[♯] is the termination. If you play B sharp[♯] with 2, 3, 4, 5, 6, 7, the termination is made with 5. If, however, you use 1, 3, 4, 6, 8 after the trill, the exchange of 1 with 2 makes the termination.

32. D[♯]

The trill on D[♯] with the appoggiatura E[♯], no. 1, is made thus: finger the E[♯], then let the keys go and begin to trill with the third finger at the same time. If the D[♯] should be too high using this method, you may leave the

fourth finger partially covering its hole, and it will be lower; C"-D" is the termination. Quantz teaches another way; namely, when you have fingered the D", cover half the hole of the first finger, trill with the third finger, and make the termination with 4 and 5. However, the E" will not speak at all during the trill. No. 2, the trill from D sharp" to E", is good and correct if after the E" you leave all the fingers down, trill with the third finger, and use the common C sharp" as termination. On D" with the appoggiatura E flat", no. 3, trilling with the seventh finger on the key is correct if you cover the hole with the fourth finger just a little. On a flute with a G sharp key it is fine; C" and D" make the termination. No. 4, on D flat" with the appoggiatura E flat", is incorrect if done with the fourth finger, since E flat" would then change to D". Here, also, there is no remedy, and it is good that this trill seldom, if ever, appears. One can justly do without it completely.

33. E"

The trill on E", no. 1, with the appoggiatura F", is good if you finger E" with 1, 2, 4, 5, 6, 7, and trill with 5 and 6, or more clearly, if you finger F" with 1, 2, 4, 7, keep these fingers down throughout the trill, and trill with 5 and 6; D"-E" is the termination. The trill under no. 2, from E" to F sharp", is bad when done with the second finger, because the F sharp" will not be heard. If you want to have a trill on this E", up to F sharp" anyway, finger the

F sharp" with 1, 2, 4, put down 5, 6, 7, and begin the trill with 5 and 6. With this fingering, which gives the first note of the trill, lift 2, 5, 6 up together, keeping 1, 4, 7 down for the second note, and put 2, 5, 6 back down again together. Should the F sharp" not want to speak well, finger the usual E" after the F sharp", and trill with 2 and 6 together; D" and E" are the termination. If, however, D sharp" and E" are supposed to be the termination, move the third finger quickly up and down, leaving all the others lying as they were.

34.

These now are all the trills possible on the flute, and you can see from this discussion how few can be made well and correctly on a common flute, and that, on the contrary, all are possible on a flute with E flat, D sharp, duplicate F keys, B flat and C keys, although occasionally they sound somewhat artificial. How many advantages there are to such a flute!--and you can see from this that these keys are not merely for the few dull or faint tones, but rather that they offer still other advantages which were certainly thought of with their invention. Some will not think of these advantages anyway, because they believe the keys create so much bungling and have so many difficulties that it is impossible to be able to use them. I admit that it is difficult, and that it takes a great deal of trouble and work to overcome these difficulties, but it is possible.

And does not the good result make such a favorable impression that the little bit of work and trouble it costs can be forgotten? And is it not convincing that in this way one becomes a flutist of superior worth? Thus, my fellow flutists, you save, because you know where deficiencies are and how to help them, and you save the honor of your instrument! Do not mind those who, for reasons known only to themselves, despise or reject the flute with keys saying that the flutes with keys are only for average players and for amateurs on this instrument, so that they can parade around, because you can do everything on a flute with several keys. However, in this judgment rests the entire worth of such men whose whole occupation and merit is to censure, although they cannot do it better as it should be.

Everything I have said here is founded on long experience, and if you try it without prejudice, you will find that it is the truth.

Chapter Twelve

About Fermatas and Cadenzas

1.

Fermatas and cadenzas seem to be more arbitrary than essential, and therefore would seem to belong to the chapter on arbitrary ornaments. However, since they are essential in certain views, and are necessary in a piece which will be performed without arbitrary ornaments, I have included them here. Fermatas appear in the middle of a movement, and cadenzas appear at the end. The sign of the fermata is found in the chapter on musical signs. When this appears over a rest in all voices of a piece, it is called a general pause, and all voices are silent as long as the conductor deems suitable. If, however, the fermata stands over a rest in a solo voice, the performer is free to be silent as long as he thinks appropriate. If the music, however, has a fermata over a trill, the performer can trill as long as he likes, and make a small ornament there instead of remaining silent so long on the rest. This is called ad libitum. See the place with the fermata in the example with the arbitrary ornaments.¹

¹See Chapter Fourteen, example a, p. 482.

2.

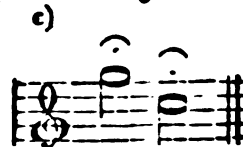
Occasionally one of these holds stands at the beginning of a piece, but you seldom find it there. See an example from an Allegro assai (example a).



This is the last phrase of a concerto, and the fermata makes a leap of an octave (see example b),



whereas similar ad libitum in arias, which are now rather obsolete, make a leap of only a fifth (see example c).



The trill before the end of this ornament will be long.

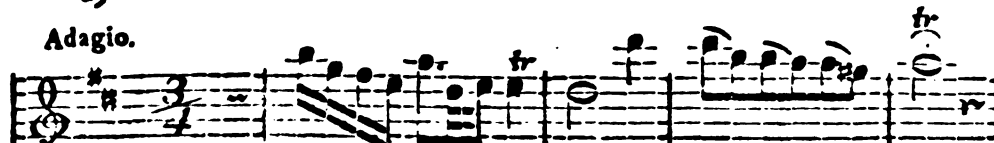
3.

If the sign of a fermata stands over a long note, after which there is a rest, and then a new thought begins, either in the same or in a different tempo, a trill with a

crescendo and decrescendo and a short termination will be played on this long note (which is often the fifth of the key in which you are playing),² and the trill will be held as long as the soloist feels appropriate. Then a little time passes before the music continues. Here the player can show whether he is capable of making a beautiful, even trill appropriate to the tempo of the piece. (See examples d, e, and f.)

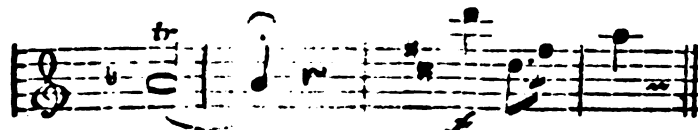
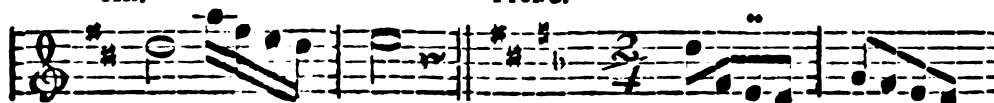
d)

Adagio.



All.

e) Presto.



f) All.



²Translator's parenthesis.

If no rest follows such a note, you should pause a little after the long trill and quick termination anyway, before you continue.

4.

This sign also appears in Rondos where it sometimes indicates a simple halt, and sometimes an introduction to the principal theme. This ornamentation by the simple halt, and the style of the introduction, is left up to the performer. Look at an example of the first case from a concerto currently being performed (see example g). This ornament can be done sometimes like example h or like example i.



Example k is also an example of the introduction of a fermata to the principal theme.



You can see from this example that the introduction is not bound to any meter, but is rather a free fantasy. I only wanted to show here how it can be done when leading to the return of a principal theme. This introduction need not be long, or otherwise you will lead the listener too far from the main idea, and before he can orient himself to the return of the theme, the piece is ended. The principal mood of the piece should rule over the interlude, so that the listener will retain it, but it is not always done this way. When the interlude is short, one retains its purpose. The performer can go through several keys before returning to the primary key. However, the harmonic progression must be according to the rules of harmony, so that no false progressions arise.³

5.

Now we come to cadenzas. Since you have more freedom here to improvise, there is also more to be considered. Nowadays this freedom is misused. Stringed instrument players, and keyboard players especially, play cadenzas that are often as long as the whole preceding section on which they are based, and the listener is taken so far from the matter at hand, that with the entrance of the ritornello,

³Tromlitz's discussion closely parallels that of Quantz. For further examples of possible patterns to be used in fermata elaboration, see Quantz, p. 156-161.

he must reflect as to whether it also belongs to this piece. In this case, thought upon thought is accumulated, or more aptly, note upon note is accumulated, that has not the slightest relation to the mood of the main theme. When the cadenza is of the right length, it is then called *bravissimo*! Hopefully you will understand that I mean here the lengthy trifles before the closing trill, because the soloist has the freedom, or much more, because he must improvise if he does not want to be rejected along with his performance. And if he often performs the most beautiful concerto, clearly and correctly, and plays no cadenza or only a short thing at the end, whether it is suitable or not, his whole performance is worthless. Since you know this now, no one will leave the place in the music where a cadenza belongs without having played one. What wretched stuff one hears there! because the least talented put up with it, especially those who have no knowledge of music, and understand nothing of the rules of harmony. Truly it would often be better if one ended simply with a beautiful trill! Sometimes you hear such a monstrosity, followed by a still more pitiful blundering trill, and then a *bravo*! *bravissimo*! I have not said all this to imply that a beautiful cadenza appropriate to the piece cannot have a good effect; if the cadenza is proper to the whole, suitable in length, and executed with good taste and judgment, it is indeed a thing of beauty.

6.

The wind instrumentalist and the singer cannot do as they please, since they are restricted by the length of their breath. No cadenza should be longer than the breath can sustain. However, there are exceptions in certain circumstances. These exceptions will be discussed in the following.⁴ The reed player can sustain his breath longer than the flutist, because more wind is both demanded and lost by the flute. I will say nothing about the origins of the cadenza, since it is of no further use; they are there now, but they are not at all so old.⁵ Cadenzas are performed in all tempos; whether the piece is slow or fast, a cadenza is placed before the closing trill, namely if the composer has indicated it.

7.

A cadenza is an arbitrary ornament, proper to the primary mood of the piece, and found on the note with the

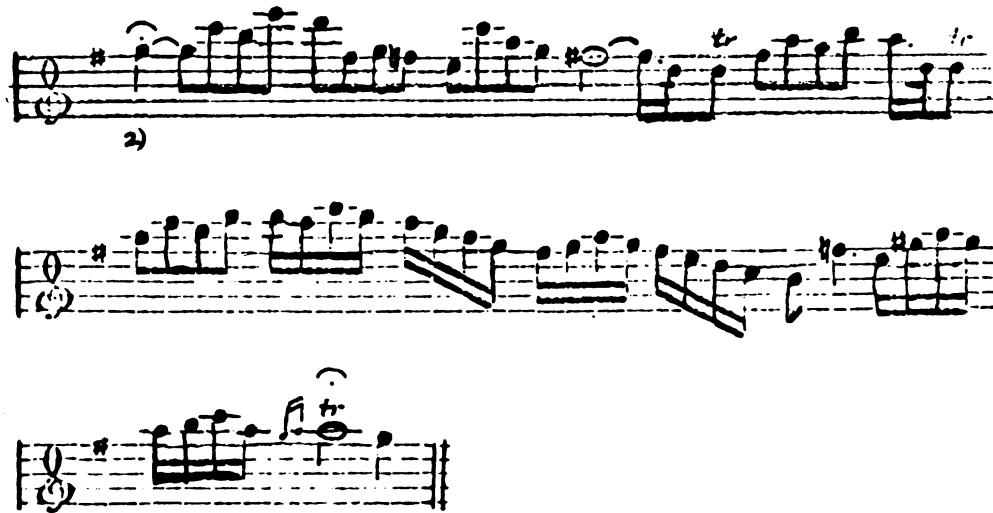
⁴See section 13 of this chapter.

⁵Quantz gives the following explanation of cadenzas: "Perhaps the surest account which can be given of the origin of cadenzas is that several years before the end of the previous (17th) century, and in the first ten years of the present one, the close of a concertante part was made with a little passage over a moving bass, to which a good shake was attached; between 1710 and 1716, or thereabouts, the cadenzas customary at present, in which the bass must pause, became the mode." (p. 179.) He also mentions that the Germans, devoted to singing and playing in the Italian style, imitated these cadenzas, which became fashionable among the Italians at the turn of the century, but that the French always abstained from using them.

fermata just before the closing trill. Or, it is an improvised ornamental transition, proper to the main theme, from the held note to the closing trill. Cadenzas are of two types, either with one voice or with two voices. The discussion here is about the one-voiced cadenza. The motion and melody of such a cadenza, and the arrangement of the figures, is arbitrary, but the treatment of the intervals appearing within it, and the order of the figures and their connection, is subject to rules. Since these cadenzas are composed of figures and thoughts set together, as well as free fantasies, and since they are usually unmetered, one cannot actually define their motion and line, and they certainly cannot be written down for someone else.

Occasionally indeed it seems as if they are metered, but it does not last long before the metered feeling is lost again. For this reason, it is difficult, if not impossible, to give a model, since the student will not perform it as the master intended. Nonetheless, I will give a brief example here, from which you can observe the motion and direction (see example 1).





8.

Here now are two brief models (1 and 2) from one and the same movement. There are actually four figures in them, and although the first one is repeated four times, it does not produce a bad effect or cause annoyance and disgust. Single figures lend themselves better to frequent repetition than do combined figures. The actual movement here cannot really be defined; I have written Allegretto so that you have some idea. The first four triplets after the fermata will be played in the same tempo as the preceding part of the piece to which this cadenza belongs. The $D^{\flat}$ is held as long as the performer deems proper, and the tone should grow. The following sixteenth notes are played a little slower. The six quarter notes following one another should not be played as quarter notes in the tempo of the piece; neither should they be played like eighth notes. Rather, try to find a tempo inbetween. Thus, with the remainder of this cadenza as

well as the second cadenza, you must draw on your feeling. It is impossible to define everything precisely.

9.

Since cadenzas are very similar one to another, it is easy to understand that if you make them too long by bringing too many thoughts together, or fail to deal with them economically, thereby missing your goal, you will cause indifference instead of effecting attention and surprise, and you will arouse disgust where none is intended. Cadenzas must, as already said, be appropriate to the piece, so that they are not too happy in a tragic piece, or vice versa. They must flow along with the central mood. In order to deal with this more surely, you can make use of the most suitable thought of the preceding part of the piece, and form a cadenza from that. This emergency aid is old and well known, to be sure, but in case of need, if you find nothing comes to you immediately, it is good. If you have taken stock of the suitable thoughts, you will not need this aid.⁶

10.

The cadenzas should be short and, if possible, surprising. If they are also studied, they must nonetheless be performed as though they are appearing for the first time. Diversity

⁶ Although Quantz and C. P. E. Bach both allude to the fact that the cadenza should continue the main mood of the piece, neither one suggests incorporating material from the movement into the cadenza, a practice common in music of the Classical style.

and variance of the figures is most important, so that they do not sound too metered. This will usually be the main attribute of the cadenza. Feeling must govern the motion, the content, and the diversity of figures, so that you do not get just empty and vacant figures. Therefore you must try to avoid the uniform in order to surprise the ear, keeping a constant supply of inventions, and trying to construct them properly. Truly not an easy matter!

11.

The intervals must also be handled correctly and according to the rules of composition, and by centering on primary notes, only the related tones will be affected. I call it modulation, but since you do not modulate to the remote keys, which is understandable, it is actually no more than allusion. For example, if you go into the subdominant of the key by means of a minor seventh or its inversion, such as 5 and 6 [first inversion], 3, 4, and 6 [second inversion], or by means of a diminished fifth alone, you only allude to it--you do not modulate (see example m).

m)



In this example, the B flat under the + is the minor seventh to C, but as already said, through the inversion of this seventh chord, with E as the bottom note, B flat is the diminished fifth, or with G as the bottom note, as the second inversion, B flat is the third. Through this B flat now, the fourth, F, is only alluded to in passing.

12.

It is the same with the augmented fourth, or when the fourth appears as a major third, leading to the fifth. And if you want to return from this remote key to the tonic note again, it happens through the minor seventh of the chord on the fifth, which is the usual fourth of the tonic note, resolving downward to the third of the key (see example n).

n)



In this example, you come to the fifth, C, by means of the augmented fourth, B, under the +, and you return to the tonic F by means of the fourth, B flat, under the *, which is the

seventh of the dominant chord. This applied primarily to major keys, although the approaching of the fifth and the return to the tonic is constructed the same way in minor keys, but the minor third in a minor key is changed to major when you want to allude to the fourth (see example o).



This example is in D minor, whose minor third, F, must be changed to the major third, F sharp, if you want to allude to the fourth, as you can see at the +.⁷

13.

I have said that a cadenza for a wind instrument must be played in one breath. However, you can create an opportunity to breathe if you arrange the melody and figures or passages accordingly.⁸ This happens either with a rest, or with short [staccato] notes where you gain enough time to take a breath. It happens frequently that you do not have enough breath for a cadenza that is longer than usual. The reasons

⁷For further discussion of harmonic implications in cadenzas, see Quants, p. 183, which contains a discussion of modulations and minor keys.

⁸A detailed discussion of phrasing is found in Chapter Thirteen below.

for this are various. For the most part, the breath fails if you are nervous. A cadenza of this type is seen in example p.



This example, like the preceding ones, is only an indication as to how it can be done. In this cadenza, there are plenty of opportunities to take a breath without hurting the effect. You can breathe at the short rests, taking in a little air at each one. You can breathe again by the

quarter notes with strokes over them if necessary, and you have another opportunity at the rest before the closing trill. So the player then never lacks breath, and yet the cadenza cannot suffer any harm.

14.

This discussion has been about cadenzas with one voice and without meter. I believe, nevertheless, that occasionally it can be correct and admissable, without being detrimental to the nature of the cadenza, to set it in a meter, if it is arranged to make it usable. It happens often indeed that cadenzas are played in a meter without one's wanting it, especially if the cadenza is formed from phrases found in the piece. If you wanted to leave these phrases unmetered, it would be unnatural to bring a once orderly thing to disorder, wanting to use it as proper, particularly if you begin the cadenza with metered thoughts, thus bringing the ear of the listener to a certain path. I mean, here you could always play in a meter if you did not lead the feeling of the listener astray. It can also be, however, that I am mistaken. Nonetheless, I will venture to set here a few examples only as an attempt, leaving the experts to judge. Should they please you, you can see how to arrange them. (See examples q and r.)



15.

Since the first cadenza is a little long, it can be difficult for some to play to the end in one breath, even though the tempo is a fast one. Thus it is certainly necessary to draw a little breath at the beginning of the runs. This can happen best in the fifth measure under the †, and now you can easily play to the eighth note F sharp in the ninth measure, taking a breath at ‡, and then breathe again in the twelfth measure before the half note D, at ‡, and then end it. In the second example, the place to breathe is in the seventh measure before the last two eighth notes.

16.

We come now to the cadenzas with two voices, which are also called double cadenzas. They are done in varying ways--they can consist either of passages in major thirds and sixths, or of free and strict imitation, or both at once. Those who do not understand composition, make do with thirds and sixths in equally advancing notes, syncopations, trills, and interspersed small rests, or, when the one voice stops and the other goes a few notes higher or lower, they use no imitation. This is the everyday and easiest method, but also the driest. Those, however, who understand composition make use of these passages named here, as well as free and strict imitation, for this last of which one must understand the usage and treatment of dissonances.

17.

Since this method of cadenzas is easy to write down, you would do well to make use of this means, so that the two performers who want or must play together can study it, creating an ornament, and not a stain. Extemporaneous cadenzas of this type seldom occur, and belong only to the very experienced player and composer, and not at all to the beginner. For these cadenzas, two people must be of equal strength in playing and composing, which seldom happens, because more often the stronger player understands less about composition, therefore always leaving some stumbling block in the way.

18.

With imitation, one voice begins, whether it be the first or second. Generally it is the first, and the other follows. With ties, observe constantly the diversity of the tied intervals, so that they do not become too monotonous. Above all, it is necessary that you constantly direct your attention to the variety of the figures and melodies. Also, you must not use mere passages and runs, but rather agreeable, pleasant and appropriate, and ever alternating thoughts. Although these cadenzas have no set meter or measures, they will always be in the tempo of the foregoing piece, and the imitations must be exact in length and count. However, they are fundamentally free fantasies like the one-voiced cadenzas.

19.

First we will take an example in parallel sixths (see example s).



In this example, both voices have the same kinds of notes, and consequently the same motion. If you invert this, making the first voice the second, and the second the first, major thirds are created from the sixths. Example t alters this in that the upper voice doubles the movement, making eighth notes from the quarters.



The second voice can also make this alteration, creating eighths from the quarters, and the second eighth always goes a step ahead, thereby changing the sixth to a fifth while ascending (see example u).



In example t, the second eighth always goes a step ahead, changing the sixth to a seventh. This seventh, which is unencumbered, and thus free to be repeated on the following note, changes again to a sixth, etc. On the last quarter of the first measure, the sixth changes to a fifth, as do the next two descending quarters.

20.

Since the seventh in the first three quarter notes [of example t] always falls on the second eighth note, or the weak part of the beat, and the sixth, on the contrary, falls on the first, or strong eighth note, which is then repeated, this sequence or procedure is still well tolerated. However, if you do not articulate all the eighth notes, but rather connect them or make syncopations from them, so that the sixth is tied and the following seventh is freely stated, it sounds harsh. It is the same in the following [example u], where the fifth always follows the suspended sixth, so that you hear the sixth less than the following fifth. And since this happens a few times in succession, you always hear the fifth, contrary to the preceding tied sixth, [which you hear] only a little. Consequently, it sounds like parallel fifths, and does not make a good effect.

Thus this manner of connecting the sixth up to the seventh, or down to the fifth, sounds very bad (see example v).



21.

If the lower voice ascends stepwise first, however, the sixth resolving to a fifth, and the fifth falling on the strong part of the beat, it sounds better, because the progression is more correct. The same applies when descending. The sixth in the upper voice is bound to a seventh through the movement of the lower voice, so that the sixth follows the seventh (see example w).



22.

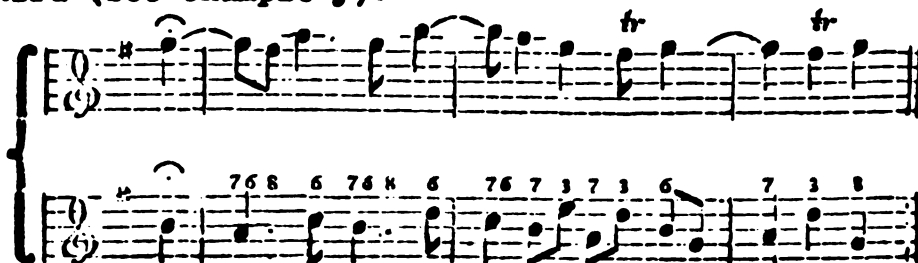
In addition to these progressions, you can use ties in two-voiced cadenzas, which are constructed from dissonances like sevenths, imperfect fifths, perfect and augmented fourths, seconds, etc. These dissonant intervals can be suspended and resolved in the first voice as well as in the

second. Generally, the second voice suspends, and the first resolves. You would do well, however, if you alternated suspension and resolution in a becoming way. I will give a few examples here of the intervals indicated. The seventh can be suspended in either the first or second voice from the octave, and resolved to a sixth or a third. Or, if the first voice suspends the seventh, the second voice can first allude to the imperfect fifth, and then resolve to the third (see example x).

x)



Or the seventh can be suspended out of the sixth or third through the second voice, and again resolved to the sixth or third (see example y).



23.

I will leave it at these two brief examples. You can see clearly enough from them how suspensions of a seventh can be arranged so that they are properly prepared and resolved. Those who want to play cadenzas like these must be familiar with harmony, so I will say nothing further here about it. I only wanted to show how one can proceed with these cadenzas. I will also give no special examples about the remaining dissonances. You have only to invert the two examples given and you get the rest of the intervals, like from the octave, the unison; from the seventh, the second; from the diminished fifth, the augmented fourth; and of course the aforementioned sixth inverts to a third. To make this clearer, and at the same time to make the treatment of these intervals more graphic, I have inverted both examples and set them here, and I have shown the intervals by means of numbers over the second voice (see examples 2 and a).

2)

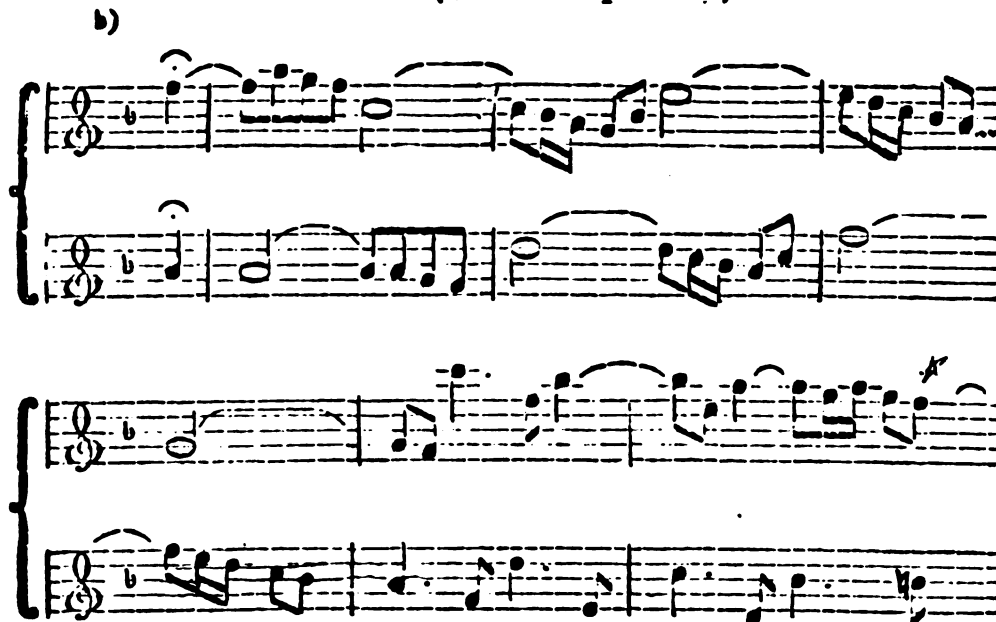
The musical notation for example 2 consists of two systems, each with a treble and bass staff. The first system shows a sequence of notes with fingerings indicated by numbers 1 through 6. The second system shows a continuation of the sequence, also with fingerings. The notation includes various note values, rests, and accidentals, illustrating the resolution of a seventh suspension.



You see here in example a how the second is suspended out of the unison and resolved to a third, and how the second is suspended out of the sixth and resolved to a sixth. In the second example, you can see how the second is suspended out of the third and resolved to a third, and how the alternation in both voices happens. It is the same with the rest.

24.

The suspensions shown in the above examples consist simply of suspensions without imitation. Now we will give imitation a try. In example b, which consists of nothing but suspensions and imitations, you will find alternating seconds and sevenths, and the fourths are suspended out of the diminished fifth. (See example b.)





You must not think, however, that such a cadenza must consist solely of suspensions and imitations; the suspensions and imitations can also be interspersed with consonant phrases. They will then be even more beautiful if there is not just one type of figure, or only similar figures and movements, to hear.

25.

Therefore, if you want to make a two-voiced cadenza entertaining, try always to interchange consonant movements, suspensions, and imitations. See the attempt in example c.

(c)







This example is certainly too long for a cadenza, but I did not put it here with that intention. On the contrary, I put it here to enable you to see the different usages of figures, suspensions, imitations, and dissonant and consonant movements better, and all at once in a single example. You will find most of these usages in previously-mentioned movements and passages, or at least their likenesses, their alternations, and relations. I think saying more about this would be superfluous. He who understands the art of composition will perceive the nature of the two-voiced cadenza

easily from this example, and will be able overall to use it properly.

To compile practically and properly, and to put down here everything possible about two-voiced cadenzas, is neither possible nor useful, and those who do not understand composition would gain nothing from further explanation. Therefore I close now with this and continue with other things.⁹

⁹For purposes of comparison, further examples of the Baroque flute cadenza can be found in Hans Peter Schmitz, Querflöte und Querflötenspiel in Deutschland während des Barockzeitalters (Kassel: Bärenreiter, 1958), pp. 62-65.

Chapter Thirteen

About Breathing When Playing the Flute¹

1.

Those who do not belong in the class of common players, who would throw everything together and play freely, come what may, but who want instead to perform only beautifully, with order, and clearly, know well how important it is and how much the good performance profits from the knowledge the player has of taking a breath at the right time and in the right place, and using this knowledge properly. It is no small skill to have this important and essential ability under your control, so that the listener never notices either lack of breath or the breathing itself, and thus his attention is not disturbed and interrupted.

2.

It is a beauty that many lack, and a great loss for those who do not possess this advantage. Through the often unattractive breathing, which separates the flow of

¹Breathing is a subject generally not dealt with in flute treatises before the time of Tromlitz. Quantz does devote a few pages to when, where, and how to breathe (p. 87-90), but Tromlitz realizes that his technique is wrong, and corrects him (see section 5 below). Hans Peter Schmitz remarks that since breathing and phrasing was dealt with so briefly in the Baroque, we can only assume that it did not play such a large role musically as it does today (Querflöte und Querflötespielen, p. 28).

music, and consequently makes it incomprehensible, not only is the listener's attention interrupted, but he also becomes uneasy because of the nervous breathing, and he will be completely diverted and prevented from understanding the context of [the music]. This does not apply just to flute players. Each wind instrumentalist and singer must also possess this skill. I have often witnessed that the singer, as well as the wind players, has committed the mistake, and has always separated the meaning of the music, namely the coherence of thoughts, with improper breathing, especially in cadenzas. This mistake is heard from flute players for the most part. I suppose the reason for this is that one cannot sustain the breath as long on this instrument as on a reed instrument. The artful production of tone on a flute requires the wind to pass first into the surrounding air, which causes much of it to be lost. Therefore, more breath is necessary to flute playing.

3.

To prevent this malady, you must take pains to expel your breath sparingly, never using it up entirely, and always trying to keep a supply. Thus when you notice your breath is about to run out, supply yourself with fresh air at the first opportunity, so that it never fails, and you are able to perform everything powerfully and with the proper intensity. If you do the opposite, using all your breath, and pump it, so to speak, until the last bit is

gone, you will never regain it fully, especially in fast places and spots that are phrased together where more intensity is necessary, and the performance will be feeble, disjointed, and unclear.

4.

Therefore you must supply yourself with enough air at the beginning of each phrase so that the notes which belong together are not separated by breath, making the performance unintelligible. I have already called this to your attention often, and will do so once more. In long passages where a lot of breath is necessary, and which cannot be played in one breath, you must be familiar with the remedy that enables you to produce [these passages] clearly and without great difficulty. Since not every flute player is in the position to play long passages in one breath, he must make use of the means discussed here, because the composer can adjust only to the length of breath in general, and not to each person in particular. If the flute player were a composer himself, he could indeed arrange things according to the strength of his chest and breath, and this predicament would then not arise.

5.

When taking a breath, it is best never to fill the lungs too full, because you lose the ability to regulate and use [the breath] with the proper strength and intensity, and you are compelled then to let it out again only very gently.

This makes the performance dull and weak, however, since often the melody and passages must be performed with force, but this intensity will be suppressed by filling the lungs too full. However, if you wanted to condition yourself in order to give the breath the proper strength, you would be in danger of causing yourself harm. Some players even contort their faces when blowing, not to mention misplacing the shoulders. What kind of good effect, then, can such a person make on his listeners, with a distorted face and shoulders held too high, and other such deforming grimaces? To avoid this evil and danger, just take a good breath in a straight and unforced position, and use it economically. In this way, you will be able to perform everything well and skillfully. And if you have only a little time to take a breath, you will be able to sustain this breath a long time again, even though it is taken with the utmost quickness, and is barely noticeable. And do not think that such a quick breath would come only to the throat, not to the chest or lungs; the throat does not draw any breath, and can also begin nothing with that breath.² Just try everything I have

²Quantz's technique of breathing is as follows: "You must enlarge your throat and expand your chest fully, draw up your shoulders, and try to retain the breath in your chest as fully as possible, blowing it very economically into the flute. But if you still find it necessary to take breath between quick notes, you must make the preceding note very short, inhale the breath rapidly only as far as the throat, and rush the following two or three notes a little, so that the beat is not retarded and none of the notes is omitted." (p. 88.)

said here precisely and without prejudice, and you will find that what I have learned from a very long and proven experience is true.

6.

I have said you should breathe before a group of notes which make up a phrase, so the phrase cannot be interrupted. Such a musical thought is set off either by rests or not; if there are no rests, but rather nothing but notes, you must know how to find the end of such a thought, and always breathe again after it. One of the primary attributes of a good instrumentalist is that he can perceive the meaning of the composer. If he can do this, the sense of the music itself dictates where he should breathe. If he cannot do this, however, no rule will really be of use to him, and he will either separate everything that should be unified, or he will bring together things that should be separated. I will show just a few situations from which you will be able to see how you should breathe (see examples 1-4).

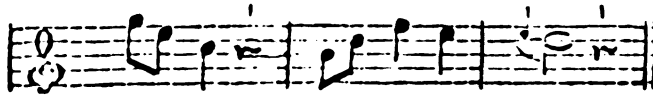
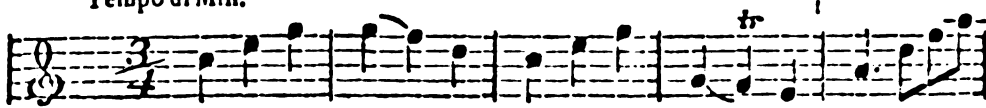
1)



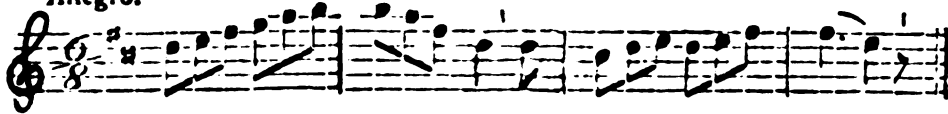
2)



3) *Tempo di Min.*



4) *Allegro.*



In these four brief examples, the dashes above show the places where you can take a breath in a proper manner and without harming the phrase. In the first example, if you cannot sustain your breath very long, you can breathe right after the last quarter note in the second measure; if the breath is not needed, however, it can be delayed until after the last quarter note in the fourth measure, where the entire thought is ended. In the second example, the breath is taken after the third quarter in the second measure, in the fourth measure after the fourth quarter note, and in the following measures during the rests. In the third example, the thought ends in the fourth measure, so the breath is taken after the third quarter of this measure, and thereafter, during the rests. If the flutist cannot play the fourth example in one breath, the best place to breathe is before the sixth eighth note in the second measure, because there is a short break at that point.

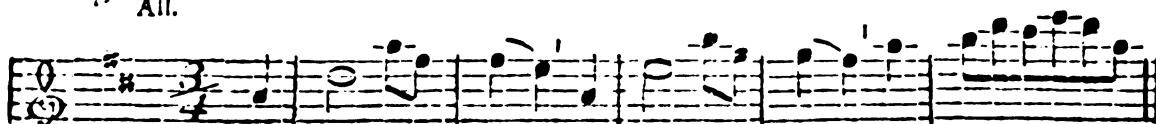
7.

If a piece begins with an upbeat, it is easy to see that if you do not want to interrupt the thought, you must take the breath after the break or after the end of the thought, which is always before the last eighth or quarter in the measure. The next note, then, is again an upbeat to the succeeding phrase. In simple or compound meter, this upbeat is always the last note in the measure. If a rest precedes it, you need no reminder that you must take a breath. Above all, you must observe precisely the break which appears in the middle of the piece, and take a breath after it when it is necessary. (See example 5-7.)

5) All.

6) Moder.

7) All.



According to the preceding reminder, you see in example 5 that the break always falls on the penultimate note, which is shown by a dash in the second, fourth, sixth, and eighth measures, and that you must always take the breath after this note, or before the last note. Also, the last eighth note leads into the following phrase, as you see, but never tie these two eighths together and breathe after them. If you do that, you will break up the phrase, making it incoherent. You can observe this in the following example 6, in the second, fourth, sixth, eighth, and tenth measures, and in example 7 in the second and fourth measures. In example 6, the breath falls between the second and third quarter notes of the sixth measure, because the melodic line is not marked by a rest, as it could be, but begins again immediately with a half note which belongs to the following phrase, and together they constitute a phrase. I hope you will understand me.

8.

When sixteenth notes follow a long note, and the first sixteenth is tied to that long note, you can take a breath after this tied note in slow movements (see example 8),

8) Adagio



or in faster movements you can omit this tied note completely, and take a breath in its place (see example 9).

9)

Allegro.



which is played like example 10.

10)

All.



This applies also when the tied note is an eighth note. In slow movements, you can breathe after it (see example 11).

11)

Adagio.



and in faster movements where you omit it, you can take a breath in its place (see example 12).

12)

All.



which will be played like example 13.³



Often it is not necessary to breathe after the tied note, unless there are other similar ties following one another in sequence, because you have already taken a breath just before the long note onto which the short note is tied, as should happen before each long note, especially when several measures follow in sequence, so that where possible you do not break up the melodic line.

9.

Example 8 is in a slow tempo, so you can take a breath in the second measure after the tied sixteenth note, which is shown by a dash. It must be a quick breath, certainly, so that the sixteenth is not too short or does not seem to be a dotted note. This would alter and disfigure the melody. He who cannot do this inconspicuously would do well to treat the tied note as a thirty-second note, and take his breath quickly, or omit the tied note altogether if nothing else is possible, and if it were also in a slow tempo, so that the following notes, although short, would

³Quantz gives an example similar to this one, and says that you may divide the tied eighth in the second measure, making two sixteenths out of it, and breathe between them.



not be too short, causing him to fall into the mistake mentioned above. I have already defined long and short, good and bad, accented and unaccented notes elsewhere--namely that of two equal notes, the first is characteristically long or accented, and the other is short or weak, and of four equal notes, the third is again strong, and the fourth, weak. You must be careful not to make the notes long or short intentionally, or otherwise they will be too uneven. The nature of the matter teaches that of four equal notes, the stress must fall on the first and third.

10.

You will learn from the following whether you should breathe after the long stressed note or after the short weak note in long and rapid passages, or whether you should omit the stressed note entirely, as it appeared in the previous case [example 13]. Since you need a lot of breath in long passages, it is important indeed that you take in plenty [of air] before you start, but yet not so much that you will be prevented from using it properly by lungs that are too full, as I have already warned. So that you have enough breath and endurance for long passages, you must use [the air] sparingly, and never use it up entirely, but rather renew your supply at the first appropriate opportunity.

11.

This proper breathing can happen in different ways. First, notice where the sense of sequential figures ends,

for as long as a passage may be, it must have a break. Such a phrase, if it is not overly long, must not be broken by a breath, but rather must be played completely through, and after the last note, an unstressed note, take a breath. This treatment is to be observed also in the following. I say breathe after the short note, and this is important if you do not want to break up the flow of the passage. No one will notice unless it is done in an improper way. When the musical phrase is not broken, the ear is satisfied and need not concern itself about the breathing. Occasionally, however, it happens that you must breathe before the last note, consequently bringing this very short note into the succeeding passage. This can only happen, however, when the last note is a passing tone, which will be discussed farther on. It is necessary, in isolated cases, that you simply leave out the first or the last of four equal notes in order to take a breath, especially where a pattern is repeated more than once. In such cases, you must rely not just on your feeling as to which note should be left out, but you must also know whether the last note is a passing tone--namely one which is non-harmonic--or a pivot tone which belongs in the harmony. In the first case, it can be omitted, but not in the second case. Breathing between stressed and unstressed notes without regard for the sequential patterns, prevents coherence and movement of fast passages, in my opinion, and makes the flow uneven. Each may follow his own

feelings, however. I maintain that it is better to direct your breathing so that it does not interrupt the coherence of the running figures, however. Example 14 shows all of these cases.

14)
Allegro.

1) 2) 3) 4) 5) 6) 7)

The musical notation consists of seven staves, each showing a different way to breathe in a running figure. The notation is in treble clef with a key signature of one sharp (F#) and a 2/4 time signature. The examples are numbered 1) through 7). The notation includes various musical symbols such as notes, rests, and slurs, and is accompanied by a series of slanted lines indicating the breathing pattern.



12.

I have purposely chosen this passage from a concerto by Hoffmeister⁴ which will probably be in many hands, so do not think I created it according to my fantasy for the purpose of taking breaths. I have indicated the best places for breathing, so you can learn how to breathe in other similar cases. Presumably many of these passages can be played in one breath, but there are many players, however, who could not do it. Those players could take one, two, or even three breaths, for example, in the fourth and seventh measures before the first note at the +. Or, in the fourth measure, you could omit either the first stressed note or the second passing note in the first figure, as shown in example 4. In the fifth measure, you can either omit the

⁴ Franz Anton Hoffmeister (1754-1812) wrote thirty flute concertos in addition to his numerous chamber works. (Demmler, Beitrag, p. 118, footnote 21.)

second note of the second figure, or take a breath between the third and fourth notes. In the sixth measure, the second note of the first figure can be omitted, because the break falls on the first note. Or, you can breathe first in the seventh measure, omitting the first note because it is a repetition, and make the following note the same as the first note, since it is a primary note in the chord. Everyone will see that the places for breathing shown here are not the only ones where you must always breathe. Each person has his own strength and endurance, and acts according to it.

13.

In passages consisting of continuous triplets, do as follows: draw in a supply of air before the beginning, as already said, and pay attention to the breaks in the passage, after which you can breathe, even though the last note is an unaccented one. Or breathe between the second and third notes of the last triplet in that section. This does not disturb the triplet as much as breathing between the first and second notes, and it always happens whether the triplet proceeds by step or by leap. However, if you perform the triplet with an altered articulation, namely if you articulate a triplet that moves by leap with *tătătă* instead of *tădădă*, it creates a completely different effect if you take a breath between the first and second notes, especially when the preceding triplet has been played with

tāādā, and to insert a triplet altered by a breath between the first and second notes needs no proof that it does not flow particularly smoothly. After a phrase, you can also omit the first note of the first triplet very well. (See example 15).

15)

All

1)

2)

3)

4)

5)

6)

7)

8)

9)

10)

11)

12)

13)

14)



For the sake of the reason mentioned above, I have chosen this example from the same concerto as the previous passage.

14.

Should you be unable to play no more than the first two measures of this example in one breath, you can either breathe quickly after the last triplet of the second measure, or omit the first note of the first triplet in the third measure, as can be seen in the third measure. Or, if you need breath for the first time at the end of the fourth measure, you can make a little rest and take a breath on the last triplet of this measure between the second and third notes, and begin again with the second half of this last note, as you can see in the altered places of this example, shown by +. If you do not have a good supply of air, you can breathe again after the sixth measure. If that is not necessary, however, play the next two measures as well, and breathe again between the second and third notes of the last triplet, making a little rest [see measure 8]. Although you cannot get much breath in such

a short rest, it is enough to go on to each section until the end.

15.

I think this is enough to make the beginner aware that he must adapt himself to this kind of arrangement if he wants order and clarity in his performance. I think more examples would be superfluous. Once more, let me caution you never to use your entire supply of breath, as you will not get the intensity back, and if you still breathe so often, a very nervous performance will result. If you always have a supply of air, however, you can breathe as often as you like in proper places; this will not harm your performance, and you will maintain your intensity. If done correctly, the listener will not notice the breathing, so it will not bother him.

Chapter Fourteen
About Arbitrary Ornaments, or
How to Ornament a Simple Melody
Using the Rules of Harmony

1.

Because arbitrary ornaments are essential to a good and varied performance, making up a part in themselves, it is necessary to discuss them separately.¹ Omitting these ornaments would adversely affect the direction and impetus of the musical line, causing more harm than good. This is no easy matter for those who have no knowledge of harmony with which the foundation of these ornaments is made intelligible and obvious, and it is impossible for those who refuse to learn the harmonic rules. To write down harmonic phrases to show the analysis of individual places and passages is, and will remain, a useless thing for those who lack harmonic knowledge. And writing down phrases for analysis will not help them to understand it well enough to use it in other situations, even with the aid of a teacher.

¹ Quantz writes, "Almost no one who devotes himself to the study of music, particularly outside France, is content to perform only the essential graces; the majority feel moved to invent variations or extempore embellishments. In itself this inclination is not to be condemned, but it cannot be realized without an understanding of composition, or, at least, of thorough bass." (p. 136.)

A teacher will read it dully, and when he is finished, the student will not have understood it. If the student wants to augment his performing vocabulary, a teacher must demonstrate for him, (and many teachers as well as many famed instrumentalists understand nothing about this), and the student imitates. If you want to show the student isolated places without his knowing the melodies from which they come, how they are rooted in harmony, and how they get their variation from the original melody, it will be just as difficult for him to understand, and the demonstration-imitation will always be the best for him; but with an explanation from the teacher, this method will also have an end.

2.

Quantz has dealt with this material thoroughly and at great length, to be sure, but only those who understand harmony can understand Quantz.² How many are there, then, who have learned from Quantz's method? For those who understand harmony, everything is clear, but can someone without similar knowledge help himself, especially if such ornaments must also be determined with feeling? Thus if one who understands harmony has no need for this instruction,

²Quantz's explanation of arbitrary ornaments is actually quite easily understood. His approach consists of taking different intervals or melodic patterns, presenting the underlying harmony, and then showing several different variations which follow the intervallic or melodic progression (Chapter XIII, p. 136).

and the beginner or student who does not understand harmony cannot use this instruction because he cannot understand it, it would seem this section could be omitted entirely, but that is not so. Such an instruction is somewhat useful to those who have acquired some harmonic, though not fundamental knowledge by playing a long time. To those who study thorough bass, it will be even more useful if they take pains with it, for they will be guided in the right direction. But where are they who will take the trouble to analyse everything carefully? There are some, to be sure, but most are prevented from careful analysis, whether by pride, frivolity, laziness, or by simple stupidity. I have even found well-known instrumentalists who lack this motivation; their ornamentation is full of mistakes due entirely to lack of harmonic knowledge, and the ornaments never stand in the right places. It would be better for those players who lack this necessary knowledge simply to play what is written. Today players are not so easily tempted to alter music with ornaments, since now most players are not composers as well, and thus are not able to show intrinsic understanding of the music, at least not as easily. If the player is also a composer, he can certainly ornament well, but not all are composers, although some think they are.

3.

I will not say anything more about this, then. I have tried to be as brief as possible in order not to be left

unread. I will only try to make the presentation of this material a little clearer for the beginner. First I will write a melody which has its essential ornaments, but which also is not void of places for arbitrary ornaments, so that you can play it the way it stands. Then I will show the primary notes and their harmony. And finally, I will show several variations and their proper use. This manner of instruction will be adaptable to the beginner, since each piece he wants to perform can be studied in the manner shown. The beginner is not able to help himself so easily from the line of primary notes, since melodies rarely appear in so simple a style. However, if he can find the primary notes and their harmony, he will also be able to use ornamentation properly, according to his feeling. The music must be played according to feeling if it is not to be destroyed. It is not enough to ornament the notes; the ornaments must also be proper to the content of the song. Here, feeling rules, determining temperament and taste. (See example a.)

a) 3

Adagio.

The musical score consists of six staves. The first staff is the melody with ornaments. The second staff is the simple melody. The third and fourth staves show harmony. The fifth and sixth staves show arbitrary ornamentation.

³The first line contains the melody with its essential ornaments, and the second line shows just the simple melody. The third and fourth lines demonstrate the harmony, and the remaining lines are examples of arbitrary ornamentation. Tromlitz elaborates further, *infra*, p. 520.

A handwritten musical score on page 483, consisting of seven staves. The notation is in treble clef with a key signature of one sharp (F#). The first staff begins with a treble clef and a sharp sign. The second staff also begins with a treble clef and a sharp sign. The third staff begins with a treble clef and a sharp sign. The fourth staff begins with a treble clef and a sharp sign. The fifth staff begins with a treble clef and a sharp sign. The sixth staff begins with a treble clef and a sharp sign. The seventh staff begins with a treble clef and a sharp sign. The notation includes various musical symbols such as notes, rests, and accidentals. The score is written in a clear, legible hand.







A handwritten musical score on seven staves. The notation includes various musical symbols such as notes, rests, and dynamic markings. The first staff begins with a treble clef and a key signature of one sharp (F#). The score is written in a fluid, handwritten style. The first staff contains a treble clef, a key signature of one sharp (F#), and a dynamic marking of *tr* (trill). The second staff contains a treble clef and a dynamic marking of *tr* (trill). The third staff contains a treble clef and a dynamic marking of *tr* (trill). The fourth staff contains a treble clef and a dynamic marking of *tr* (trill). The fifth staff contains a treble clef and a dynamic marking of *tr* (trill). The sixth staff contains a treble clef and a dynamic marking of *tr* (trill). The seventh staff contains a treble clef and a dynamic marking of *tr* (trill). The score is written in a fluid, handwritten style.

musical score for piano, page 488. The score consists of seven staves. The first staff begins with a trill (tr) and a forte (f) dynamic. The second staff continues with a forte (f) dynamic. The third staff features a forte (f) dynamic. The fourth staff includes a forte (f) dynamic. The fifth staff has a trill (tr) and a forte (f) dynamic. The sixth staff contains a trill (tr) and a forte (f) dynamic. The seventh staff concludes with a trill (tr) and a forte (f) dynamic. The notation includes various musical symbols such as notes, rests, and dynamic markings.



A handwritten musical score consisting of seven staves. The notation is in black ink on white paper. The first staff begins with a treble clef and a key signature of one flat (B-flat). The music is written in a style that appears to be a sketch or a working draft, with some notes and rests clearly defined, while others are less so. The score includes various musical symbols such as notes, rests, beams, and slurs. The second staff continues the melody. The third staff features a bass clef and a key signature of one flat. The fourth staff has a treble clef and a key signature of one flat. The fifth staff has a treble clef and a key signature of one flat. The sixth staff has a treble clef and a key signature of one flat. The seventh staff has a treble clef and a key signature of one flat. The score is written in a style that suggests it might be a preliminary sketch or a working draft, with some notes and rests clearly defined, while others are less so.

The musical score is presented on seven staves, connected by a vertical brace on the left. The notation is as follows:

- Staff 1:** Features a series of eighth and sixteenth notes, with a fermata over a half note in the middle. There are some slurs and ties.
- Staff 2:** Continues the melodic line with similar rhythmic values and some rests.
- Staff 3:** Shows a more complex texture with chords and moving lines. There are some accidentals (flats) visible.
- Staff 4:** Includes numerical figures (6, 7, 6, 7, 6) above the staff, possibly indicating fingerings or specific notes. The notation includes eighth and sixteenth notes.
- Staff 5:** Features a melodic line with many sixteenth and thirty-second notes, some marked with 'tr' (trills).
- Staff 6:** Continues the fast-moving melodic line with various slurs and ties.
- Staff 7:** The final staff, showing a continuation of the fast melodic pattern with 'tr' markings.

A page of musical notation, numbered 492. The page contains seven staves of music. The first staff is in treble clef with a key signature of one sharp (F#). The second staff is in bass clef. The third staff is in treble clef. The fourth staff is in bass clef. The fifth, sixth, and seventh staves are in treble clef. The notation includes various musical symbols such as notes, rests, beams, and slurs. The first staff ends with a double bar line and a repeat sign. The second staff ends with a double bar line. The third staff ends with a double bar line. The fourth staff ends with a double bar line. The fifth, sixth, and seventh staves end with double bar lines. The notation is arranged in a system with a brace on the left side of the first four staves and a brace on the left side of the last three staves.

This page contains seven staves of musical notation. The notation is written on a grand staff system with a vertical brace on the left. The staves are connected by a vertical line. The notation includes various musical symbols such as notes, rests, and dynamic markings like 'f' and 'tr'. The staves are connected by a vertical line on the left.

The first staff begins with a treble clef and a key signature of one flat. It contains a series of notes and rests, with a dynamic marking of 'f' and a trill 'tr' at the end. The second staff continues the melody with similar notation. The third staff features a series of notes and rests, with a dynamic marking of 'f' and a trill 'tr' at the end. The fourth staff includes a series of notes and rests, with a dynamic marking of 'f' and a trill 'tr' at the end. The fifth staff features a series of notes and rests, with a dynamic marking of 'f' and a trill 'tr' at the end. The sixth staff includes a series of notes and rests, with a dynamic marking of 'f' and a trill 'tr' at the end. The seventh staff features a series of notes and rests, with a dynamic marking of 'f' and a trill 'tr' at the end.

A handwritten musical score consisting of seven staves, grouped by a large left brace. The notation is in black ink on white paper. The first staff begins with a treble clef and a key signature of one flat (B-flat). The music is written in a style that appears to be a sketch or a working draft, with some notes and rests clearly defined, while others are less so. The score includes various musical symbols such as notes, rests, beams, and a double bar line. The overall layout is clean, with the staves aligned horizontally.





ad libitum.

A handwritten musical score on seven staves. The first three staves are relatively simple, featuring whole notes and half notes with some phrasing slurs. The fourth staff contains a sequence of notes with the numbers 7, 6, 7, 6, and 7 written above them. The fifth and sixth staves are more complex, featuring many beamed eighth and sixteenth notes, often with slurs. The seventh staff continues this complex, fast-moving melodic line with many beamed notes and slurs. The notation is in black ink on white paper.

A handwritten musical score on seven staves. The notation is in black ink on white paper. The first staff begins with a treble clef and a key signature of one sharp (F#). The music is written in a style that appears to be a sketch or a working draft. The first staff has a long horizontal line drawn below it. The second staff has a long horizontal line drawn above it. The third staff has a long horizontal line drawn below it. The fourth staff has a long horizontal line drawn above it. The fifth staff has a long horizontal line drawn below it. The sixth staff has a long horizontal line drawn above it. The seventh staff has a long horizontal line drawn below it. The notation includes various musical symbols such as notes, rests, beams, and slurs. There are also some markings that look like "tr" (trills) and "mf" (mezzo-forte). The overall impression is that of a composer's sketch or a student's exercise.

This page contains seven staves of musical notation. The notation is written in a style typical of early 20th-century music. The staves are connected by a vertical line on the left. The notation includes various musical symbols such as notes, rests, trills (tr), and slurs. The staves are numbered 500.

The first staff begins with a treble clef and a key signature of one sharp (F#). It contains a series of eighth and sixteenth notes, followed by a trill (tr) and a rest. The second staff continues the melody with similar notation. The third staff features a series of chords and a trill. The fourth staff contains a series of chords and a trill. The fifth staff begins with a treble clef and a key signature of one sharp (F#). It contains a series of eighth and sixteenth notes, followed by a trill (tr) and a rest. The sixth staff continues the melody with similar notation. The seventh staff features a series of chords and a trill.

This page of musical notation, numbered 501, features seven staves of music. The notation is complex, including various musical symbols such as notes, rests, trills (tr), and slurs. The staves are arranged in a single system, with a large bracket on the left side grouping them. The music appears to be for guitar, given the use of trills and the specific notation for the instrument. The notation is arranged in a single system, with a large bracket on the left side grouping the staves. The music appears to be for guitar, given the use of trills and the specific notation for the instrument.

4.

For this example, I have deliberately chosen a slow rather than a fast piece, because one has more opportunity for ornamentation, although occasionally such ornaments can be used in fast movements. The first line contains the melody, which should be ornamented. Essential ornaments are found in it, so that you can play it as it stands without adding anything further. However, there are many places for arbitrary ornaments as well. I did not want to write merely simple notes, like the second line, because it is more difficult to find the flow of the song, and because it would cause the beginner more difficulty in ornamenting. When the beginner is not in the position to ornament, he must play the music as it is written, and this simple line would certainly make a very bad effect. That is why I chose the melody shown in the first line.

5.

The third line contains the harmony. I have written the notes chordally, as they would be realized on the keyboard, but the variations can be played as you like, as long as they are proper to the mood of the piece. The ornaments must never obscure the principal notes of the song. If you want to ornament, it must not be just for the sake of ornamenting, but rather your intention must be purely to beautify the song. This involves much insight and judgment, for often a simply-performed piece creates

a much better effect than one containing too many varied notes. The first chord in this example is the triad D, F sharp, A. All Ds, F sharps, and As in any octave belong to this chord. Make use of these higher or lower tones according to the nature of the piece or circumstance, but so that the primary melody remains recognizable, and especially so that the primary note at the beginning and at the beginning of each new phrase is noticeable.

6.

The ornamentation, as previously said, must correspond to the mood of the piece, so that lively and even wild ornamentation is not placed in a modest and pleasant movement; fresh and sprightly with sad and melancholy; saucy and untamed with tender and gentle. Everything must be in the right place, and not everything needs to be ornamented. Ornaments are necessary only in those places where the melody is monotonous and stiff, and especially in places that appear more than once. However, as already said, you must have no other intention than to beautify the piece. It must not appear to the listener that you want him to notice how well you can ornament. The listener must know nothing of whether you can ornament or not; he should anticipate nothing. The point of the performance should not be only to arouse amazement, but also to move the heart. Both are difficult, but ornaments handled properly in the appropriate places help create the desired effect.

Much practice and a correct, cultivated, and orderly musical sense is required, as well as good mechanical control of the instrument. If you must torture yourself with technique, feeling and expression will be forgotten.

7.

I have indeed tried to alter every measure in this example, but with no other intention than to show how it is done. The three ways of ornamenting found below the keyboard realization can be played just as they stand, or parts of them can be interchanged. The lyric places in the simple melody can be left as they stand, they can be combined with the ornamented lines, or they can be played differently according to the feeling of the player. Since this is impossible without knowledge of harmony, if you lack this knowledge, I advise you not to use ornamentation at all rather than to make inappropriate alterations, thereby destroying the music. Or, if you want to use ornamentation anyway, learn such ornaments and the actual simple melody by heart, and try to bring the melody in occasionally. In this manner, everything will remain more correct than if you try to do new things yourself.

8.

In this example, you can see how essential and arbitrary ornaments are related to one another, and how light and shadow are brought into the performance through the use of forte, piano, crescendo and decrescendo, thereby making the performance pleasant and expressive. However, to be able

to play expressively, from the soul, you must take the trouble to think carefully about the music, so that you have grasped the mood of it. To go through each measure of this piece in detail, and to show how the variations are related to the simple melody and the harmony, would be tedious and certainly useless, because it would not be read. It is better to take this example before you, and look at how the ornamented versions relate to the simple line. We will leave it at that.

Chapter Fifteen
Summary of the Whole With Some
Supplements for the Student and the Teacher

1.

If the student is to gain anything from this Instruction, he must spare no pains in examining and practicing everything diligently, and he must always tie everything he studies together with rules, so that he sees that everything is correct. If he does not do this, it is quite possible he will go astray and spoil his entire performance. If poor playing is customary and natural to him, however, then any attempt to correct it would be in vain.

2.

If the student has a teacher who is knowledgable, it is the teacher's duty to point out everything clearly, and to demonstrate the same material often, so that no mistakes can creep in, because not every student takes the time to check everything and to compare his playing with the rules of this Instruction. If the teacher does not understand the rules, as is often the case, he must familiarize himself with them, if conceit and pride do not prevent him from doing so, and then read this Instruction assiduously. Since knowledge of the matter and mechanical practice must be bound together, it is necessary to check each trifle by playing.

3.

First of all, the student must stand in a free and unaffected position, because this influences performance. He must neither lay his left arm against his body nor let his right arm sink too low. In the first instance, he will become used to holding his head too low, and in the other, he will tilt his head too far to the right. This constrained stance not only hinders the free flow of wind, but also makes the performance tense and affected. A good posture is discussed in the third and following sections of the second chapter.

4.

Now observe carefully that the fingers are placed so that they lie naturally, freely, and unconstrained. Place the left thumb with the fleshy part of the first joint firmly on the flute, across from and between the first and second fingers, as this thumb and the first finger of the left hand hold the flute. No more than the tip of the right thumb should be placed under the flute. The reasons for this are found in the second chapter, along with how the left little finger should not support the flute, and the right hand little finger should not be stuck under the flute or left resting on the key.

5.

Grimacing is to be carefully avoided, especially the lifting of the shoulders. When this happens, facial grimaces

are sure to follow. You can read about this in the eleventh section of the second chapter. The flute must rest firmly on the lip, but without too much pressure, or the tone will become harsh, and the excessive pressure will heat and destroy the lips. In certain situations, such as when using crescendo and decrescendo, the flute must be turned inward or outward, but otherwise it must remain firmly placed. If you feel, or even just think, while you are playing, that the flute is not in its proper position, do not try to move it back and forth on the lip or try to replace it correctly. You will certainly lose control of the embouchure. It is better to wait for an appropriate opportunity to adjust it.

6.

Now try to bring the flute to the mouth and produce a tone according to the twelfth section of Chapter Two. When the student can produce the sound easily, he must try to make it full, singing, and imitative of a good singer's voice, and with the help of a good teacher, he must try to play with good intonation in the low as well as the high register by practicing scales. The means of doing this can be found in the fourteenth and fifteenth sections. Be very careful not to push and press the tone so that it becomes harsh and inflexible. Try rather to play with a tone that flows easily and smoothly, and try to get only as much force as is solid and wholesome, so that you can play both fortissimo and piano-pianissimo. That is, do not bluster,

but do not whistle either. You will find more about tone quality and intonation in Chapter Six.

7.

The beginner should strive especially to play a correctly-built and correctly-tuned flute with a fixed and sure embouchure and proper fingerings. He should practice the scales carefully, as I have already mentioned, with the help of a suitable teacher, or if no teacher is available, he can use the means described in Chapter Six, section 12, to help him and to cultivate his ear, for without these three things, namely a well-built and well-tuned flute, a proper fingering, and a trained ear, it is impossible to play this instrument well. When playing the scales, he should pay careful attention to the fingerings, and become well acquainted with them, for it is an essential thing. Then he will have the advantage of learning to regulate the wind properly, which is dependent on the ear; if the ear hears correctly, it will help to regulate the wind properly. After he has read about fingerings in the third chapter, he should read the sixth chapter about tone and pure intonation, where he will also find the treatment of the scales. He should differentiate the notes with # or $\flat$ in his fingerings, because they are a comma apart, and much depends on it. He must learn the use of the E flat and D sharp keys, because clean playing is also largely dependent on that, and from that he will learn the difference

between large and small half steps, and how they are tuned correctly. Read section 21 and the following sections of the third chapter.

8.

When good posture is established, the student must become familiar with the key signature and the other musical signs, as well as the name, value, and division of the notes and rests, so that once he is ready to play, he will not be hindered by them. These things are all explained in the fourth chapter; look them up. How to recognize the notes in their different octaves is also found there. He should be especially familiar with the value and division of the notes and rests, because this is the essential part of the rhythm. If this is missing, no amount of effort will enable him to proceed with the measure.

9.

Now the student must learn the different meters and what they are called-- $2/4$, $3/4$, C, etc. He should then make examples of each meter, or, if a teacher is available, he should have the teacher show him. With these examples he learns to count the parts of the measure, and to distribute them in a definite tempo. This must all happen before he begins to play. It will give him a proper idea of the matter, and be of more help than some believe. During this practicing, the teacher must always play the scales with him, thereby clarifying the relation of intervals and their

construction, so that he gains a clear understanding of intervals and a certainty in playing cleanly. Before he reaches this certainty, and before his ear is trained, he must not try to make any leaps on this instrument, or he will certainly do a disservice to himself. A more detailed discussion of meter, as well as how the notes should be divided and counted, etc., is found in Chapter Five. If the student neglects this, he learns nothing.

10.

It often happens that a teacher presents something to a student, and begins playing when the student has no idea of what he is supposed to do. He does not learn, so he listens and imitates, and when the piece is ended, another is taken, and so it goes until the end of the hour, without a word having been said. The student then has not the slightest idea of why things are done as they are, or whether it could not be done in another way. He gains no understanding of either the part or the whole. So it continues for one, two, or three years. When this instruction is at an end, then, so is the student's skill, for he has had enough of the little pieces he has learned by imitation, and he does not want to play them anymore. However, he cannot learn anything by himself, because he has not learned any fundamentals, and so his flute playing is over. This is what usually happens. Perhaps here or there, one will go deeper into the matter and proceed more with firm rules,

but it is rare. Most are without knowledge and have not learned to think. I know well that occasionally one or another has torn himself free of this evil path, and has been able to pull his talents upward with great effort and diligence, but how many are there? Teaching in this abysmal manner is certainly the reason that so many amateurs play this instrument without rhythm, without clarity, and without elocution.

11.

I have said the student should learn the different meters, and should practice counting the parts of the measure, distributing them according to a fixed tempo. When he can do this satisfactorily, he can begin an easy piece. But before he begins to play, he should practice the examples shown earlier. He should examine the meter and the parts of the measure, and count them according to the division of the notes, as is seen in the examples of Chapter Five. When he is finished, he should investigate the key signature, and the end of the piece will show him the key. If he has a teacher, the teacher should explain, if he can, so that the student obtains a proper knowledge of the intervals in a key, and what major and minor are. If the teacher cannot clarify these things well enough, the student should read over Chapter Seven, which is about present-day key signatures. After he has read about the Italian words in section 15 of the fifth chapter, he should

look at what is written at the top of the piece, which will tell him the tempo. When he has a firm understanding of the words written above a piece, he should try to establish a tempo proper to the piece, and even if it is not the right tempo, he would have something anyway to which he could refer. He should then divide the parts of the measure, and go through the whole piece a few times according to this tempo before he begins to play. If he is able to divide the parts of the measures correctly according to a definite tempo, he then begins to play in this tempo. When playing, he marks the parts of the measure with his foot, but gently so that no unpleasant tapping is heard. If he can do this in his head, as I have mentioned several times, it is certainly better, for once the tapping is learned, it is always hard to stop it, and if, in the course of time, he plays in a group, it would hinder the playing of the ensemble, and mistakes would occur. He should go through the piece in this manner often enough that he learns to feel the content of the piece. He then establishes a proper tempo according to what he feels. A more detailed description about how he should proceed can be found in Chapter Five, as already stated.

12.

I have now brought the student to playing, and have also shown him the means of proceeding by himself. Notwithstanding, he must have patience, and try to produce each note

clearly and in the proper way according to the method. This method is the correct movement of the tongue, or the language of the flute. Since this is one of the most important parts of playing the flute, I warn the student to study carefully Chapters Eight and Nine, which deal with the language or the means of properly regulating the breath. He can first read the 13th rule in Chapter Eight, where he will find a repetition of this language. Then he must study all of Chapter Eight carefully, and he will find everything clearly explained through examples. He should take special care to learn the syllables ta, da, and ra, at first individually, distinctly, and easily, and then in connection with one another as explained in this chapter. He can best learn this by playing scales, articulating ta on each note at first, then da, and finally, ra. Then he should practice two notes with taa, then daa, and raa. Da and ra make the same effect, and can therefore be used interchangeably. The preceding tone is always connected, never separate. If the tone is separated, you cannot continue with ra, just as you cannot begin a new phrase with ra. This must happen with ta, and not merely with the breath or the syllable bi. The language found in Chapter Nine, or the so-called double tongue, must not be taken on by the student until he has the language contained in Chapter Eight completely in his power, which might take even more than a year.

13.

When he has mastered the language, the student can begin to play his piece according to the directions shown above, marking each part of the measure either with his foot or in his head, according to a firmly-established tempo, seeing that he maintains a good firm tone and pure intonation, which he learned from Chapter Six. He should always play with power and life, and pay close attention to the fingers, seeing that they always move precisely with the tongue. This he should do, and always with the same piece, until he has control of the language, and knows where the inner phrases end. Then he will have found the composer's meaning, and will be able to take a breath at the right place, making his performance clear. To observe all of this at once will perhaps appear too advanced to some, but it is not, and I always think that the saying, "habits formed in youth are continued in old age" [Jung gewohnt, alt getan], is suitable here. Thus, you accustom yourself early to gaining everything that is possible and that belongs together, deferring nothing for the future.¹ Everything you can learn in one piece must be absorbed, and nothing passed over, for what you learn in one piece, you should not have to re-learn again in another.

¹The shift from "the student" to "you" is Tromlitz's.

14.

If the student has a teacher, it is the teacher's duty to remind him constantly, and often in every situation, to play in the proper manner, until it is correct. Certainly the student will not learn as many pieces with this method, but he learns thoroughly, and as small as the steps may seem at first, they will be big when he has practiced this way for a while. But one commonly thinks, erroneously, that students should learn concertos before they can play a simple song. That is surely the horse following the cart. Therefore, leave such large projects as these, especially when they lie in foreign and difficult keys, and their value consists of more than just playing the notes, although some think the contrary, until you have the skill to do it. Easy lyrical pieces set in the easier keys must be played a long time until the student gains more and more skill. When he has reached a certain level, for example when he has a solid tone, fluent fingers and tongue, and pure intonation, he can choose pieces containing more difficult running and leaping passages, with which he can practice his technique and tonguing, but, as I have already reminded you, not in foreign keys before his ear is fully trained, for he would bring about a pitiful performance without a correctly-trained ear and fluent fingers and tongue, which are far more difficult in these keys than in the easier ones. Lack of clarity and pure intonation would certainly

be the result of this. Also, he must not play these running and leaping passages faster than he is able with the single tongue. Double tonguing must be the last thing he undertakes, and when he wants to use it in these passages, he must first practice a long time with individual figures, because otherwise it would easily be possible to lose the clarity and evenness of these figures and passages, which must be carefully maintained so that one note is not longer or shorter than the other. The notes must be even and flowing, and of four equal notes, the stress must always be on the first and third, but such that the notes do not limp along--that is, so that the first and third are not too long in relation to the second and fourth. With triplets, lay the emphasis on the first note, but such that the other two are not too short in relation to the first. The beauty of the triplet lies in playing the three notes as evenly as possible, but such that the emphasis is always on the first note without making it longer or stronger, which would create a poor effect. This must be observed as much with the single tongue as with the double tongue.

15.

When the student can do everything mentioned above, it is still too early for him to appear publicly, for he is still missing much. If he does it anyway, he will certainly leave a poor impression which would take years to erase. So it is better for him to wait, and proceed with pieces in which he has the opportunity to practice ornaments. These

essential ornaments are proper everywhere--even in the pieces which he has already learned to play--so he should take these pieces again, and try to apply the proper essential ornaments, which are described in detail in Chapters Ten and Eleven. If he chooses a new piece, he should proceed exactly according to the instructions given previously, not deviating from them, but striving to grasp everything. He should give special attention to the essential ornaments, the spice of his performance. These ornaments are vibrato, appoggiatura, termination, double appoggiatura, slide, turn, pralltrill and schneller, mordent, battement, forte and piano, crescendo and decrescendo, portamento, and trill. These he will find discussed in detail in Chapters Ten and Eleven, as already said, and he should study them diligently. Once more I recommend the proper usage of these methods.

16.

Although I discussed sliding from one tone to another in sections 29 and 30 of the tenth chapter, I will say a bit more about it here, and show a few more advantages of it to please the amateurs. I say that the sliding from one tone to another makes a very good effect when done only seldom, and in the right place. If used too often, however, it loses its good effect, and becomes disgusting and intolerable. In order to summarize it all once more, I will take the second octave, because it is used there more

frequently, and begin with D", sliding upward one tone at a time to D'", and then back down again. You can then slide as many tones together as you wish according to this instruction.

17.

This upward slide occurs either when you slide the finger of the following tone away bit by bit, or when you turn it to the side. There is a firm rule here that as soon as you begin to move the finger from the hole, you strengthen the wind as much as necessary to maintain an even tone quality; this also applies to the reverse, namely sliding down from above. If you do not do this, the tone will become weak the instant you move the finger from the hole, and it will fall off too much from the previous tone where the slide began. This ornament is best produced where the fingers follow one another, and the tone to which you want to slide lies naturally under the next finger, and does not require passing through a different note first.

18.

The interval D" to E" does not lend itself well to sliding, because the E" is naturally weak, and if you uncover the hole even just a little, either it will not speak at all, or the tone will be much too weak. If you want to do it with the E flat key, it is more tolerable when you begin to lift the sixth finger just as you open the E flat key, and then close the key properly, or otherwise

the E" would be sharp, because the E flat key would still be open. This is more easily done than said. Since this has many difficulties, it would be better not to use the slide at all between these two notes.

It is easier to slide from E" to F sharp", because you pull the fifth finger away bit by bit. You can turn the finger to the side little by little, or you can begin to lift the tip of the finger, or you can pull the finger toward the fourth finger. When the tone rises ever higher, any method is correct. If you want to slide from E" to F", you do it exactly the same way, except that the fifth finger is not taken completely away from the hole, but rather remains fixed as soon as F" sounds.

To slide from F sharp" to G", you proceed in the same manner, but the slide from F sharp" to G sharp" is more difficult, because of the pure intonation on G sharp". If you want to slide this interval, you must use the third finger, leaving the fourth finger down. But the third finger must not be raised completely, but rather only until the G sharp" sounds.

Sliding from G" or G sharp" to A" is easy again. From F", you slide the third finger little by little, and from G sharp", the fourth and sixth fingers.

From A" to B" is also easy, but from A" to B flat" is difficult. Here there is no suitable fingering for B flat", because you cannot slide the fingers without too great a

change in fingering. If you want to do it, finger A", and raise the tip of the finger as far from the hole as necessary for B flat" to sound, and hold it there.

Proceed in the same manner from B" to C", raising the tip of the finger as far as necessary for C" to sound. Or, you can finger B" with 1, 3, 4, 5, 6, 7, and push the fifth finger downwards off the hole until C" sounds.

From B" to C sharp" is again easy. Pull the first finger away from its hole little by little.

From C" to D" is difficult. Either you finger C" with 2, 4, 5, 6, 7, and while you hold C", pull the sixth finger off at the same time you put the third finger back on, and raise the tips of the fourth and fifth fingers little by little, and you arrive through C sharp" to D", or you can play C" with 1, 3, 4, 6, 7, and pull the first finger away from its hole little by little, and as soon as it is away, put down the second finger and raise 4 and 6 little by little with the tips, and you come to D".

19.

Sliding downward happens in the following manner:

From D" you come down to C sharp" when, holding D", you stretch 4 and 6, hold them inward above the holes, and put them down together little by little from the side of the flute until the holes are closed, and you have C sharp".

From D" to C", proceed thus: finger D", stretch our 4 and 6 as before, laying them over the holes little by

little, creating C sharp", then proceed in the same manner to put 5 down, at the same time taking 3 away, and you have C". Or you can reverse the slide from C" to D", namely slide down the same way you went up.

From C" to B" happens just like B" to C", namely you finger C" with 1, 3, 4, 6, 7, and put down 5 little by little to get B", or finger C" with 2, 4, 5, 6, 7, and push the first finger off the hole until B" sounds. If you push it all the way off, you will get B flat".

From B flat" to A" there is no way other than to finger B flat" with the first and third fingers, and push the second finger as far over its hole as necessary to sound A". If you cover the hole completely, you get G".

The slides from A" to G sharp" and G", from G" to F sharp" and F", from F" to E", and from E" to D", are all easy, and you need only to reverse the manner shown first. I hope this will be enough to instruct the amateur about this ornament and how it should be handled, and to enable him to handle strange situations when they appear. For my part, I do not use this ornament unless I feel I have the power to do it. Once again I say that if you use it only to show that you can do it, it will certainly always stand in the wrong place. If it stands in the proper place, however, which can happen only seldom, it will certainly not fail to make its good effect.

20.

I will go back again now to where the student occupies himself with the essential ornaments. Of these ornaments, the trill is one of the most distinguished, and must therefore be practiced with the utmost diligence and attention. The student must observe carefully the place the trill is to be made, and see whether it should consist of a whole or a half step, which he can find out by looking at the key in which he is playing. On a flute without keys, the trill is not usable overall, but where it is possible do not overlook it. I have shown in detail in the first chapter, that a flute with several keys can be played more correctly in most key signatures than a common flute. When a student has a keyed flute, he must take the trouble to be able to trill with each finger, including the thumb, not only beautifully and evenly, but also to trill properly for each tempo. In order to attain more certainty, he should practice one finger after the other. He must see to it that the trills are alike, and that the stress falls on the first note, which is the same note that is to be transformed into a trill. The trill must never be separated from its appoggiatura, just as little as the note over which the trill stands and which follows the appoggiatura.² The trill

²"Der Triller muss nie von seinem Vorschlage getrennet werden, eben so wenig, als die Note, über der der Triller stehet, und nach einem Vorschlage folget."

appearing in a song has an appoggiatura and a termination. In the eleventh chapter, you find how the trill should actually be made, and the number of shakes it must contain for each tempo is found in paragraph 13 of that chapter. There I have suggested that to find the right tempo, you should take four times the preceding beat. However, in cases where the tempo is very fast, four times the beat, namely eight notes to a quarter, is much too fast, so take six notes instead of eight, in order to be able to divide them evenly, and only three movements of the fingers, like a triplet, should be counted, because the other three originate from lifting the fingers. In this way, all six notes will be even. In very slow pieces where eight notes would produce too slow a trill, you should play twelve notes, and count six as the fingers go down, the other six being created when the fingers go up. Read section 13 and those following. You will find a table of trills and an explanation of each trill in section 15 of the eleventh chapter.

21.

When the student has conquered all of this, whether with the help of an intelligent teacher or through his own diligence, and he can play a piece with the correct rhythm, in the proper tempo, with the right articulation, and with the proper essential ornaments performed beautifully, clearly and cleanly, he should practice in this way a long time, and try to perform his music lyrically and sustained.

He will obtain this if he looks at his tone as a thread that he must never break unless the composer indicates it with a rest or other sign, or unless the expression of the piece demands it. Onto this thread he should tie his tone, so to speak, through the correct pronunciation of syllables shown earlier, and through the language which arises from them. This connected tone or thread must always be bright, ringing, and singing, and the notes tied to it must be the same, and the intervals must be pure. Here, singing will be of great help. If the student has the opportunity to practice singing, he should take it. His performance will gain much if he can think of what he is playing as a singer would, so that he plays not just empty notes, but rather plays with feeling. If he intends to stir others, he himself must be moved in his performance.

22.

The student must also practice with his fingers and tongue together until he can play clearly, even in the fastest tempos in both running and leaping passages. Each note must get its full value, so that in the fastest passages, too, each note is heard. He must hear them himself, or the listener will not hear them either. To accomplish this, he must always place the stress, or the accent (which sounds more scholarly) on the proper note. He will be able to do this with much daily practice. To this end, he should hear good players, good singers, and

good musicians when he has the opportunity, to help direct his own playing, and to establish his taste, so that he is capable of making a proper choice for his use. It is not to be advised to imitate everything foreign, but rather he should take what is useful to him, and incorporate it into his own [musical] taste.

23.

When the student hears a flutist, he should investigate carefully whether this flutist has all the attributes which create a good flutist, before he imitates him. If he does not do this, he can easily be led astray. He looks, then, to see whether the flutist has a nice, free, and unforced posture; a beautiful, full, singing, and even tone with pure intonation; whether his tone speaks well both in the low and high ranges; whether his tone is supple enough for shading; whether there is variety in his playing; whether he uses a proper articulation and its proper accents; whether his fingers and tongue move precisely together producing clarity; whether his passages and phrases contain clarity, ease, and are flowing; whether he plays from the soul with feeling and expression; whether his essential ornaments are used with understanding; whether his arbitrary ornaments are chosen carefully with insight into the harmony, and thus are used in the right places; and whether he shows composure in his playing, and does not spoil everything with nervousness and much trouble, or grimaces constantly while

playing. Composure when playing is a superior virtue of the player. You seldom find it in young players. Thus true expression, which is the prevalent passion in the piece, is also often missing, because it is usually overstated by the player. This calm composure comes only after the wild fire has vanished.

24.

If the player has these good qualities, the student can imitate him confidently. However, he must take the trouble to adopt everything said above through diligence and with time. All of this is subject to a special practice; he should choose good duets (when he can use them) with which he must play both the first and second voice alternately, so that he has more opportunity to practice in rhythm; and good trios and quartets where he must always accustom himself to hearing the other voices, so that he learns to know whether he is playing right together with them, which is a great art on the flute. In this manner he will build his ear with a great deal of practice. Then he can go on to bigger things like concertos and solos. The adagios contained therein, especially when they are set in the Italian style (although this great [style] of song is nearly completely lost for today's instrumental music), teach him to play expressively now, with arbitrary ornaments which must be used with knowledge of the harmony, for without this knowledge, this will be and will remain only for common

players. He must be very careful with these works, moreover, and bring nothing into his performance which could be detrimental to the main passion of the piece. If he had established that he were an excellent flutist, and had all the mechanical things well under his control, much would still be lacking, and he would be nothing more than a good instrumentalist if he were not also a musician. Thus he must endeavor to become a musician, for only then will he have a superior worth.

25.

The player tries to find the proper feeling of a piece through the tempo, according to the word written above. Although this word cannot define the tempo of a piece exactly, you must direct your attention toward it first, and then let the feeling regulate this tempo. The same heading can stand above two different pieces, and not just one tempo would be found. Therefore the feeling must decide, because passions have their places, and one person will not perceive them exactly as another would. The player must not fail to perform slow movements gently and pleasantly, and fast movements must be merry and lively, so that the former are not too merry and skipping, and the latter, too sorrowful and idle.

26.

The performer must try to play a piece so that the listener will understand it. If the listener does not

understand anything he says with his instrument, he has certainly performed unclearly and without order, without any feeling, and with too many unrecognizable essential and arbitrary ornaments used improperly or not at all, or ground out miserably and clumsily, or everything is thrown together and the thoughts are not separated. Performance in music must be like a good speech. A musical piece can be lifted by a good performance or spoiled by a bad one, just like [a speech]. A bad piece can gain much through a good performance. It is an obligation never to play carelessly, no matter by whom the piece is written or for whom it is played. Also, when practicing, the player should play as though he were performing before a congregation of the most important people, so that this picture is vividly impressed on him, and he will not err, then, when it really happens.

27.

Since a concerto and solo player always performs studied things, and must occupy himself with many ornaments and other affectations, to my way of thinking it is not good for him to play with the ripieno; otherwise, since the ripieno voices must be performed plainly and simply, he would certainly be detrimental to the whole with his own and other natural affectations, or, if he plays along and adapts himself to plain playing, he would hurt his concerto and solo playing. With the flute there is an exception, since it is usually set simply, and thus it would not do so

much harm if [the flutist] lost an occasional flower, especially with solo playing. Should [the flute part] be arranged doubly [with the ripieno], which I consider a grave error, the arbitrary ornaments certainly must not be used, and [the flutist] must play with the ripieno only when [the composer] indicates it, paying careful attention to a good, simple performance, but with the necessary essential ornaments, and his flower will be entrusted to further use. As a soloist, he has the freedom to do anything, since he plays his part alone, and can carry out his fantasies. Woe to him if he does not execute it properly!

28.

If one wants to believe, however, that the ripieno is more important than the solo, and trouble himself to become an excellent ripienist, he then cannot become a good soloist, particularly if he is a ripienist, of which we have many here and there, who believes he has fulfilled his obligation when he sticks right to the material. These want to become solo players! However, if a good ripienist wants to become a good soloist, he must quit playing the ripieno, because otherwise he would hinder himself and the whole. I appeal to this experience: in a large group where many soloists must be ripienists, it was quite clear that too many were soloists. Examine and judge. A soloist who must also serve as ripienist will not be able to deny either his solo playing to ripienists or his ripieno playing to soloists.

29.

He who will obtain a good performance must take the good singer as a model (I mean a singer who exercises the art of singing from fundamentals and according to rules, but not such a one as just imagines it). He must strive to imitate him in lyrical as well as in fast, running passages. As long as his music and passages do not sound just like the good singer's, he is not on the right track, and is not using the right methods. These methods, and also those which help with other passages and affectations not applicable to the singer, are clearly explained in the chapter about the language of this instrument. He must try to enrich and beautify his music, also, with essential ornaments, and when he has attained the proper insight into the harmony, he should also try to incorporate arbitrary ornaments. The tempo of the ornaments depends on the tempo of the piece where they are to appear; thus faster in an Allegro, and slower in an Adagio. Contemporary composers often write the ornaments out in similar cases.

30.

Arbitrary ornaments actually belong mainly in the Adagio. Few arbitrary ornaments appear in fast movements, with the exception of very simple songs. An Adagio in the Italian style is not customary these days, which is regrettable. Simple little songs, more French than Italian, are found in its place, or Romances in miscellaneous styles, which thus

may be performed only with essential ornaments such as trills, appoggiaturas, double appoggiaturas, mordents, and the like. In these, one shows himself certainly as a galant player, but not as a musician. Presumably we have forsaken the former, because not every player has the necessary knowledge to perform such Adagios. To play these without the proper knowledge, however, creates a boring and tiring performance whose end is awaited with longing by listener and player alike. These slow movements are also not for fiery temperaments, because a calm, gentle and pleasing feeling is required.

31.

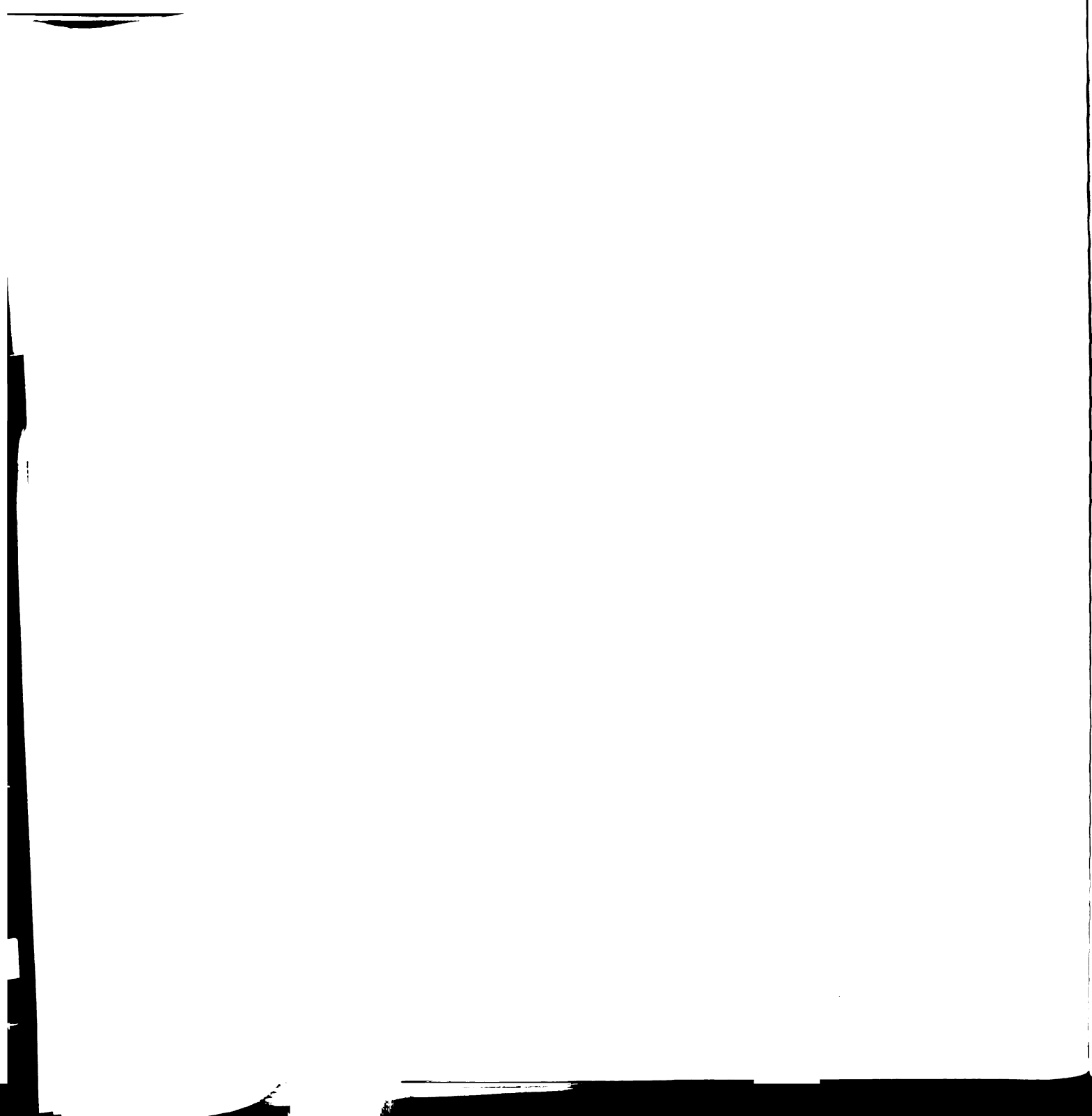
With fast pieces, be careful that the fast tempo is not exaggerated, for the piece would then lose its inner content, and be careful that you do not undertake to play it faster than you are able to play the passages clearly. Pay attention, also, that at the beginning you take the tempo at which you practiced the passages appearing there, so that if you had started with too slow a tempo, you would then have to play the passages you practiced fast, even faster. This unbecoming hurrying is a mistake which many concerto and solo players make. Perhaps this mistake occurs, because when practicing a difficult passage, you dwell on the passage as long and practice it as long as you find necessary to have control over it. This happens every day, because you do not play the rest of the piece, which

seems very easy to play, and you practice only the passage, and it becomes faster and faster without your awareness, and then you find you cannot play it at a slower tempo. If this happens, everything is ruined. If, however, the rest of the piece is played, too, in its proper tempo, and the passages appear, you will be forced to play them in the beginning tempo, and this tempo seldom matches the preceding; it is always faster.³ To avoid this evil, play the entire piece in the proper tempo until you come to the passages, and these you practice six, eight, ten, or twelve times, paying close attention to the language, and to the correct and clear pronunciation, so that each note has its proper stress and value. Then begin again from the beginning to find out if you have the right tempo--now again to the passages--again to the beginning, etc., until the whole piece is right. I have said above indeed, that you should not take a faster tempo than you can play the passages, but it is always better, if you cannot play the passages appearing in a fast piece in the proper tempo, not to play the piece at all, because otherwise the liveliness and merriment, the attributes of an Allegro, would be lost, and the piece would be bungled and ruined. Therefore it would be better to wait until you can play a piece correctly before performing it.

³In light of the preceding sentences, Tromlitz must mean "slower" here.

32.

Since light and shade will be brought into the performance through the growing and waning of the tones, the gentle and forceful playing according to degrees, and since this is as important in an Allegro as in an Adagio, pay close attention that you do not always play in one shade, as we say making it sound so commonplace and coarse, and so plain. How these ornaments should be handled can be found in the chapter about essential ornaments. In the lower octave of the flute, try to bring out a full, ringing, strong tone in your Allegro and Adagio; otherwise it sounds wooden, as often happens, and since the lower range of the flute is not as piercing as the high, it will not be heard as clearly. State the low tones strongly, especially in leaps in an Allegro. In performing in general, direct your expression according to the main theme. The player will be able to attain this so much better if the piece is a proper whole in which the feeling of the main theme is found throughout, from the beginning to the end. Truly not an easy thing for the composer! It is also not always found. Since each piece, whether it is confined to rules or is nothing more than a fantasy where lively, merry, flattering, sad, and similar thoughts alternate according to different passions, the player must pay careful attention to them, and try to express them. He must, as just mentioned, always distinguish the governing passion carefully, because the former are only



near passions. In order to avoid the monotonous as much as possible, such places that appear frequently must be varied in performance, whether through the notes, by shade or light, by transposition of the slurs and staccatos, or through weakness and strength, but the sense must not be hidden, or you would do better to play it as written.

33.

If the performer does all of this precisely, he must be completely in control of the mechanical play, and language is one of the best means. Nothing must fail him--he must have everything in his power so well that he does not have to think about anything during his performance except passion and expression. He must, if he wants to deserve the name of virtuoso, be able to reach the outermost limits of the instrument. That is, he must be capable of doing everything the instrument can do (and the flute can do a great deal) in simple songs as well as in the difficult places. He must not mind if this one or that one opens his mouth and says, "That is not proper on this instrument." I say, "Everything that is possible is proper, and you must be capable if you want to be a master."

34.

It is impossible to set here all the situations and all the inner senses concerning the performance. If it were possible, they would not be generally useful, because nearly everyone feels differently and thus performs differently. I leave it at that, then, while I say that one

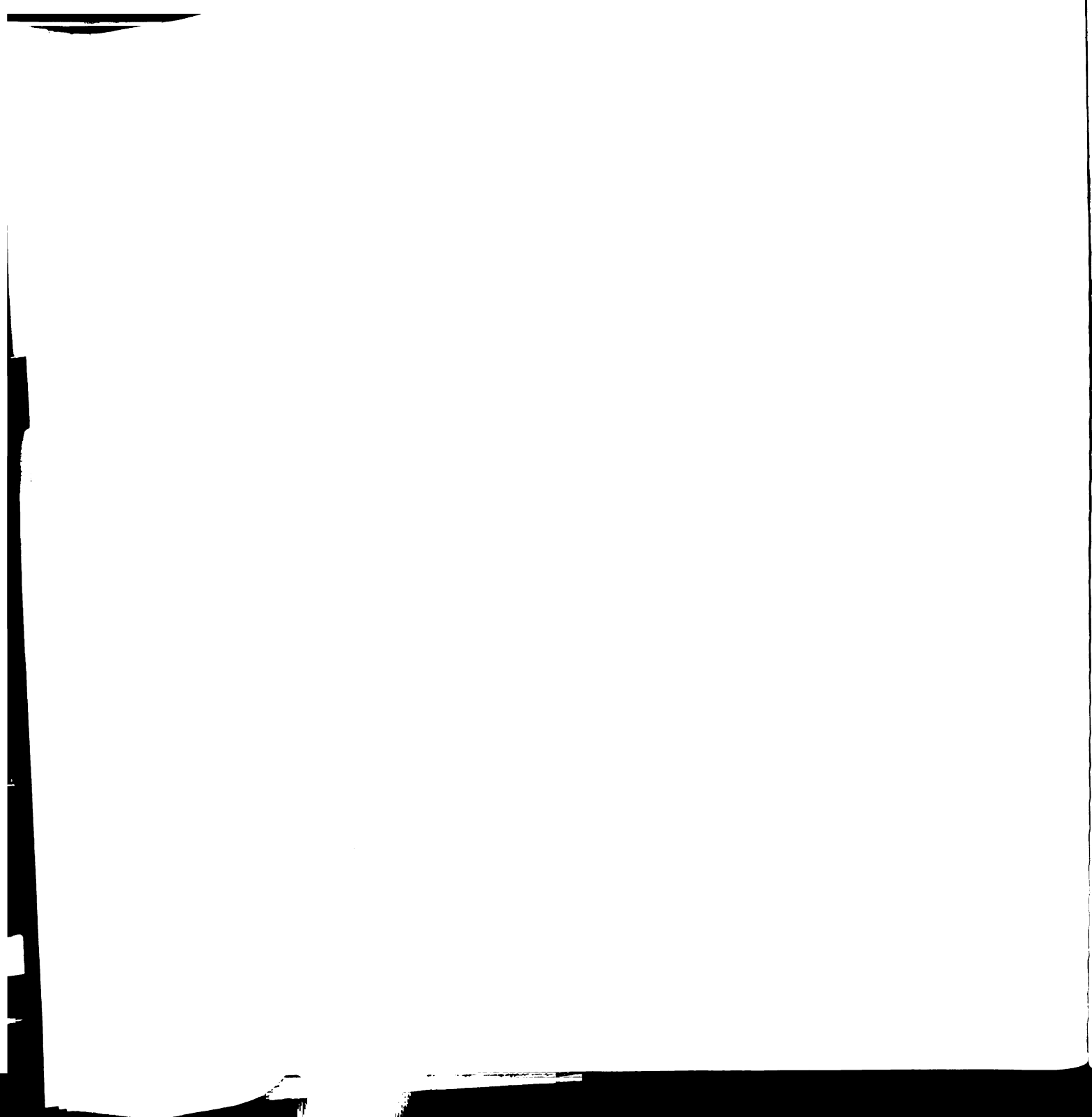
speaks through his tones; he brings his own feeling to the feeling of the listener through them; he makes him sad, and he makes him joyful; he speaks with him from the heart and from the soul; and he lays everything he feels on his spirit with the greatest emphasis. At the very least, one tries. Not everything succeeds, but some things do, and consequently with sustained practice, the rest will come if the student is not a sleepyhead, or does not proceed carelessly, or simply does not have any talent. If you want to cause the effect described above, you must speak to the listener from your soul. This is more easily done with words than with tones or sounds. From this you will see how much is dependent on the composer and on the performer, and that it is truly not enough to write down a row of sounds, at best in the right order, and again grind it out where nothing is said, the more so if this row of sounds occurs piecemeal in other compositions. Therefore it is very good when a good composer can be his own good performer.

35.

Although I have given detailed answers to the questions: Are all keys usable on the flute, or if not, which are? Is each of these keys proper to concertos, or above all to such pieces as have a strong accompaniment in a large orchestra? Where not, which are proper? In my short treatise on flute playing, I have no hesitation in repeating literally that which I deem necessary. The first question, of whether all

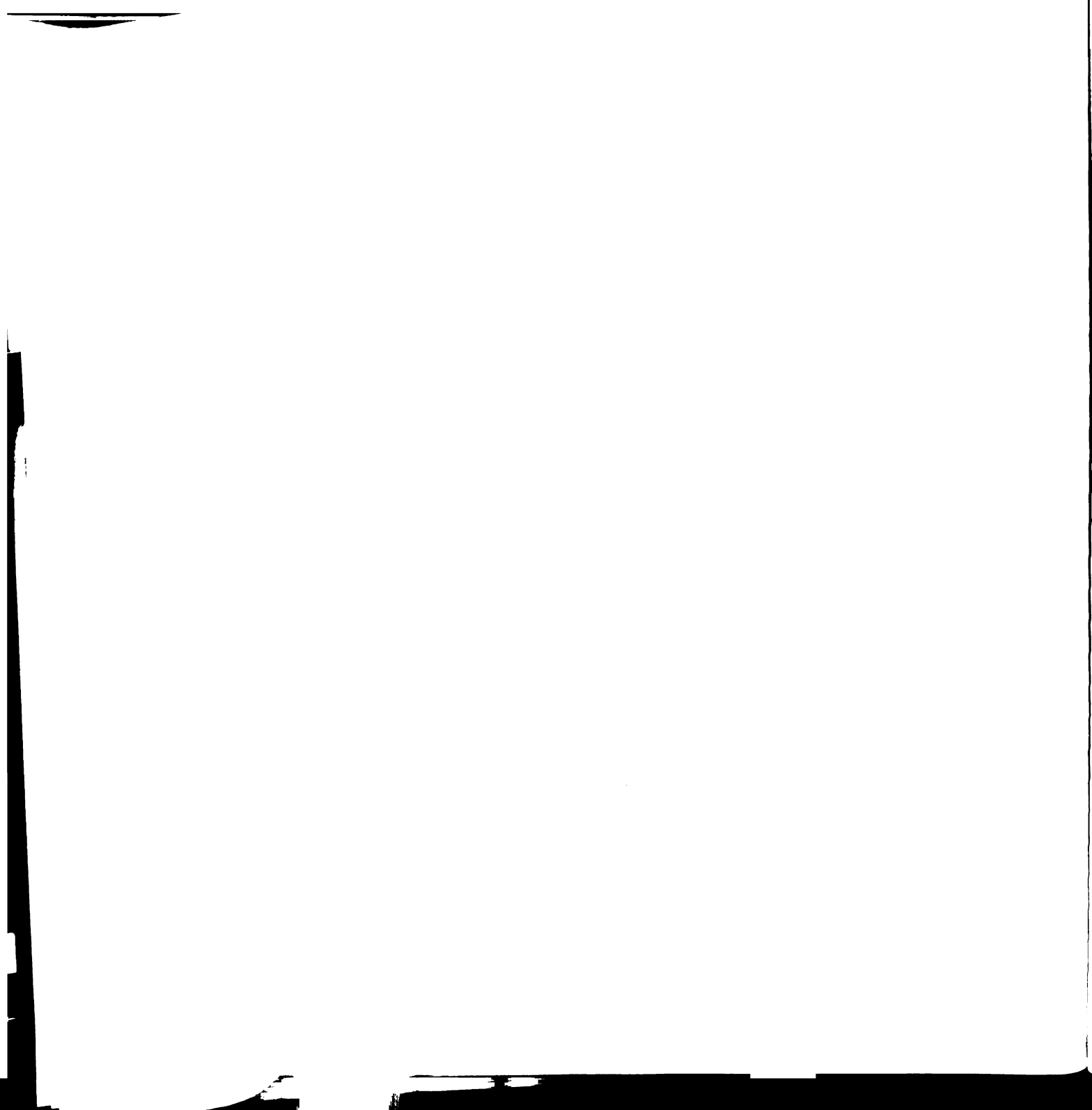
key signatures are playable on the flute, can only be affirmed with qualification. On a common flute some are impossible, because of lack of a proper temperament. If a flute is tuned correctly, it is tolerable, although a few difficulties remain here and there, which can be overcome by one who has an ear for pure intonation. Such a flute, however, must have at least two keys, namely E flat and D sharp; one key alone is not tolerable. If you have a well-built and correctly-tempered flute with E flat, D sharp, F, G sharp, B flat, and, where possible, C" and another F key, and know how to use these keys properly not only on the notes for which they are named, and not only to make those notes sound brighter, but also on the notes that have a strong influence on the pure intonation, which is actually their greatest advantage, you will be able to play cleanly in all keys, but it is difficult. Therefore it is laughable if someone has these keys put on a flute when he has no accurate awareness of them, or if he has not the slightest knowledge of them, and thus cannot use them and can never know how to use them properly, but rather simply has them put on so the onlooker will think he plays more skillfully than others, although more often such players are average players with a wooden sound, and are therefore not mindful of the keys. How do these players expect to get along with so many keys when they cannot even find the D sharp key, whose use is so much easier, and which is so

important to pure intonation? To such people I give my well-meant advice (with your permission) first to learn the proper ratio of the intervals, and to learn to play cleanly on a well-tuned flute with E flat and D sharp keys before they have more keys put on their flutes without knowing where they actually are and how they must be used. Whole pieces are not generally set in the difficult and uncommon keys, but you must be familiar with them nonetheless, and know how to handle them, because they do appear. The most difficult of the keys are E flat minor, E major, F minor, F sharp major and minor, G flat major and minor, G sharp major and minor, A flat major and minor, B flat minor, B major, and C sharp major and minor. The rest are accepted and usable as complete keys in which whole pieces are set, although clean playing in most of them is still a rarity. I have said you must be familiar with these keys, and know how to finger their intervals correctly, for it is not all the same, although many believe a note with a flat and a note with a sharp are played in the same way. For example, if E flat and D sharp, F and E sharp, F sharp and G flat, G sharp and A flat, B flat and A sharp, or C sharp and D flat are fingered the same, you would certainly not be able to produce a single pure scale, and if you finger them correctly, but the flute has not been properly voiced, you will also not be able to play a pure scale. From this you can see how many difficulties the construction of the flute



is subject to, and how difficult clean playing is on this instrument. Thus all tonalities are usable on a well-tuned flute. If the flute has several correctly-tuned keys, it is even better, but the builder and the player must have a good ear for intonation. Since most of these tonalities are usable not as whole scales, but only for purposes of modulation, we will examine now those which are usable for whole pieces--D major and minor, E flat major, E major and minor, F major and minor, G major and minor, A major and minor, B flat major, B minor, and C major and minor. Because the keys of E major and F minor are occasionally, although seldom, used for whole pieces, I did not want to omit them, although they belong to the first category. The rest are the most usable on account of their ease in handling, although some are not usable overall because of their uneven intonation, especially in the lower octave where so many dull and faint tones stand next to the bright ones; these are used for concertos or other pieces with a strong accompaniment. For these purposes, when everything must be clear and understandable, you must choose a key that has clear and bright tones in its scale, or otherwise you will not hear them all, and the good performance and clarity will be completely lost. If you try to make the faint tones in such an uneven scale stronger and brighter by blowing harder to help the continuity, they will all become too high because they respond so easily, and they will not

become brighter, and now a second malady, namely impure intonation, will be created. Thus the keys which have clearer and often brighter tones in their scales are the most proper to those pieces which are accompanied by several instruments, and the others are more proper to those pieces which have a smaller accompaniment, such as quintets, quartets, trios, and duets, but not for two flutes, and especially solos. There, one can certainly play to more advantage, and can show, if he wishes, that he is familiar with these tonalities on his instrument, than by playing a concerto. If you want to play full-voiced pieces in these keys on the flute, the player must also be the composer, so that he can arrange the accompaniment such that the main voice is not hidden or suppressed by it. I believe, however, that even if you observe all of this carefully, no particularly good effect can be made with a concerto set in one of these keys for the reasons mentioned above, especially on common flutes where the intonation is particularly poor in these tonalities. At least I have never heard clean playing. Usually those who play in these keys do not have the intention of choosing them on account of the good things, but rather only to show that they can play in these keys. The effect, however, is also like that. What I have said here should not serve for those who do not like to study as a pretext that they do not have to learn to play in these keys at all. When it is necessary, you must be able to play in these keys as well as the others. It is best for those



players to stick to easier pieces where the player can clearly hear, and can observe clean playing better, for it is not enough just to have control over the correct fingering; you cannot play cleanly if your hearing is not attuned. Although some believe that if you only finger the flute correctly, everything is done, but it is not so. On a well-tuned flute, [fingering] does a lot, to be sure, but not everything. The well-trained ear must constantly regulate the proper weakening or strengthening of the wind, or everything will be impure. If it just depended on correct fingering, clean playing on the flute would not be so difficult, and you would be able to play as cleanly with twenty-four flutes together as with as many violins, but just try it and you will learn; often two flutes will not be in tune, alone or with the rest, not to mention so many. Do not believe it is not possible--it is possible, but you seldom find it.

36.

This now has been what long experience has taught me. I do not flatter myself that I have set everything right, or completely exhausted this material, but I do think I have said the greater part and the most important things here. Although others have said different things, I do not think with correct judgment--the many new added advantages, and an arrangement suitable to all situations, to mention a few. However, the truth remains the truth, no matter who says it

when. Should you not always agree with my opinion, and want to say something contrary, I ask you to do so with modesty, for bitterness accomplishes nothing. I may have erred, although I believe I have based everything on fundamentals, but he who disagrees with my opinion can also err. Contrary fundamentals presented agreeably can illustrate doubtful places, but I will not answer an immature and untimely accuser. Finally, I ask my readers to receive this, my well-meant and toilsome work, which was not finished in one, or even in two years, kindly. Whether I will publish another treatise concerning the construction of flutes with several keys and especially my newest discovery, its advantage, usefulness, and proper application, will depend on the reception of this work. Herewith, I present my respects to good memory.

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