JOHANN CRÜGER AS A MUSIC THEORIST:
A TRANSLATION AND CRITICAL
COMMENTARY OF HIS
SYNOPSIS MUSICA of 1630

A Thesis
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for the Degree Master of Arts

by
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INTRODUCTION

The prime objective of this thesis is to provide a complete English translation of Johann Crüger's most significant theoretical work, the Synopsis Musica of 1630. Reliable and scholarly literary sources concerning treatises available in English translation reveal that this particular work by Crüger has not been previously translated into English or any other language. My second objective is to provide a critical commentary and comparative examination of Crüger's theoretical writings of 1625, 1630, and 1654.
CHAPTER I

BIOGRAPHY OF JOHANN CRÜGER

The date and place of birth of Johann Crüger are consistently given, in biographical sources, as April 9, 1598 in Grosse-Breesen near Guben in Brandenburg (Prussia). These sources, with the exception of one, give Crüger's date of death as February 23, 1662. The exception occurs in the article on Crüger by Walter Blankenburg in Die Musik in Geschichte und Gegenwart, where the month and the day remain the same, but the year is 1663. Later in this article where further mention is made of Crüger's death and interment, the date is again given as 1663.

Crüger was the son of a well-to-do innkeeper, George Crüger, and a minister's daughter, Ulrike Kolheim.

Until he was fifteen years of age, he attended school in Guben. Following this, he travelled about for several years.

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1 The problem concerning Crüger's death date may result from an adjustment in the Gregorian Calendar which occurred in Great Britain in 1751. When this adjustment was made, the commencement of the new year was changed from March 25 to January 1. This enactment was carried out as early as 1600 in Scotland. It is also probable that this change was observed in some parts of Germany at an early date, for the Roman Catholic states of Germany adopted the Gregorian Calendar in 1583.

years as a wandering student travelling first to Sorau and from there journeying to Breslau where he spent a brief period of time. Then Crüger proceeded to Olmütz (Moravia) where he attended a Jesuit college and completed his studies "in a brilliant manner." After his basic studies in the sciences, he went to Regensburg (Ratisbon). There he studied music for an entire year as a pupil of Paul Homberger, who had received his fundamental training in Italy with Giovanni Gabrieli. Following this period of study in Regensburg, Crüger travelled through Austria to Hungary where he lived sometime at Pressburg (Bratislava). Then he proceeded across Moravia and Bohemia to Freiburg (Saxony) and from there to Berlin in 1615.

In Berlin Crüger obtained his first position around 1616 at the court of the governmental official, Christoph von Blumenthal, and became the private tutor in the family of this personage. With the attainment of this position, Crüger ceased being a wandering student. However, during

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4Ibid.

5Homberger is said to have lived from 1560 to 1634. He became a protestant cantor in Regensburg on June 11, 1601. See: Johann Mattheson, Grundlage einer Ehren-pforte (Hamburg, 1740), p. 119.

6Blankenburg, II, 1800.
his residence in Berlin, he resolved to devote himself to the study of theology.

Hence, in 1620, Crüger went to the University of Wittenberg to take courses from the faculty of theology. It is stated that Crüger lived a miserable and burdensome life there, the reasons for this not being given. This assertion is, however, probably very correct, for Crüger was then twenty-two years of age and, in all probability, had established little or no financial stability since he had spent the major part of his life, up to this time, as a wandering student. Also, Crüger's decision to study theology at Wittenberg reveals that he was already concerned with religious and social problems. Apparently, Crüger, despite an onerous existence there, was not completely overcome with anxiety, for it is stated he worked and assisted as a good bass singer at the cathedral chapel. After two years at Wittenberg, Crüger returned to Berlin.

After his return to Berlin, his reputation as a composer increased greatly, following the publication of the first part of his *Meditationum Musicarum* in 1622. In this same year Crüger was appointed to the position of cantor of the Lutheran church of St. Nicholas by the Magistrate of Berlin. Besides holding this position, he was also occupied

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in teaching at the Gymnasium and the Grauen Kloster (an ancient monastery) in Berlin.

Crüger filled the office of cantor for forty years until the time of his death. According to Dietrich Saße, this profession "fällt die höchste Blüte des Schul- und Kirchengesanges in Berlin zwischen Reformation und Aufklärung zusammen." During these years as cantor, Crüger certainly displayed a rare versatility as a performer, theorist, and teacher.

In 1625 Crüger's first theoretical work, Praecepta Musicae Practicae figuralis, was published in Berlin.

In 1628 he married the widow of Councilman Aschenbrunner, Marie Beling, the daughter of a Bernauer burgomaster. She died in 1636. In the following year Crüger remarried, his second wife being Elisabeth Schmidt, the daughter of an innkeeper. From these marriages Crüger had nineteen children, five by his first wife, fourteen by his second. Most of them, however, died early. One of his daughters married the electoral court painter, Michael Conrad Hirt, who painted the portrait of Crüger engraved by Busch. The picture hung in the Church of St. Nicholas

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8 Blankenburg, II, 1800. ([. . . "brings together the highest quality of the school and church melodies between the Reformation and Enlightenment."])

9 Févis, II, 399.
until 1944, but was removed before the dismantling of the building.\textsuperscript{10}

During these thirty years, the hardship and severity which Crüger encountered in his personal life often affected him adversely and sometimes caused him deep depression. As was previously mentioned, Crüger was seemingly concerned with religious and social problems very early in life, and by this time his interests in these issues had most likely greatly increased. Thus he was probably keenly aware of the weakening effect which the Thirty Years' War (1618-48) was having on the musical culture established in the sixteenth century. Growing social and religious unrest undoubtedly caused the German cantor much anxiety. This is disclosed by his political involvement which will be discussed subsequently. Furthermore, the death of his first wife and the early deaths of most of his children must have certainly brought him great sadness.

Between 1631 and 1640, he apparently had no publications.\textsuperscript{11} Then in 1640 a new creative power and the old appetite for work was revived.

Though Crüger was a Lutheran cantor he concerned himself with the world and was not content to work within the strict, confining boundaries of his profession. Thus he

\textsuperscript{10} Blankenburg, II, 1802-1803

\textsuperscript{11} Ibid.
proposed a plan which he thought might bring an end to the Thirty Years' War and offered it to the electoral court. In 1647 the Great Elector Friedrich Wilhelm von Brandenburg called for an emphatic mediation policy between the Lutherans and the Calvinists, members of the Reformed Church. This was to be handled through the Lord High Chamberlain Konrad von Burgstorf and the purpose was to reach an arrangement with Crüger, but this did not materialize for unknown reasons. This evidence indicates Crüger's involvement, though unsuccessful, with the political problems of his time.

In 1651 his *Recreationes musicae, das ist neun poetische Amorösen*, containing thirty-three pieces, was published in Berlin.

In 1652, in the commission of the Elector, a new transaction was taken by the Chancellor Otto von Schwerin towards the appointment of Crüger as a cathedral composer in Cölln. Though the Elector of Brandenburg wanted to make Crüger the head chapel master of the Holy Trinity Church, the appointment was not achieved, for the Hofpartei (district church officials) prevented it.

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13 Cölln was located in the palace confines on Spree Island and is referred to as the district on the left bank of the Spree, while the Church of St. Nicholas of Berlin belongs to the old city on the right bank of the Spree. This is not to be confused with Köln (Cologne), Germany. See: Blankenburg, II, 1801.

14 Eitner, III, 119.
Crüger still remained as cantor at the Church of St. Nicholas and, nevertheless, stood by the great elector and held him in highest esteem. In 1653 he produced another songbook entitled *D. M. Luthers und anderer vornehmen geistreichen und gelehrteten Männer geistliche Lieder und Ps. auff sonderbaren Ihrer Churfürstl. Durchlaucht zu Brandenburg . . . zur Erweckung unserer Andacht bey frommen Herzen Zusammengetragen . . .,* which was published by Christoph Runge at the suggestion of Electoress Luis Henriette. Then in 1657-1658, Crüger presented to the commission of the Great Elector his *Psalmodia sacra*, an edition of the entire Lobwasser Psalms. During these years of tribulation for the Lutheran confessional, Crüger was clearly not dissuaded from his confessional lineage.¹⁵

The last years of Crüger's life became very significant because of his collaboration with Paul Gerhardt, who was deacon at the Church of St. Nicholas from 1657 to 1666. Until 1653 he was the sole composer of Johann Franck's *Lieder*. Though some of the melodies are borrowed from Goudimel's psalm melodies, the original melodies which Crüger composed to the verses of these men support Riemann's estimate of him as "bedeutendsten Melodischöpfer der evangelischen Kirche nach Luther." (Christhard [Christian

¹⁵*Ibid.*, II, 1802.]
Reinhard] Mahrenholz.)\textsuperscript{16}

In 1643 Crüger had already resided in Berlin for a few years as a private tutor. It was during this time that his creative poetical power was at its peak and his abilities as a composer and an editor began coming together. Furthermore, after his musical experience and compositional work with Franck, Hermann, and Gerhardt, Crüger became an important forerunner of the subjective Erbauungsliedes (foundational, devotional song) around the middle of the seventeenth century.\textsuperscript{17} Much of his fame rests on the composition of many fine chorales such as Jesu, meine Freude; Jesu, meine Zuversicht; Nun danket alle Gott; and others. Many of these chorales were originally published in the collection Praxis pietatis melica (Berlin, 1644; reprinted in forty-five editions before 1736).\textsuperscript{18}

Crüger's principal theoretical works comprise two groups, the first being the more elementary studies which are designed for various stages of educational training, and the second being the two editions (1630 and 1654) of the Synopsis Musica which are somewhat different but have

\textsuperscript{16}Hugo Riemann, Riemann Musik Lexicon, ed. Willibald Gurlitt (12th ed., Mainz: B. Schott's Söhne, 1959), p. 353. (\ldots "the most outstanding composer of melodies of the evangelical church after Luther.")

\textsuperscript{17}Blankenburg, II, 1802.

greater value as early examples of complete composition textbooks. The music theorists who influenced Crüger's theoretical thought and whose works he supported will be discussed later in the commentary, along with his own theoretical principles.

Though Crüger's death was mourned only by a small circle of friends, he would have certainly been glad to know that far off, he had a great reputation. Blankenburg states that he was probably buried at the Church of St. Nicholas, whereas Fétis definitely says that Crüger's mortal remains were placed in a tomb at the Church of St. Nicholas on March 2.

An extensive and comprehensive listing of Johann Crüger's theoretical and practical works may be found in the second volume of Die Musik in Geschichte und Gegenwart. Another fairly good listing, though not complete, is located in Band 3 of the Biographisch-Bibliographisches Quellen-Lexikon der Musiker und Musikgelehrten by Robert Eitner.

The Catalogue of Printed Music Published between 1487 and 1800 and The British Union Catalogue of Early Music Printed before the Year 1801 give identical listings of the works of Crüger found in the British Museum in London with one exception. The Catalogue of Printed Music between 1487 and 1800 includes the Synopsis Musica of 1630 and The British Union Catalogue does not. The works listed are as follows.
Geistliche Kirchenmelodien. Published by Daniel Reichels; printed by Timotheo Ritzschen, 1649. 4°

Königliche Harff des . . . Sängern Fürsten Davids. Schaffhausen, 1663 (1662). 8°

Des Königs . . . Davids Geistreiche Psalmen. Salfeldischer Wittwe, Berlin, 1700. 8°

Laudes Dei Vespertinae. Published by Martin Gutho and Christoph Runge, Berlin, 1645. 4°

Meditationum Musicarum Paradisus Secundus. Published by Martin Gutho and Christoph Runge, Berlin, 1626. 4° & fol.


Praxis Pietatis Melica. Balthasar Christoph Wusts. Franckfurt am Main, 1662. 12°


Praxis Pietatis Melica. Printed and published by David Salfelds Sel. Wittwe. Berlin, 1690. 4°

Praxis Pietatis Melica. Published and printed by David Salfelds Sel. Wittwe. Berlin, 1690. 8°

Psalmodia Sacra. Christoph Runge. Berlin, 1658, 57. 8°

Johann Crügers Und Peter Sohrens Ubung der Gottseligkeit in geistlehr--und trostreichen Gesängen . . . Belthasar Christoph Wusts. Franckfurt am Mayn, 1700. 8°
Synopsis Musicae continens Rationem Constituendi & Componendi

Melos Harmonicum Conscripta, varijae exemplis
illustrata. Berlin, 1630. 4°
[with the autographs of Dr. Pepusch and Sir John Hawkins.]
CHAPTER II

THE SYNOPSIS MUSICA OF 1630 IN ENGLISH TRANSLATION

Synopsis Musica
Continens
Rationem Constituendi Componendi Melos Harmonicum,
Conscripta verisq[ue] exemplis illustrata
a
Johanne Crugero Directore
Musico in Ecclesia Cathedra
q uae est Berolini
Cum gratia et Privilegio
Sumtibus Johannis Kalle Bibl.
Anno 1630

Musical Synopsis
Containing
The Principles for Establishing
and Composing Harmonic Melody
Written and Illustrated by
Various Examples
by
Johann Crüger, Music Director
at the Ecclesiastical Cathedral
of Saint Nicholas
which is at Berlin

With Esteem and Special Privilege
At the Expense of Johann Kalle, Book-seller
1630

To Men
the most distinguished, the most observant,
and indeed in the practice of political affairs,
the most eminent and experienced

To Master George Haan--the most praise-
worthy secretary of the most serene
Elector of Brandenburg.
To Master Joachim Schultzen--the most serene Elector of Brandenburg by his more distinguished letters.

To Master Tilemann Essenbrucher

To Master Christian Weiler

To Master Petrus Engel
Partly of Berlin, partly of the Colonial Republic with its distinguished citizens and its most unprejudiced merchants.

To Master Hermann Langen--the most merituous Pro-Registrar of the most serene Elector of Brandenburg.

To Divine Music and to the undisputedly first patrons of the cultivation of the same,
To the perpetually honored Maecenates with due respect.

Art does not have a hater, unless an ignorant man, Distinguished and Respected Men, when it is purified by the universal tongue of Latin. The detrimental state of ignorance is most common among the greatest part of mankind. One in how many is there who with due appraisal considers matters unknown to him as worthy. On the contrary he occurs most frequently, who seizes established matters beyond his comprehension with the raging teeth of Momus, or if he is milder, he greets them with the tongue of Democritus. But

1Maecenas is an Etruscan name. It also refers to C. Cilnius, a Roman knight, the friend of Augustus, and the patron of Horace and Vergil.

2Momus was the Greek god of criticism and sarcasm.

3Democritus (c. 460-370 B.C.) was a famous philosopher of Abdera and originator of the atomic theory.
because the Triad of the higher Faculties and the encyclo-
pedia of very noble Philosophy are not useful for making a
millstone for grain, grievously and lamentably he calls them
to witness as not to be reverenced by shrewder men. With
the golden crown of knowledge, to the very perverse judgment
of the world, Music is dirge-like and has been rejected as
more vile than seaweed among her sisters just as she has
been reckoned more native in the highest benefit by the
theoretician than by nearsighted mankind. But whatever the
case, sound simply does not make music, but harmonic number
with variations is sound which ascends to such a height by
the felicity of the talents of the present marvelous age so
that it has nothing, which may be lost, unless, with the
ripest flowers, idleness and briefly a fall, which those who
are long-eared, but now with the Midas\(^4\)-like ears of an ass,
think.

I have appropriately made a list of the six names on
the frontispiece of my excellent preface so that I might
especially address you first, most Distinguished and Respected
Men, Master George Haan and Master Joachim Schultzen, always
to be honored patrons of divine music and its care. You
have given not only a love of music but also a heavenly

\(^4\)Midas was a king of Phrygia, who received from
Bacchus the gift of the golden touch. He also judged a
musical contest between Apollo and Pan and decided in favor
of Pan. Then Apollo punished him by changing his ears into
those of an ass.
defense of it in human affairs. You, Schultzen, have paid reverence not only to its access but also its inmost shrine with angelic knowledge which you would not have found accessible except by innate intellect. Nor do you stand idly by, but if the affair demands, you have learned to add your vocal and instrumental variations.

You, most celebrated Triad of Businessmen, Essenbrucker, Weiler, and Engel, I honor deservedly in my dedication, for you are not in the number of dimsighted men who in contempt of music use their rapid tongues for injuries (I do not flatter eyes reading this!) but in comparison to your fellow citizens you venerate the divine gift and cherish it because of its pleasantness. To you and those patrons designated easily in the first order of clients, this heavenly gift appears sacred.

What a love musicians have shown today and you, most Eminent, Hermann Langen, have proved this sufficiently while you made an effort against the hinderer, concerned with the business of the courts, who advised a neglect of music and often you divide the hours with harmonic exercise so that you became accustomed to this, your active vocation.

Moved and advised by your affection I did not doubt what patron I should choose for my synopsis, it chose you and hoped I would inscribe you. I have yielded to the silent petition and I offer to you with my heart, most excellent of Men, this synopsis for the purpose of pleasantly
making available a written manual of skills. Because it may
offend the innumerable ears of Midas, I beg that you con-
sider it worthy for your patronage and, moreover, allow it
to be the container of your musical equipment if not a part
of your equipment. Receive, therefore, most Eminent Patrons,
this little gift and the study of the man preparing it, who
will allow nothing to be omitted and who, in the first
place, thinks highly about you by name and speaks kindly
about you. He desires most promptly to be deserving. Thus
may the great Saviour of mortals preserve us! Berlin,
September 8, 1629.

Hail and Farewell

Most Respectfully,

Johann Crüger

The Sacred Spirit of Divine Music
is thus contained in the
Sacred Pages

Genesis 4:21. . . . Jubal: he was the father of
them that play upon the harp and the organs.

Exodus 15:1,2 and 20,21. Then Moses and the children
of Israel sung this canticle to the Lord: and said: Let us
sing to the Lord, etc. And Mary . . . took a timbrel, etc.

Numbers 10:3.5 And when thou shalt sound the trump-
pets, all the multitude shall gather unto thee to the door

5In the original, this scriptural passage is errone-
ously cited as verse 13.
of the tabernacle of the covenant.

Deuteronomy 32:44. So Moses came and spoke all the words of this canticle in the ears of the people, he, and Josue, the son of Nun.

Josue 6:20. So all the people making a shout, and the trumpets sounding, when the voice and the sound thundered in the ears of the multitude, the walls forthwith fell down.

Judges 5:1. In that day Debbora and Barac son of Abinoem sung, etc.

I Samuel 16:23. So whencesoever, the evil spirit from the Lord was upon Saul, that David took his harp, and played with his hand: so Saul was refreshed, and was better, and the evil spirit departed from him.

II Samuel 6:5. But David and all of Israel played before the Lord on all manner of instruments made of wood, on harps and lutes, and timbrels, and cornets, and cymbals.

II Kings 3:15. But now bring me hither a minstrel. And when the minstrel played, the hand of the Lord came upon him.

I Paralipomenon 23:5. Moreover four thousand were porters: and as many singers singing to the Lord with the instruments, which he had made to sing with.

Judith 16:1,2. Then Judith sung this canticle to the Lord, saying: Begin ye to the Lord with timbrels, sing ye to the Lord with cymbals, tune unto him a new psalm,
extol, etc.

David's Psalm 150. Solomon's Canticle of Canticles.

Ecclesiasticus 32:5,6,7,8. To speak the first word with the careful knowledge, and hinder not music. Where there is no hearing, pour not out words, and be not lifted up out of season with thy wisdom. A concert of music in a banquet of wine is as a carbuncle set in gold. As a signet of an emerald in a work of gold: so is the melody of music with pleasant and moderate wine.

Ecclesiasticus 39:20. Magnify his name, and give glory to him with the voice of your lips, and with the canticles of your mouths, and with harps . . .

Ecclesiasticus 44:5. Such as by their skill sought out musical tunes, and published canticles of the scriptures.

Daniel 3:15. Now therefore if you be ready at what hour soever you shall hear the sound of the trumpet, flute, harp, sackbut, and psaltery, and symphony, and of all kinds of music, prostrate yourselves, and adore the statue which I have made: but if you do not adore, you shall be cast the same hour into the furnace of burning fire . . .

Matthew 26:30. And after reciting a hymn, etc.

Luke 1:46. And Mary said, My soul magnifies the Lord,

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6 In the original, this passage is wrongly numbered as verse 23.

7 In the original, this verse is misnumbered and appears as 51.
etc.

Luke 2:13. And suddenly there was with the angel a multitude of the heavenly host praising God, and saying, Glory, etc.

Ephesians 5:18,19. And do not be drunk with wine, for in that is debauchery; but be filled with the Spirit, speaking to one another in psalms and hymns and spiritual songs, singing and making melody, etc.

Colossians 3:16. Let the word of Christ dwell in you abundantly: in all wisdom teach and admonish one another by psalms, hymns and spiritual songs, singing in your hearts to God by his grace.

Apocalypse 5:9. And they sing a new canticle, saying, etc.

Apocalypse 14:2,3. And I heard a voice from heaven like a voice of many waters, and like a voice of loud thunder; and the voice that I heard was as of harpers playing on their harps. And they were singing as it were a new song before the throne, etc.

Master Martin Luther in Colloquy

One of the most beautiful and most magnificent gifts of God is music, to which Satan is very hostile, so that one dispels much temptation and evil thoughts; the devil does not trust in it.

I have always loved music. He who knows this art,
which is a good kind, is adept in all.

Furthermore he says: music is a beautiful, glorious gift of God and close to theology, I myself do not want the music of mine to be inferior and to remit whatever there is of greatness. The youth should always be restrained in this art, then they make refined, dexterous, and gentle people.

Music is one of the best arts, the notes make the text alive. They drive out the spirit of sadness, as we observe with King Saul.

In the year 1538 on December 17, when Master Martin Luther had several musicians for guests, who sang beautiful, lovely motets and pieces, he spoke with astonishment: Because of us, God has poured out here in this life such a noble gift, from which pure sweetness surely arises, and has given us, whatever should take place in one eternal life, that everything will become most perfect and most joyous in all. Here however is only the first matter, the beginning.

He once told a harpist to sing: Hither he willingly sings to me a little song, just as David sang it. When the people who are yet so noble escape from the suffering of death by music, thus David would be very surprised. At no time do they come nobler than at present. Therefore we have sung on the harp as David shall have sung, for example, My soul doth magnify the Lord, on Tone 8. At that time, David had a simple instrument of ten strings.

He who scorns music (spoke Master Martin Luther) as
if because of every difficulty, with him I am not pleased.
To him, music is a gift and present of God, not a gift of
man. Thus it also dispels the devil and makes the people
joyful. They thereby forget all anger, unchastity, arro-
gance, and other vice. I give music the highest honor and
the next place to theology. And one sees to what extent
David and all of them have employed their holy, godly
thoughts in verse, rhyme, and song. Thus in the time of
peace music reigns.

For the Musical Synopsis of
Master Johann Crüger,
A Most Distinguished and Learned Man

Elegidion

If everything is to be measured as appropriate by time,
Let this present book, Crüger, be
Investigated and let it deserve garlands.
It teaches how a low and shrill voice
Indicating the diverse position of a note may become
Harmonious.
What mode adorns something happy, what mode
Gives mournful color,
What is not fitted to sacred things, what is
More fitted to sacred things.
But the fatherland harassed at this time by
Hostile war teaches violence and all
Wickedness will come into being.
Because the rash order produces
Armed strife alternating dramas of love,
Robbery and death.
So that no one may disturb his mind with
Biting cares,
Let the low and high voice exhibit some sound
Nor let it undertake to draw out sad rhythms.
Anxiety teaches the fierce Lydian rhythm
While art is silent.
Therefore those whom the fierce state of affairs
Disturbs, ask the reason for your Synopsis, Crüger.
I order you to write by the rules of your
Art, as it pleases you, whatever a defense
Requires to be written.
Whereby you may teach the nation
Through your art to be calm,
Since no one is able to do so with equal ability.
Nor perhaps will it have been in vain: to
Have played Lycurgus.⁸
And thus a defense will be written
For harmonic sounds.
So that meditation might quench the
Anger of the soldier and the enemy
Might thus be able to endure his conqueror.
The general might strip off his sword.
He has become accustomed to pay homage
To a new muse;
About to point out that he loves the
Favor of art,
Nor is the melody to be forgotten on a
Darkened weapon.
Therefore if everything is to be measured
As appropriate by time,
Altogether this book, Crüger, will deserve
Garlands.

Johann George Viola, Ulmas,
A most Noble Caesarean Poet

To a Most Eminent and Pleasing Musician,
Master Johann Crüger, A Colleague and
Friend to be Honored in Song

Schediasma

Music, sent to the ends of the earth, has
Constructed a path to august honors for many men.
It has revealed love to many and disclosed
An eminent place among the honored.
Unwilling to appear unpleasing to its supporters.
At no time has it decreed that their names will
Be abolished.

These things, Crüger, arouse your strength and
Inspire you, by equally stimulating your zeal
From this such love and ardor comes to you,
And to you Music alone is pleasing before all things.
This present work testifies to your vigil and labor
Undertaken up to this point, not without your praise.

⁸Lycurgus was a great Spartan lawgiver who lived about the beginning of the ninth century B. C.
You embellish Music and it will embellish you. 
Being full of the true style of witnesses of Christianity 
You honor Music and it will honor you. 
Always weighing out single things with an equal lance. 
You will be put to the test briefly, for the 
Violent offspring of Momus will come into being 
Intending to create traps for you. 
It will breathe out anger, death and threatening words. 
But if you are intellectually sharp, care 
Nothing for this fierce evil and seek what is good. 
You will destroy the offspring courteously 
Thus you will be secure and fear less 
The weapons of Momus, his envy and his 
Legions. 
Now hasten to run on the foot with 
Which you began and persevere in 
Loving your musical mistress. 
Thus your praise will increase and 
Your name will run through the world 
It will remain in the stars as long 
As the sky glows. 
0 God, grant to Grüber to live long 
Years 
And you, Vacuna9, grant him much 
Leisure for his pious pursuits.

Made in sincere good will, 
Erdmannus Giessseus, School of Law, 
Gymnasion, College of Berlin.

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9Vacuna was a goddess of the country, especially among the Sabines.
Chapter I

Concerning the Definition of Music and the Established Harmonic Principles

Music (spoken by the muses) is the science of skillfully and discreetly uniting and shaping harmonic intervals into an effective agreement of diverse sounds, and for the sake of moving man to the glory of God.

The first principles by whose agreement or harmony a song is arranged and composed, are either external or internal.

The external are the boundaries and determinants.
The internal are the matter and form by which the essence of harmonic song is resolved.

Concerning the Boundary of Harmonic Song

The boundary of harmonic song (which should be esteemed more but is cared for less by many today) and indeed of intermediate pre-eminence, is a movement of the universe turning to the worth of the subject quickly, and turning away from its imperfection.

The final end of all harmony is our originator, the thrice hoped for fountainhead, the great God, to whose praise and majesty all things yield entirely.
Harmonic song is (as Lippius said) universally most beneficial in the life of man. It is loyalty to devotion: knowledge to wisdom: honest, solitary, private, and public harmonic song is useful for moderation of the spirit: sound for temperance of the body: pleasant for arousing delight by its own power, so that alone it is the most fitting gift of God, greater and more eminent than every prophecy of mortal men: for which we mortals, while many men unthankful for music abuse it, should give everlasting thanks in everything to the most pleasing God, the same melodies will be celebrated throughout all centuries in secula seculorum, Amen.

Concerning the Effectiveness of Harmonic Song

The effective cause, and indeed the beginning of everything all together close to the weight, number, proportion, and harmony of geometry and music is the wise, beloved master-builder, Jehovah.

The effective second cause, particular and more characteristically the mother of sound, is the form of the man of music, bringing into use that skill, perfecting, and excelling, who according to the rule of the science of music knows to fashion sweet harmony skillfully and wisely, to put it together and finally in the last phase in time and place, so that a succession being complete by its own principles is able to be deduced and modulated by men of music, either by
the human voice or a skillfully made instrument.

Concerning the Material

The material from which harmony is generated is sound. Sound is indeed the origin of all musical intervals, and of the entire harmony. It has the same relation to harmony, as unity has to number, time to greatness, movement to time. The number does not affect the rhythm, if not the unity does: nor does the greatness, if not the time does: nor the time, if not the movement. When the number is made from the renewed unity, then the magnitude is made from the fluctuation of time, and time is measured from the movement. Thus, neither the interval nor the harmony is effective unless the principle should lead from sound. This principle is revealed in the same sound from which the harmony is put together, in which manner, speech is governed by diction, diction by syllables, and syllables by letters, which are defined very little as a part of diction.

Sound is either simple and can most fittingly be called Monas music according to Lippius, or composite and indeed so and imperfect and can be called Dyas music or perfect and rightly so and can be called Trias music.
Chapter II

Concerning the Simple Sound
or Musical Monad
and Its Foundation

In respect to the simple, the sequence in which it comes should be carefully regarded:

1. The foundation
2. Duplicate names of sounds, certainly the keys and syllables, and the progression of these.
3. The figures, or signs of the sounds. The notes, of course, and the rests.
4. Measure or tactus, directing the value of notes and rests.
5. The musical intervals.

The Foundation of Sound

The foundation is the musical staff, employing lines and spaces, on which the sounds are affixed to their own signs and intervals. The musical staff, moreover, is either major and joined together by many lines and spaces, both lower and higher, through lines perpendicular dividing the distance of two tacti chiefly representing harmonic song put together in this manner:
Or minor and disjunct and simple in the manner of five lines and four spaces, not always fashioned by a distinctive division, and serving as a compressed means of drawing out notes and melody.
Chapter III
Concerning the Names of the Sounds

The names of the sounds are 1. letters or musical keys, and [2.] then syllables or vocables.

Concerning the Keys
The keys in music are the first seven letters of the alphabet, a b c d e f g, which are written diversely in reference to the lower and higher octaves, and thus they are chiefly distinguished from instrumental music.

\[\begin{align*}
4 & \quad \text{C} \\
3 & \quad \text{D} \\
2 & \quad \text{E} \\
1 & \quad \text{F} \\
\text{E} & \quad \text{G} \\
\text{C} & \quad \text{A} \\
\text{B} & \quad \text{B}
\end{align*}\]

From these seven letters, three of them, G f c, are called clefs, thus because they are placed at the beginning of the staff, they are expressly indicated in a certain form on this line:

\[\text{G} \quad \text{C}: \quad ||c\]

In a joined together staff, they are placed thus:
On a simple staff, they are placed variously in proportion to the depth and height of the melody, and indeed the G clef, which is the index of the higher sounds, is placed on the second line, sometimes also (chiefly in instrumental music) on the first.

The F clef, an index of the lower sounds, is placed on the third, fourth, and fifth lines.

The C clef, the middle one of the pitch signatures, fixes the middle sounds and is located on the first, second, third, and fourth lines, in this manner:

Note: The signatures are called clefs when they fall on the lines, and they are distant from themselves, in turn, by a fifth. But when they fall on spaces, they are the
octave of the signatures.

\[ \text{Octave} \]

The remaining \textit{Abode} are called the \underline{Intellec}tue because they are not expressly signified: but the foundation and arrangement of these is determined by the signified clef. Truly they are arranged after the signified clef either upwards or downwards. Upwards, this is, they ascend in a natural order to the highest part of the staff, by which in turn A b c d e f g follow in alphabetical order. Downwards, truly they are numbered in inverted order G f e d c b a.

\[ \text{G} \quad \text{f} \quad \text{e} \quad \text{d} \quad \text{c} \quad \text{b} \quad \text{a} \]

Otherwise, in respect to the key b, the figure will be written in a two-fold manner, either the rounded b: or the square b in this manner: \( b \underline{f} \) and it is foremost of all the remaining keys. For example. 1. A melody which serves a distinction is either \underline{mollis} or \underline{durus}. The rounded b written expressly at the beginning in the staff and placed near to the clef signature represents a \underline{mollis} melody. Omitting it in this place, the \underline{durus} results, in this manner:
2. This key alone points out the deduction and the progression of the six musical syllables (as is indicated in the following chapter). Therefore deservedly it should be considered the principal key of all the remaining keys, both the signatae and the Intellectae, seeing that all these be arranged and distributed in reference to it.

In addition, the altered keys, c♯, d♯, f♯, and g♯, are, for the most part, employed in instrumental music, when of course on the keys c d f g the sound is raised on account of the appropriate chromatic sign ♯.

Concerning the Syllables

There are musical syllables or vocables by which sounds are named, and as much in ascending order as descending order, the six syllables are expressed as follows: Ut, Re, Mi, Fa, Sol, La, of which Mi and Fa, likewise, are designated as the chief syllables because they are found chiefly on the
key b, on which only, at one time Mi, at another time Fa is most rightly sung.

These two syllables are the foundation of all music and they are the chief cause of good harmony, and likewise, the ancients said that Mi and Fa are *tota musica*. Guido Aretinus, the inventor of these two musical sounds, placed Mi and Fa in the middle, so that they are arranged in a more dignified place. And unless they are observed and distinguished well in singing, the grace of all harmony not only perishes but is finally altogether destroyed; most frequently it is customarily used less among the commonly practiced syllables.

In turn two things must be considered in musical syllables: the progression of the keys and the permutation of them.

The progression or deduction of these six musical syllables are through diverse keys, separate from each other, each of which has a progression of sounds that is able to be called correctly a hexachord, of which there are three kinds given: *durus*, *mollis*, and *permanens*.

The first two, the *mollis* of course and the *durus* (from which also the kinds of melodies are named) take their beginning in the principal key b, or through the syllable Fa, if the letter b has been expressly written at the beginning of the staff, and joined to the signified clef: or through the syllable Mi, if in its own place, it [b] has
been absent from the signified clef, by progressing from the nearest note to the next nearest upwards all the way to La: downwards all the way to Ut. This, because it clearly has Mi on the key $b$ is called the durus hexachord: the other because it has Fa on the $b$ is called the mollis.

**Hexachords**

![Hexachord Diagram]

The third hexachord, the permanens, of course, does not affect the chief note $b$, but the note immediately above. It does certainly pass through on the $C$ through the syllable Ut; and affecting the nearest below on $A$, it takes its beginning by retrograde order through the syllable La.

![Hexachord Diagram]
It is called, however, the permanens and servus because it remains on all the staves, and called from the primary keys by permutation on its own keys, it serves the durus as much as the mollis hexachord.

Since indeed the first syllables of any hexachord are not adequate for expressing sounds so much by ascending as descending, that is when the melody moves beyond La or Ut a mutation of syllables must be instituted through the unison; that is to ascending the servus hexachord or the permanens, because it remains the same perpetually in each melody; thus vice versa, when the syllables of the permanens hexachord are not adequate, some primary hexachord should be employed.

The mutation and conjunction of syllables through the unison comes about in an ascending melody through the syllable Ut on the three signified keys G, F, and C, and indeed.
On the melody \{\textit{durus on G} \} & C
\{\textit{mollis on F} \} & C

But the mutation in the descending melody comes about through the syllable La,

On the melody \{\textit{durus on E} \} & A
\{\textit{mollis on D} \} & A

And finally, what syllables the key may contain in itself, the melodic scale will disclose from both of the following:
Descending        Ascending
{ A La        Re
    \^[C Fa        Mi
    D Sol        Re
    E La        Mi
    F Fa        Ut
    G Sol        Ut

Descending        Ascending
{ A La        Mi
    B Fa
    C Sol        Ut
    D La        Re
    E Mi
    F Fa        Ut
    G Sol        Re

Note: In a durus melody where Mi has 4 and Fa has F, the syllables should not be changed, but in a mollis melody Fa has a $b\flat$ and Mi has an E.
Chapter IV

Concerning the Figures or Signs of the Sounds

Since sound is not able to be written on a chart or to be preserved by the human mind, it is necessary that it be represented by certain signs and figures.

These signs are notes and rests. The notes indicate the extent of the presence of determined sound and its position: the rests, the absence and freedom from use.

These are eight notes. The forms are fashioned as such:

\[
\begin{array}{cccccccc}
\text{Maxima} & \text{Longa} & \text{Brevis} & \text{Semibrevis} & \text{Minima} & \text{Semiminima} & \text{Fusa} & \text{Semifusa} \\
\end{array}
\]

This is the value of them:

Maxima \hspace{1cm} \{ \text{eight tacti} \\
Longa \hspace{1cm} \{ \text{four tacti} \\
Brevis \hspace{1cm} \{ \text{two tacti} \\
Semibrevis \hspace{1cm} \{ \text{one tactus} \\
Minima \hspace{1cm} \{ \text{one-half of a tactus} \\
Semiminima \hspace{1cm} \{ \text{one-fourth of a tactus} \\
Fusa \hspace{1cm} \{ \text{one-eighth of a tactus} \\
Semifusa \hspace{1cm} \{ \text{one-sixteenth of a tactus} \\

By musical instruments, especially by the organ, the value of the small notes is signified in this manner.
As far as the ligatures \textsuperscript{(connected notes)} are concerned, only the semibreve $\text{H}^2$ is kept in the music of today. Otherwise all the significant array of older notes must be removed and abolished from our script as it openly is in that of the Italians. It cannot be said how detrimentally the ancient musicians, truly amateurs within the preceding generation, defaced the script with intricate and unnecessary signs. Moreover, in place of those \textsuperscript{[signs]}, the sound of one \textsuperscript{[note]} must extend and be prolonged through many notes pleasingly. One small mark, that being the virgula, which our wiser musicians of today and the Italians employ, is also able to be used in notes of lesser value, such as the minimæ, semiminimæ, and fusæ.

\textsuperscript{1}This notation refers to the use of organ tablature.

\textsuperscript{2}Here Crüger is referring to two semibreves, not two notes in the time of one semibrevis.
The notes can also change in proportion, sometimes increasing, sometimes decreasing in value.

The increase in value is brought about by placing a small dot beside the note, and this increases the value of the preceding note by one-half. The placement of the small dot behind the brevis adds one tactus. The placement of the dot behind the semibrevis adds one-half tactus. And so it continues.

\[ \text{\textbf{Brevis}} \cdot \text{\textbf{Brevis}} \]

Notes are diminished in proportions, two kinds of which are in use in the present age, the \textit{tripla} and the \textit{sesquialtera}.

The \textit{tripla} proportion exists when a brevis with a semibrevis, or three semibreves, or six minimae, or others corresponding in value to these are fitted to one tactus.

The sign of this is a complete circle with a line to which the number three either alone or with the number two written under it is added in this manner:

\[ \text{\textbf{Brevis}} \cdot \text{\textbf{Brevis}} \cdot \text{\textbf{Brevis}} \]
It is the **sesquialtera** which measures either a semi-brevis with a minima, or three minimae, or six semiminimae, or others equivalent to these by one tactus.

The sign of this is a complete circle without a line to which likewise the number three either alone or with the number two written below it is added in this manner:

\[
\begin{array}{c}
\text{\textordfraq{3}{2}} \\
\text{\textordfraq{3}{2}}
\end{array}
\]

**Observations**

1. When two breves in **tripla** proportion or two semibreves in **sesquialtera** follow each other, the former is measured by a whole tactus because of the following note or pause of the same value.

\[
\begin{array}{c}
\text{\textordfraq{3}{2}} \\
\text{\textordfraq{3}{2}}
\end{array}
\]

The more recent musicians do not observe this, but they always write the small dot beside the brevis in **tripla** and beside the semibrevis in the **sesquialtera**.
2.

When three blackened breves follow each other mutually in *triple*, nothing is accomplished, but if all pressed together to two tacti in this manner, the middle tactus is separated in the middle.

3.

When a semibrevis precedes a brevis in *tripla* proportion in the depression of a tactus or the minima precedes the semibrevis in the *sesquialtera*, either both or only the last is blackened.

There is another kind of proportion in use but with the preceding proportions, it is scarcely the same, except that when it has the blackened notes and confers more movement, it is clear.
Hemiola
Major and Minor

Major hemiola is nothing else but tripla; the minor hemiola is nothing else but sesquialtera proportion.

\begin{align*}
\text{Major:} & \quad \begin{array}{c}
\cdots - \cdot - \cdot - \\
\cdot - \cdot - \cdot - \\
\end{array} \\
\text{Minor:} & \quad \begin{array}{c}
\cdots - \cdot - \cdot - \\
\cdot - \cdot - \cdot - \\
\end{array}
\end{align*}

The signs used for the hemiola are the same as for the tripla and sesquialtera, at least in this observation because often they are notated without any different marks, but by a darkness of the notes only.

Indeed it is permitted that musicians make the sesquialtera with this supposition, and that the blackened notes be abolished when they do this, and if they fashion anything of this kind, they are able to express it by one tripla. Moreover, I have not said that this is done incorrectly, but rather that a more correct distinction in the pleasures of song is obtained when they are used in certain kinds of songs. Clearly the tripla is retained in motets and concertos; the sesquialtera in madrigals, and especially the galliards, the courantes, the voltas, and other songs of this kind, in which there is an urgent need for a swifter beat. I think that truly the hemiolas are able to put to use where the sense of the words requires this, and where
the crowded insertion of varied signs seems to confuse and
confound a song.

So much for the notes.

Concerning the Pauses

The pauses designate the delay of silence for as many
notes as their values correspond, except for the maxima in
place of which two longae are placed: and the semifusa,
which has scarcely any use.

| Longa | Brevis | Semibrevis | Minima | Semiminima | Fusa |

In the sesquialtera proportion, the rests maintain
their values. In the triple, they really decrease.

Moreover, these are added with harmony.

1. The agreeableness of distinction. For speech, or
the musical text as it is spoken of in the following texts,
is established by use of periods, colons, and commas. How-
ever, all parts of the composition must not be represented
with equal magnitude and quantity of voices but certain
voices occasionally should be at rest, in order that the
text may be better understood, distinguished, and presented more sweetly to the ears of listeners.

2. The evenness of breathing. Since human breath is not infinite and not able to be held for an extended length of time, rests must be brought in at each convenient place. As respiration has been made and when their strength has been regained, those who are more prepared to sing may return to other things which must be expressed.

3. In the arrangement and form of the fugue, some voices are held back, until they are able to follow in a convenient place and in concessive steps.

Here it must also be noted that often agreeableness comes when total silence is applied to all voices in singing and, attracts the attention of many. This is especially true when there is a peculiar phrase or when some new and unusual matter occurs in the text. Likewise this happens if words have designated a succession.

It comes about 1. through a rest placed in separate voices; also there should be a rest at the end, but in a finished manner.

2. Through a semicircle with a center placed above the note in this manner: 

\[ \text{[Diagram of semicircle]} \]

3. Through a parallel line led through the whole staff.
This is also pertinent:

1. The sign of continuation is a custos or index, indicating the place of the first note in the following staff.

\[ \text{\includegraphics{image1}} \]

2. The sign at the end of a phrase points out a repetition.

\[ \text{\includegraphics{image2}} \]

3. In a fugue the beginning point for the following voice is designated by \( \text{\includegraphics{f}} \) and the same is used if there are others.
Chapter V

Concerning the Tactus

Tactus is a fixed measure of time and prolation, determining or dividing the quantity and size or value of the notes and rests.

It is also two-fold: equal or spondaic, and unequal or trochaic.

It is the spondaic which retains uniformity in depression and elevation, and the depression [down-beat] requires one minima, or others corresponding in value to it; in elevation [up-beat] it requires another.

\[
\begin{align*}
\text{In depression} & \quad \text{In elevation} \\
\text{\hspace{1cm} p} & \quad \text{\hspace{1cm} p} \\
\text{\hspace{1cm} \bullet \bullet \bullet} & \quad \text{\hspace{1cm} \bullet \bullet \bullet} \\
\text{\hspace{1cm} \bullet \bullet \bullet} & \quad \text{\hspace{1cm} \bullet \bullet \bullet} \\
\text{\hspace{1cm} \bullet \bullet \bullet} & \quad \text{\hspace{1cm} \bullet \bullet \bullet} \\
\text{\hspace{1cm} \bullet \bullet \bullet} & \quad \text{\hspace{1cm} \bullet \bullet \bullet} \\
\end{align*}
\]
The sign of this meter, behind the key signature, is a semicircle with a line, or without a line.

The semicircle with a line is employed in these works, which musicians call motets, and near to the style of Orlando de Lasso, they are abounding in breves and semibreves and demand a more rapid tactus.

\[ \text{\begin{tikzpicture}
\draw (0,0) circle (1cm);
\end{tikzpicture}} \]

The semicircle, in fact, without a line is employed in those works, which abound in semiminimae, fusae, and semifusae, and they require the progression of the tactus by a slower movement as do madrigals and especially concertos, etc.

\[ \text{\begin{tikzpicture}
\draw (0,0) circle (1cm);
\end{tikzpicture}} \]

As thus the middle between two extremes is retained, lest in those (such as motets), a slower progression might prepare a loathing in the ears of the listeners: or in another way, a swifter progression (such as concertos and madrigals) might lead them over a precipice just as the horses of the sun snatched away Phaeton, when in his chariot he dared to use no reins.
The trochaic tactus, which is employed in proportions, is unequal in elevation and depression. For example, in the *tripla* proportion, it counts the brevis like unto depressione and the semibrevis as elevations.

In the *sesquialtera*, in fact, the semibrevis is as depressione: the minima, in fact, counts as elevations.

The signs of the unequal tactus or trochaic are signs of proportion, about which it has just been spoken.
Chapter VI

Concerning the Intervals

The musical intervals, besides the unison, which is the foundation and root of all, are the second, the third, the fourth, the fifth, the sixth, the seventh, and the octave.

As all or one alone are either major or minor, as it appears from the definition of the semitone (especially Mi to Fa in contiguous voices) which chiefly should be observed here.

The second is the ascension or descension of a voice from any note whatsoever to the next nearest place.

The major second is called the tonus; the minor second, the semitonus.

It is the semitone which is named as the distance that falls between Mi and Fa, or in the nearest two neighboring notes immediately following it; it is called a major semitone, which is either natural or altered.

The natural characteristically and regularly falls between Mi and Fa in contiguous sounds and in successive tones, in this manner:
The altered is that which inappropriately falls among all the other sounds and is customarily indicated by that sign ‹ which musicians call the diesis.\textsuperscript{3}

Or in one key (that is, in one or on the same line, or in one or on the same space), the sign distinguished as the cross ‹ or the \(\frac{\text{\#}}{\text{\#}}\) quadrata or b rotunda is called the minor semitone.

The tonus is called the distance which falls between the sounds encompassing the nearest two semitones, one major and one minor.

\textsuperscript{3}The word diesis is Latin, but is derived from Greek.
There are four kinds in whatever hexachord you please: Ut-Re, Re-Mi, Fa-Sol, Sol-La.

The third is a leap from one line to the next; or from one space to the next.

The major, called the ditonus, consists of two tones. The kinds are: Ut Mi, Fa La.

The minor, called the semiditonus, consists of a tone and a semitone, whose kinds are: Re Fa, Mi Sol.

The fourth is an interval from one line to the second space: or from whatever space you please to the second line. It is called the diatessaron by the Greeks because it contains four pitches.
The major⁴ is called the tritone, because it consists of three tones. And it is the interval from Mi to Fa, or from Fa to Mi by a fourth.

The minor consists of two tones and a semitone. Such kinds in whatever scale you please are three, near to the positions of three semitones: Ut-Fa, Re-Sol, Mi-La.

The fifth is the leap of a voice from a line to the third line above or below, or from a space to the third space above or below. It is called the diapente by the Greeks because it contains five pitches.

The major⁵ consists of three tones and a semitone, of which in one hexachord there are only two kinds: Ut-Sol, Re-La. In fact, from the joining together of the hexachords, another two are certainly added to the kinds: Mi-Mi, Fa-Fa.

⁴Crüger refers to the augmented fourth and the perfect fourth as the major and minor fourths respectively.

⁵Crüger refers to the perfect fifth and the diminished fifth as the major and minor fifths respectively.
The minor is called the **semidispente** and is a leap from Mi to Fa by a fifth.

The sixth is an interval from a line to the third space above, or from a space to the third line above.

The major consists of a tone with a **dispente** and has only one kind in one hexachord, in fact, in joining the hexachords together, another two kinds result in this manner:

The minor consists of a semitone with a **dispente**, the three kinds of which come forth from the conjunction of two hexachords in this manner:
The seventh is an interval from a line to the fourth line or from a space to the fourth space, but it is less common.

The major consists of the ditonus and diapente, of which there are two kinds.⁶

![MIDI staff](image)

The minor consists of the semiditonus and diapente, of which there are four kinds.

![MIDI staff](image)

The octave, finally, is a leap from a certain key into an octave with a nature similar to itself. It contains a fifth and a fourth.

It is called the dispason by the Greeks (that is, through all voices and essential tones).

Indeed there are as many kinds as there are the seven pitches: for each pitch completes a whole octave similar to

---
⁶The phrase, "of which there are two kinds," is dropped from the text of the Synopsis Musica of 1654. This was probably done to preclude any misinterpretation of the statement. The corresponding phrase in the definition of the minor seventh is likewise omitted from the text of the 1654 treatise, probably for the same reason.
it in nature through the remaining intermediates, and beyond these seven pitches, it retreats to the original pitch. Hence the rule: the judgment is the same concerning the octave.

\[\begin{array}{cccccc}
\text{b} & \text{Mollis} & \text{f} & \text{g} & \text{a} & \text{b} \\
\text{ut} & \text{Re} & \text{Mi} & \text{Fa} & \text{Sol} & \text{La} & \text{Mi}
\end{array}\]

So much for the simple sound or the musical monad.

The compound sound follows, namely the dyas and trias music.
Chapter VII

Concerning the Compound Sounds
and in the Species of
Musical Diads

The compound sound results from the simple tones
(specifically the simple tones of monodic music) uniting
among themselves and in the highest degree of amplitude\(^7\)
produce either consonant harmony or dissonant harmony.

Consonant harmony arises from the unpleasant and
shrill\(^8\) sounds of corresponding amplitude combined in pro-
portion, and the unity among them is heard as pleasing.

Dissonant harmony arises from the unpleasant and
shrill sounds of disagreeing amplitude forced together in
proportion, and it is heard as annoying.

Moreover, a portion of the simple sounds, or monodic
music, is compound or imperfect and can be called Dyas music
according to Lippius, or perfect, and can be called Trias
music.

---

\(^7\) The word crassitudine is translated literally as
"thickness" or "density"; however, in the sense in which
Crüger uses the word, it is probably better translated as
either "amplitude" or "loudness."

\(^8\) Crüger uses the words gravibus and acutis which mean
"unpleasant" (or "heavy") and "sharp" (or "shrill") respec-
tively.
Concerning Diad Music

Diad music is put together from two sounds of different pitch position and indeed may be sounding consonant or harmonious from consonant sounds, and dissonant or inharmonious from dissonant sounds, each of which is either simple or compound.

The simple diad consonances are seven intervals, that is, simple harmony established by its proportions coming together, of which the two extremes of music are forced together promptly and at the same time the harmony is heard sweetly.

The first consonant diad is the octave.

2. The fifth

3. The fourth

The fourth is rejected by certain people from the number of consonances, but less correctly. For although through itself and though placed properly, it is not applied in composed harmony. Nevertheless, joined together with other intervals, it prepares consonance so that if it is joined to the fifth, it makes an octave: if joined to a
major third or minor third, it makes the major and minor sixth. However, there is nothing of many proportions which sounds in the intervals, that can be dissonant absolutely and by itself. It also appears in instrumental music in the testudine⁹, the viola da gamba and others, in which if the strings separated by an interval are tuned precisely close to the true proportions, no dissonance is heard, but both sounds come with sweetness to the ears of the listeners. By no means, therefore, is the fourth to be rejected from the number of consonances, but on account of the greatest use which it has in establishing harmony, if it is applied dexterously, it must be included for it may yield sweetly and perfectly to the remaining words in the measure.

4. The ditonus or major third

5. The semiditonus or minor third

6. The major sixth

⁹Crüger uses the word testudine which really has the meaning of "tortoise-shell" but may also be translated as "a curved string-instrument; lyre, cithara, etc."
7. The minor sixth

This is the order of perfection. Although simple consonance may be made perfect by its own gradation, yet in another respect, it exists either perfectly or imperfectly. Thus, just as an octave (composed unison) may be most perfect and chief just so by its own highest perfection, it may be able to sound in unison\(^\text{10}\) and simple unison is heard.

After this the fifth is able to resound with its most pleasing perfection by a firm and masculine ringing of sound.

Then the fourth is able to resound with a heavier ringing.

After this the major third in its sweet imperfection is able to sound more quickly, more lively, and more vividly.

Afterwards the minor third with its sweet imperfection is able to sound softer, milder, and more plaintive.

Finally the major sixth by its imperfection is able to sound loftier and higher.

And finally the minor sixth is able to sound weaker, softer, and more languid so that the various affects may be heard in its movement.

From these there are three prior consonances, the

\(^{10}\text{Here Crüger uses the word aequissonsare which means "to sound equally."}\)
octave, the fifth, and the fourth commonly called perfect (to which equalness or unison is joined, because nothing more consonant and perfect is available in sound, than that which, in looking back, is one of a kind and is contained in the rationale of quantity). 11

Afterwards, these four, the major third, the minor third, the major sixth, and the minor sixth are called imperfect because they produce ratios in which neither harmony nor hearing can be at rest, nor is there any further thing, which is more satisfactory, that is desirable.

The remaining intervals are simple dissonant diads, the simplicity of which is contained in disconsonant proportions, in which extreme sounds are forced together and at the same time are heard as annoying. It is of great importance, said Seth Calvisius, that dissonances be correctly recognized, not only that they may be avoided lest they accidently be mixed together just as harmonious intervals are mixed together with suitable intervals, but also that they may be employed in certain places where harmony is required. Then we may indeed be able to proceed more rightly

11It seems that Crüger is really saying that "one is not a number but the basis of numbers."
from interval to interval without a cleft. Next the har-
mony, if the sense of the text requires it, is made rough.
Thirdly, all harmony is varied and provided plentifully with
the same. For although harmony is most powerful and prin-
cipally made from consonance, nevertheless when it is accu-
tomed to be made by consonance alone, that is by a similarity
of things, it prepares sweetness; when it is mixed with dis-
sonance, it lightens boredom and the consonance which
follows comes back sweeter and more pleasing to the ears,
for in a similar manner, light customarily delights after
darkness and sweetness delights after bitterness.

Diads which are dissonant are either dissonant in
themselves and are absolute dissonance or are dissonant by
accident.

The absolute dissonances are seconds (as much tonus
as semitonus) and sevenths.

\[ \begin{align*}
\text{Seconds} & : 0 & \cdots & 0 & \cdots & 0 \\
\text{Sevenths} & : 0 & \cdots & 0 \\
\end{align*} \]

Diads by accident are dissonant intervals which first
do not differ broadly from consonances, for they customarily
use in notes the same position of lines and spaces, as do
consonances. But yet they either abound with a minor semi-
tone or lack harmony or prepare dissonance.

Intervals are designated as augmented when they
abound in a semitone, and diminished when deficient in them.
The fourth is augmented when three tones (called the tritone) are found by a semitone added to them and is made either regular or irregular.

The regular is made when it proceeds from the note F to the square B or to B⁷, as it is called in instrumental music, or round B [B⁷] to E in this manner:

\[ \text{Diagram of regular fourth} \]

The augmented fourth is made irregular when the highest notes, as in the first and second examples, have a # sign, or the lower notes, as in the third example, add a round B [B⁷].

\[ \text{Diagram of augmented fourth} \]

When the signs # and b are placed in the contrary manner, the # undoubtedly to the lower notes and the b to the higher notes, the fourth is diminished by a minor semitone, and is called either semidiatessaron or diminished fourth.

\[ \text{Diagram of diminished fourth} \]

The fifth is made augmented and is changed in dissonance, if the notes in the highest position are sharped
as in the first or second examples, or as in the third example when the $b$ is added to the note in the lower position.

\[ \text{Diagram} \]

It is diminished either when these signs are placed in the contrary manner, or if from the square $B \ [B^6]$ to $F$, or from $E$ to the round $B \ [B^6]$ ascending; it is called the semidisponsa.

\[ \text{Diagram} \]

The octave is made augmented, as in the third or seventh examples, when the notes in the lower position are flatted; or as in the remaining examples, when the $\#$ is added to the notes in higher position.

\[ \text{Diagram with numbers} \]

It is diminished if these signs are placed in the contrary manner.

\[ \text{Diagram} \]

From the dissonance by accident, a common rule in the harmony of music has been established, in the fact that it
is not proper to place Mi against Fa in consonance, which is generally called perfect [dissonance].

The compound diads from the simple unison, and the agreement from the consonance, and disagreement from the dissonance, resembles the simple elements near to the axiom of notes.\textsuperscript{12} From the octave there is the same and like understanding.

\textsuperscript{12} Though the phrase, "near to the axiom of notes," is literally what the Latin is saying, I think that Crüger was stating that the diads composed out of single tones and indeed agreement from consonances and disagreement from dissonances, imitates the simplicity of nature "in the manner of a well-known axiom."
Chapter VIII

Concerning the Musical Triad

The musical triad is composed of three tones and just as many diads, and are indeed either consonant or harmonious from consonant sounds or dissonant or inharmonious from dissonant sounds.

Each musical triad (undoubtedly harmonic or inharmonic) is considered likewise either simple or compound.

The simple triad is composed of three tones or monads and just as many diads, all together and separately, harmonized among themselves agreeably.

The three tones or three arranged monads are harmonious diads and a harmonious triad. The two extremes of the triad are the first or lowest note and the last or the highest note, distant from each other by a fifth.

And finally the middle note is placed between the two extreme notes, and agreeing resonantly, joining together with sweetness and softness, proceeding, intervening and distant from the one by a major third and from the other by a minor third in this manner:
The harmonic trinity, the true and also natural root of the unification of sound, is the all-perfect and complete harmony, which is able to be given in the world of sounds a thousand times a thousand, which nevertheless ought to be related to one part of the triad either in simple or compound unison (& octave). I do not know whether the image and likeness of that great mysterious and divine unitrinity to be adored is able to be known more clearly in the world.

The root of this unity of sound (not indeed by reason of the unmoved extremes, but by reason that the middle note is changed less through the semitone) is two-fold. The one, the more natural, more perfect, nobler, and sweeter, has a major third below the minor third. (Its middle note must be expressed through the vocable Mi or just as Mi.)

\[\text{\textit{Sanctus}}\]

\[\text{\textit{Pater Noster}}\]

The other, the more imperfect and softer, has a major third above the minor third. Its middle note must be expressed through the vocable Fa.

\[\text{\textit{Sanctus}}\]

\[\text{\textit{Pater Noster}}\]

Each harmonic triad has its own species, at one time natural, at another time shaped by means of chromaticism.

The former and more natural species are these natural and chromatically altered kinds.
These are the inferior and softer kinds:

Other kinds of the harmonic triad which appear are added here 1. from the principal note B through the raised semitone to the quadrata $\#$ 13 of the higher extreme, or from the note $B^b$.

2. from the note $E^b$ through the extreme semitone which is lowered in this manner:

The kinds of harmonic triad either natural or soft, are natural and altered by chromisticism:

$^{13}$The quadrata $\#$ refers to $F^#$. 
The harmonic triad is so arranged that the parts themselves, reciprocal or neighboring, dispersed in their own octaves to producing a more varied and fuller harmony, are increased and multiplied. This should be attended to diligently lest the sounds be too distracting and disjoined, for harmony will be hindered and dissonance will take place. Hence this rule has arisen among musicians: where sounds are in closer proximity, they are thus more agreeable.

Nevertheless, disjoined consonances are able to be tolerated when they receive medial sounds, but tolerable harmony is not brought about from many consonant sounds.

In fact, in enriching and increasing the parts of the triad, this should be remembered 1. the lowest [the root]; 2. the highest or farthest [the fifth]; and finally 3. the middle [the third] will scarcely and rarely be most pleasing and effective, which is the natural disposition of every harmonic trinity.

So much for musical triads and so much concerning the material of harmonic composition from which comes required and imposed form.
Chapter IX

Concerning the Form of Harmonic Song and the Setting of the Text

The form of harmonic song consists of the monad, the diad, and the triad constructed and united to the text in a skillful and discreet arrangement and conjunction.

Therefore the musical text or speech gives spirit to a harmonic song. For even bare harmony, knowingly and cleverly interpreted by musical instruments, exerts power in exciting feelings: however, if the human voice is added, with which it takes on a significant thought expressed by harmonic numbers, the harmony, on account of this double attraction, that is both excellent harmony and thought which bring forth delight, will be much more wonderful, more august, and equally more acceptable to the ears and mind of the listener.

The text possesses two natures in relation to the words. The two natures are to be classified as divine and human, the character, strength, and establishment of which prudent skill first diligently considers and examines; then the text is able to form and express fitting harmony with sounds and intervals and inquires into every study.

The serious matters are expressed by descending, long,
and deep sounds contrary to light matters with short, sharp sounds.

The sad matters, fear and lamentation, use funereal, deliberate, and languid sounds.

Harsh matters use rough sounds whereas happy matters employ lively and stirring sounds. Sublimity and clamor are expressed by sharper sounds.

At the ending and in finality, all voices are silent.

Words are able to be whatever you choose; however, similarity, equality, and congruence to the matters to be sung about should be chosen, and words should chiefly relate to the nature and force of these matters either with or without an established poetic meter.

In words there are chiefly two things to be observed: the distinction and accent of the syllables.

Phrases are distinguished by periods, colons, and commas.

Truly harmony is distinguished by formal cadences and pauses.

Thus the period distinguishes primary clauses that are more similar in manner (concerning which there are many below).

The colon distinguishes secondary clauses, and the comma, tertiary and very often unrelated clauses.

Words are distinguished by pauses in this manner so that the major clauses are concluded by periods and colons,
and the lesser ones, by commas. Pauses should not divide an incomplete sentence but a modulating progression should be continued until the text may be legitimately distinguished by either periods, colons, or commas.

Furthermore, in the application of the text to the notes the accents and properties of the syllables must be observed. It is not permitted that a short syllable be lengthened by a modulating ascent or by a larger note value; or, on the other hand, that a long syllable be shortened by a modulating descent or a shorter note value. In relation to this, it is wrong to draw out short syllables and to shorten long ones. Thus no short syllable is fitted to be drawn out through many notes, only a long syllable is.
Chapter X

Concerning the Four Principal Melodies

From melodies composed of diads and triads, an orderly arrangement has been made in the division of harmonic song. Moreover various melodies in today's generation are employed in one song sometimes 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, and there are many devices for agreeableness and discretion.

Moreover there are only four principal established voices. In the two extreme positions the very heavy bass and the very piercing discentus (the Italian soprano). In the two intermediate positions is the one neighboring the bass, the tenor, and the other, known as the alto.

The nature of these four is such that they altogether produce beautiful modulation, fluent and elegant, neither widely separated nor harsh.

The melody of the bass is especially the foundation and has a more supple movement and a fuller scope, seeking the greater intervals and sustaining the other melodies, robust and august.

The melody of the tenor and the soprano is principal or royal, pointing out the mode in certain phrases by their splendor and by their closeness to each other in certain
phrases.

Finally the melody of the alto fills with a more joyful and more elegant progression and joins together the agreeableness and completion of all harmony.

They are discerned (that is, the melodies) by a diverse arrangement of clef signatures in this manner:

The *discaentus* has a clef signature of either C on the first line or G on the second, and rarely (and scarcely except in instrumental music) G on the first line.

\[\text{\includegraphics[width=2cm]{example1.png}}\]

The alto has a clef signature of either C on the third line or the second line.

\[\text{\includegraphics[width=2cm]{example2.png}}\]

The clef for the tenor has C on either the fourth line or the third line. Sometimes it also has F on the third line.

\[\text{\includegraphics[width=2cm]{example3.png}}\]

The bass has the clef signature of F on either the third, fourth, or fifth line. Sometimes it has C on the fourth line in this manner:

\[\text{\includegraphics[width=2cm]{example4.png}}\]
Since it is not permitted to construct melodic order wandering outside the granted limits according to anyone's judgment, but must follow one of the twelve modes, I think that I will be rewarded for my work, if knowingly, in joining together necessary melodies, I add a chapter on that very beautiful doctrine of musical modes. Harmony enclosed by no certain mode is empty noise and sound produced without judgment, which to the ears of the listeners trained in musical knowledge brings about more weariness than delight and agreeableness.
Chapter XI

Concerning the Musical Modes

The musical mode is nothing other than a certain pattern near to which every harmonic song (in some way about to be intensely important and spreading far and wide) in certain triads, and in the limits and boundaries of the harmonic octave, and it is contained harmonically and arithmetically in the circuit or scope of the mean. From the beginning through the middle and all the way to the end, the mode proceeds justly, to the virtue of any text which is prudently and skillfully set forth and pressed upon the listeners with due moderation of feeling.

There are seven modes close to the seven kinds of octaves (from which, it is said, the seven modes spring). However, on account of the inverted placement of the fourth, the harmonic triad with its own peculiar affection gives access to two modes, therefore bringing the number of modes to fourteen, from which the last two are rejected on account of the false fifth and fourth.

An investigation arises concerning the order of the modes, for they designated the Dorian in first place on account of its every proportion. A certain Aeolian arises
from the first musical pitch A.\textsuperscript{14}

Truly the most natural and agreeable order is when the mode, which obtains first place, arises from the first kind of octave C to c; and from the first kind of fifth C to g; and from the first kind of harmonic triad C e g.\textsuperscript{15} Certainly the Ionian together with its Hypoionian gives evidence of 1. musical voices, which take their beginning in the key of C (regular form) and in the key of F (transposed form) and follow the natural order to the final key of the mode, and fit properly together.

2. Musical instruments (especially the fundamental ones) such as the organ, the principal of all instruments, the positive organ (the Italian \textit{organo piccolo}), the regal\textsuperscript{16}, the clavicimbalum\textsuperscript{17}, and others, chiefly take the lead among instruments in the key of C.

Therefore the Ionian with its Hypoionian deservedly obtains first place. Truly the Dorian which arises from the following kind of octave succeeds this one, and thus it follows consequently in this order.

1. Ionian  
2. Hypoionian  
3. Dorian  
4. Hypodorian

\textsuperscript{14}This remark seems rather extraneous.

\textsuperscript{15}Crüger was very aware of Zarlino's renumbering of the modes.

\textsuperscript{16}The portable organ.

\textsuperscript{17}The clavicord.
5. Phrygian  
6. Hypophrygian  
7. Lydian  
8. Hypolydian  
9. Mixolydian  
10. Hypomixolydian  
11. Aeolian  
12. Hypeseolian  
13. Hyperseolian  
14. Hyperphrygian  

The last two, as was said before, are rejected on account of the false arrangement of the fifth and the fourth.

These modes, because of the harmonic ratio of the triad, which is lasting and special, are either naturaliores, beginning with a more natural triad [a major triad] or molliores beginning with a softer triad [a minor triad].

The naturaliores are the Ionian, the Lydian, and the Mixolydian. The molliores are the Dorian, the Phrygian and the Aeolian.

In theory when the fourth is joined with the harmonic triad, the modes are either authentic and primary or plagal and secondary. For every melody is naturally employed in the circle of one octave, to which if anything is added or taken away, at the liberty of musicians, it is especially to be expressed in the text. Therefore it is necessary in completing the scope of the whole octave to join the fourth to the harmonic triad either above or below it.

The fourth is placed above the harmonic triad if it is being used to complete the scope of the octave. Thus the harmony will represent the authentic and primary mode.
(Such a placement is called harmonic and is consonant by its agreeableness.)

The fourth is placed below the harmonic triad if it establishes the plagal, and the harmony will represent the secondary mode; however, this harmony does not differ from the former except it is placed under it, for which reason it always has the Greek prefix ὑπο.\textsuperscript{18}

(Such a placement is called arithmetic because mathematicians place greater numbers in a higher place and lesser numbers in a lower place. Thus, by this placement, the fifth occupies the higher position, the fourth the lower.)

Note: This matter is to be considered carefully. The bass and alto always occupy an arrangement contrary to the order of the tenor and soprano. As an example: when the melody of the soprano and the tenor are placed in the authentic mode, then the melody of the bass and alto requires the arrangement of the plagal mode. Thus, vice versa: when the soprano and tenor are in the plagal mode, the bass and alto are established in the authentic system.

\textsuperscript{18}This prefix means under.
Next, a mode is called mixed when the primary mode is joined with its secondary. This happens very often in today's music, especially in the harmony of many voices.

It must also be observed that all modes are by nature. However, by urgent necessity, especially in instrumental music (for there is not such a need in vocal music), the modes are able to be transposed up a fourth or down a fifth. Thus the durus hexachord is changed into a mollis, and the principal note B is expressed through the vocable Fa.

Concerning the Ionian

The Ionian, the first in order and the most natural mode of all, together with its Hypoionian is formed from the harmonic triad as follows:

\[
\begin{align*}
\text{c e g Regular} & \\
\text{f a c Transposed} & \\
\text{ut mi sol} & \\
\end{align*}
\]

Concerning the Dorian

The Dorian together with its Hypodorian has its own harmonic triad.
Concerning the Phrygian

The Phrygian together with its Hypophrygian is formed from the harmonic triad.

\[
\begin{align*}
\text{Regular} & : g \quad b \quad d \\
\text{Transposed} & : b \quad d \quad g
\end{align*}
\]

(Transposed)

Concerning the Lydian

The Lydian together with the Hypolydian is from:

\[
\begin{align*}
\text{Regular} & : f \quad a \quad c \\
\text{Irregular} & : b \quad d \quad f \\
\text{Transposed} & : d \quad f \quad b
\end{align*}
\]

\[19\text{Crüger gives both terms.}\]
Concerning the Mixolydian

The Mixolydian and the Hypomixolydian are formed from the harmonic triad and its root.

\[
\begin{align*}
g & \; b^7 & \text{Regular} & \} & \text{System} \\
c & \; e & \; g & \text{Transposed} & \\
\end{align*}
\]

Concerning the Aeolian

The harmony of the Aeolian and the Hypoaeolian is formed from the triad

\[
\begin{align*}
a & \; c & \; e & \text{Regular} & \} & \text{System} \\
d & \; f & \; a & \text{Transposed} & \\
\end{align*}
\]

Concerning the Hyperaeolian

The spurious Hyperaeolian together with its secondary, the Hypohyperaeolian or Hyperphrygian, is formed from a false, spurious triad and on account of that, is rejected.

\[
\begin{align*}
b^7 & \; d & \; f & \text{in the Regular Melody} \\
e & \; g & \; b^b & \text{in the Transposed Melody} \\
\end{align*}
\]

The modes have obtained this naming from generic characteristics and each is appropriate to its name.
Concerning the Nature of the Modes

The nature of each mode follows by effect and affect the nature of its own root of unified sound, intervals, and tones, and also the disposition of the semitones in the range of the octave, from which, in turn, the modes are distinguished.

Hence some are lively and blithe, namely that of the intense Ionian, the devoted Lydian, and the restrained Mixolydian. Others are soft, gentle, sad, and dignified, as the moderate Dorian, the weak Aeolian, and the complete²⁰ Phrygian.

So much for the musical modes, see the varied examples of them below the chapter on the formal cadences.

²⁰The word modifying Phrygian here is admodum, an adverb, which among other similar meanings, means "wholly" or "completely." What I think Crüger really meant here is "unique."
Skill in producing and establishing harmony uses many ways and methods. Truly we will be pleased in finding the most advantageous way and in acquiring the easiest method of putting together melody. By this method the remaining upper parts can be added to the underlying and established foundation. In this manner it will soon be easily possible to add the essential voices to the royal melody of the tenor and the soprano.

Therefore proof of their strengths will be made.

1. The composer places as many musical staves as there will be parts of the song, and he distinguishes them on perpendicular lines cut by the distance of two tacti.

2. The musician should choose an appropriate mode suitable to a text if he has taken upon himself any adornment. Poets have never been able to produce material
through songs completely in the manner that they wished. As Horace said: "Comedy does not wish to be expressed with tragic words." Thus a musician, unless he is very trained in shaping consonants, will never be able to produce in any mode with equal facility, these same affects which the feeling requires.

3. He signifies the fundamental melody (which is the bass) of the staff by dot over dot in the place of the root parts of the harmonic triad, the first and last of which the very heavy bass holds strictly; and sometimes the middle, but never the highest except in syncopation.

4. He adds the larger rhythmic units to the fundamental melody and they proceed through parts of the harmonic triad notated by a dot. Thus the rhythmic unit progressing from one part of a triad, falls into another part of the following triad as near as is possible, from this part into another thus all the way to the end and silence follows.

---

21 This statement is somewhat vague but it possibly means that musical settings of poetic texts rarely are in keeping with the text.
5. It happens especially that upper melodies proceed more naturally through the gradations of the staff, that is, through tones and semitones rather than violently through large intervals or leaps. Therefore change is then produced more evenly, more fluently, and more easily. However, the bass (which ought always to indicate the foundation of the harmonic triad) progresses mostly in leaps and large intervals, whereby the varied arrangements of the triad are able to be connected, composed, and arranged more resoundingly and more easily in a suitable manner, and the remaining higher melodies are able to flow in a more natural and more even gradation.

6. This also must be observed that some fundamental note, following or ascending through a fourth, or descending through a fifth, naturally requires a major third in a
lower position in its own harmonic triad: but a minor third in a higher position. It does this in either its natural positions, or in other positions through this chromatic sign drawn thus♯.

When the following note ascends through the fifth or descends through the fourth, the harmonic triad retains a minor third in the lower position and a major third in the higher position, unless certain procedures, such as the fugue, impede the arrangement.

7. Next, one should know about the ♯ quadrata and what appropriate place it holds in songs either on the note B♭ in a transposed system or on the note F in a regular system. When a fifth in the harmony is placed in a lower position, where Mi and Fa are enclosed in the diapente, that is when a diminished fifth is changed into a true fifth by the addition of a minor semitone which it previously lacked.
Indeed, they think it should be written on the key $E_b$ only and always if the chromatic sign is written there, for every available consonance is placed against it. However, on account of sufficient reasons listed by Michael Praetorius (Volume 3, Chapter 3 of the Syntagma Musicum), these men appear to me to speak foolishly in this matter.

6. Truly, chromatic signs are not to be applied regularly in the beginning of melody, but rather are to be used elsewhere, where the harmony gains strength by progressing. If these signs are applied in the beginning to lead the arrangement of a particular triad into another form, thus they seem to reveal an ambiguous mode.

The following rules represent the essential principles that are further necessary in establishing good harmony.

1.

Consonant diads, which musicians call perfect (the octave, the fifth, the fourth, and to which the unison is also added) if they should be of the same kind and proportion,
are permitted to follow each other neither in steps nor in
leaps, as much as ascending motion as by descending motion,
for they emit all sweetness by such a continuation and they
incline to dissonance rather than consonance.

2.

They do not impede the faulty arrangement of such a
kind. 1. Intervening dissonance is a ratio, such as a
second in the middle between two simple unisons or a seventh
or ninth inserted between two octaves, because dissonance
does not pertain to establishing harmony by itself but by
accident.

Therefore when no pertinent or unrelated matter
intervenes, the faulty succession is not able to be excused
or endured.
3.

Neither are the small rests, such as those for the minima, the semiminima, etc., able to destroy a faulty succession of consonant diads, because the rests are not the indicators of the duration of sound but the cessation and silence of sound.

4.

In the resounding of many voices, a faulty succession may be destroyed by a rest when the note which advances is of the same value with a rest and regularly changes the position before the other voice which is quiet because of the rest falls into the same position.

5.

A bad succession of fifths can also be prevented by a
rest if the third voice falls on the rest which joins in a minor sixth.

6.

If fourths and sixths, although they are consonant diads, proceed by step, they do not make two fifths bearable unless in the sounding of many voices.

7.

In fact, when the small notes are introduced in a high voice and they mix in thirds with the other intervals, a faulty succession is prevented. At other times a fifth is
sustained when one voice proceeds by a leap and another by a stepwise progression of four semiminimae, where similarly the third intervenes.

8.

So when the small note values, which introduce the tenth and the sixth proceeding between octaves either by step or by leap, are employed, they abolish a faulty succession.

9.

When voices are distributed to different choruses, and all are mixed together at the same time, it is agreed that the bass of the higher chorus together with the bass of the lower, or of another chorus in unison and at the octave, progresses to building a foundation more suitably in whatever
chorus one pleases.

10.

The perfectly consonant diads, if they should be diverse in kind, can proceed and follow each other mutually. Usually one rests or proceeds by step and the other voice moves by leap. When both progress by leaps, a more difficult transition and a more forced harmony is made. Certainly before a voice follows the appropriate foundation of its own interval, harmony vanishes, becomes faint and disconnected.

11.

Consonances, arranged in their own appropriate positions, that is a major third and a minor third in the shriller voices, a fifth in the middle voices, and an octave in the heavier voices, produce a much sweeter harmony than if the order is inverted, from which a sadder and more bitter harmony is brought forth.
The octave, the most perfect of all of the consonances, when employed in heavier sounds (namely, C D E) does not retain the middle sound. Indeed in the higher voices, it is not used without the middle intervening sounds by good writers. Thus also the fifth, a perfect consonance in the heavy voices (clearly F and G), does not admit the middle voice.

For a fifth here in the middle of an octave and the third in the middle of a fifth on account of the depth are less sonorous because they resound sadly and inappropriately.

The octave or unison are not to be frequently placed in fewer voices for they are equal consonances and do not
allow a variation of harmony. Sometimes they produce a simpler harmony as needed.

14.

Nevertheless, it is not always necessary to abstain from the use of these, for harmony as it forms cadences, and modulation as it proceeds more elegantly and more fluently, require the presence of these. Therefore musicians invent a mode where the unison can be more conveniently used (indeed the octave is more easily tolerated) namely, if both coincide neither with equal figures nor at the same moment of time, but if another voice takes the last part of another note, it should not be heard at the same time.

15.

The perfect consonances are not always to be in a
continuous stream, for these prepare boredom in ears sensitive in musical knowledge, if the imperfect consonant diads are not mixed together to vary harmony, inasmuch as the third and the sixth which produce boredom, if they are born from perfect consonances, raise up and restore a more agile and exciting harmony.

I will explain in the following rules how we are able to mix and cross fittingly and appropriately an imperfect species with a perfect or another imperfect, and this should be reflected upon when one has fewer voices. However, in many voices, if anything is done contrary to these rules on account of urgent necessity, it may be excused more easily since if anything inconvenient should arise, it is covered by the harmony of the remaining voices.

16.

1. From the minor third to the perfect consonances.

The *semitonius* or minor third crosses to the unison first by steps, when the voices come together in contrary motion; then by a leap as much in ascending motion as descending, when the other remains stationary.

In fact, when both move by a leap, then this progression to the unison is
not possible. 22

The minor third passes to the fifth first by step when the voices are separated by contrary motion. Then by a leap, when the lower voice observes a gradation in ascending order and the higher voice in descending order, we arrive at the progression of a minor tenth to a fifth in this manner. Thirdly, if both descend by leap, the higher voice keeps the interval of a minor third. At another time the progression from the minor triad to the fifth is bad.

22 The meaning here is that the progression is not acceptable because of crossed voices.
18.

The minor third passes to the octave,

3. To the octave. the one descending by step, the other proceeding upwards by leap.

19.

The minor third passes to the imperfect consonances. 1. When it is continued, it is able to take place by steps but not by leap. 2. When it passes to the major third or ditonus, it frequently happens to fall as much in steps as in leaps. 3. When it passes to the minor sixth, it remains stationary.
When it passes to a major sixth, this is scarcely accustomed to be done.

20.

Progression from the major third to the perfect consonances.

From the major third 1. to the unison

A major third about to make a transition to perfect consonances arrives at the unison, either when the voices ascend together, the higher by step and the lower by leap, or when the voices come together in contrary motion, or when one remains stationary.
21.

In passing to the fifth, when one of the two remains stationary, or when they ascend or descend together, one by leap, the other by step, and, in this fashion, the progression of a major tenth to a fifth is arrived at. It is rare when they leap backwards and forwards, or when they go in different directions from each other by steps; and in this manner, they do not interfere with proper harmonic relationship.

22.

It moves to the octave by contrary motion. Observe the higher step.
23.

Progressions from the major third to the imperfect consonances. 1. When the major third passes to the semiditoneus or minor third, the voices may move in ascending or descending motion as much by step as by smaller leaps. 2. It can be continued but this is rare. When a major third moves to a major third, it does not fall in the harmonic relation, because it restores a harshness to the harmony. 3. When it moves to the minor sixth, the voices go in different directions from each other, one by step, the other by leap. 4. In moving to the major sixth, one of the two remains stationary.

Note: The relation of Mi against Fa is not harmonic, and that, which is called dissonance by accident, happens in four notes and, in this manner, is mixed obliquely, as if
through a sharped interval.\textsuperscript{23}

When there are fewer voices this ought to be carefully avoided since it results in a more difficult melodic interval and harsh harmony. However, in more voices, if it is allowed by urgent necessity, it is overcome by the harmony of the additional voices.

24.

Progression of the minor sixth to

From a minor sixth perfect consonances. Progression of the minor sixth to the fifth. In this regular progression, one of the voices remains stationary. On the other hand, in passing to the octave which is most rare, it is imperative that the voices ascend or descend together. One progresses by a major semitone, the other by a leap. Then when it proceeds to the octave in contrary motion in semiminimæ, an easy progression is maintained.

\textsuperscript{23}This refers to $\text{mi}\, \frac{E}{D}$ to $\text{fa}\, \frac{F#}{B}$
25.

Progression of the major sixth to imperfect consonances. [1.] When the major sixth passes to the minor sixth, the voices move together in ascending or descending motion by step. 2. In moving to the major third or the minor third, one proceeds by step, the other by leap or [3.] one remains stationary. [4.] It is not able to be written because the relation does not happen to be harmonic.

26.

The major sixth passes to the octave and uneasily to the fifth, except in syncopation, as the approach to the
The major sixth continues by step to another major sixth or is able to move to a minor sixth, just as it also moves to a major third or a minor third.

Note: Several sixths, having a third in the lower part and a fourth in the higher part, are used, by some musicians, in establishing harmony especially in descending order (in ascending order these are displeasing). They begin them in a mode of perfect consonance, and are put down in the octave in this manner.
The Italians call harmony of this kind, which progresses in many sixths, falso bordone because of its weakness. The French call it fauxbourdon. Indeed a succession of sixths is not able to be censured entirely because a succession of this kind does not follow itself. However, majors are very often alternately mixed with minors because 1. many fourths of this same proportion may be found in uninterrupted form in this harmony and the first rule given above concerning the prohibition of perfect consonances in higher succession is not followed. 2. Very often a non-harmonic relation may be included. 3. Consonance removed from its own place may be detained for a longer time. (The major third and minor third, as mentioned before, are naturally found in high, shrill voices, not in low, heavy ones, and therefore are scarcely able to occupy continually a fundamental place in heavy voices, as in this form of harmony). Scarcely will harmony of this kind be approved.
And now, finally, concerning consonances joined purely and simply with harmonic diads and triads. The following chapter will show in what way harmony is to be established by a great and ingenious art and how the nature of the text is able to be expressed successfully with varied ornaments and skillful musical devices.
Chapter XIII

Concerning Ornamentation of the Harmony and the Species of Passing Dissonance Intermingled in Celerity in the Harmony

The flowering and also the musical figures or ornaments are used to put together harmonic song which prudent skill uses to obtain its end.

1. In the dissonances, they are fittingly and congruently intermingled in the harmony without causing aversion to the ears.

2. In the formal cadences, they make use of the principles of harmonic ratio and a good text.

3. In the fugues, they are auspiciously fashioned and carefully worked out.

The dissonances of harmony are intermingled in two ways: either they are quickly cancelled or are in syncopation.

Concerning Celerity

In celerity, the major dissonant notes, which are delayed in their place for a longer time and then continue (those being the maxima, the longa, the brevis, and the semibrevis), are allowed in no mode. The remaining minor dissonances, the minima, the semiminima, the fusa, and the semifusa, which swiftly pass by the ears with pleasingness
of every variety, are allowed and tolerated, but the following conditions are to be observed.

1.

They must progress in order by ascending and descending steps, not in leaps, where all might be harmonious.

2.

Those which are of one form are consonant alternately, so that as consonance begins, dissonance follows. Primary consonance, which begins with the depression of a tactus, begins from two minimae completing a whole tactus. The other, which is dissonance, begins with the elevation of a tactus.

From the four semiminimae on a single tactus, the first and the third are consonant; the second and the fourth are dissonant.
From the eight fusae on a single tactus, the first, the third, the fifth, and the seventh are consonant, whereas the second, the fourth, the sixth, and the eighth are dissonant. From the sixteen semifusae, the odd numbered eight are consonant, and the remaining are dissonant.

Note: In the fusae and semifusae, this law in today's music is not strictly observed in all kinds of songs. For often on one tactus two dissonances are placed between the first fusae and the fourth, or the fifth and the eighth. Often they go forth with the first part of the tactus in consonance while they begin the other part of the tactus by dissonance. Examples of these affairs are found in today's generation among good authors.
3.

In this form of harmony, the minima progresses after the preceding semibrevis, and very often in position the first notes have a dot. And the semiminimae also imitate the dot on the preceding minima. In the fusae, this rarely comes into use.
The tritone and the diminished fifth (diads dissonant by accident) are cancelled out by celerity if the tritone falls on the minor third or the diminished fifth falls on the sixth or is placed between the sixth or another consonance preceding and a major third following.
Chapter XIV

Concerning Syncopation

Musicians call it syncopation when one or many notes because of a preceding minor figure (either a note or pause) fall against the tactus and are drawn out until the figure of supremacy yields, for which syncopation offers a cause in the beginning. When a minima or its rest sign, which begins a tactus by depression, is located before a semibrevis, it is necessary that the semibrevis begin in elevation and be distributed to diverse tacti until a minima or another corresponding in value to this returns.

Thus when a semiminima, either a note or a pause, which begins part of the tactus in either depression or elevation is located before the minima; the minima is syncopated and distributed to different tacti.

\[ \text{\textbf{Diagram of syncopation}} \]

Notes are syncopated in this manner and occasionally total dissonance is allowed, especially in strong cadences and smaller note values or in one part only, truly the part following, which falls in the depression of the tactus. Nevertheless, this can occur only on the condition that it
[total dissonance] be resolved by descending step into neighboring consonance close to the following rules.

Rules

1.

A second occurring as a syncope is resolved 1. to the third, which is very near, 2. to the unison, through contrary motion and, for the most part, if one voice by proceeding by step makes a semitone, or 3. to the sixth but this is rare.

Note: 1. A lower voice is also able to ascend or descend by a dissonant second into a third in this manner:

2. In harmony of many voices, a second progresses to a diminished fifth through syncopation in this manner:
It is special when the syncope occurs with the interval of a second in the lowest part while the third voice added to the highest place is accustomed to sound with the middle voice either in the third, the fifth, or the sixth.

There are many examples in many voices in which a syncopated second is able to be employed and resolved.
A seventh established in a syncope is resolved generally to the sixth, when undoubtedly the higher voice follows the lower in passing dissonance and descends by step into consonance.

It is also resolved to the third, when either the lower voice passes into dissonance and ascends by a fourth, or when the upper voice passes into dissonance and ascends by a third.
It is also resolved to the octave when the lower voice follows the higher one in passing dissonance and then the lower voice descends by step.

Thus the seventh is able to pass to the fifth when the lower voice after dissonance ascends by step.
3.

The fourth in a syncope is resolved generally to the third if the higher voice follows the lower voice passing into a fourth and descends by step.

\[
\begin{align*}
&\text{\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{example.png}
\end{figure}}
\end{align*}
\]

It is resolved to the diminished fifth when the lower voice follows the higher voice passing to the fourth and ascends by step when the major third follows. The diminished fifth is tolerated on the condition that the notes become syncopated.

\[
\begin{align*}
&\text{\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{example.png}
\end{figure}}
\end{align*}
\]

This rarely happens with the perfect fifth because the harmonic relation of the tritone does not often occur and one faulty fifth, if it is made, is disapproved of especially in fewer voices.
A higher voice progressing to the fourth is able to ascend by step to the sixth or to descend through the third, especially in many voices.

There are various examples of resolving the fourth.
The remaining established, dissonant intervals, founded in the syncope, follow the ratio of their own simplicity. Likewise, this is the judgment concerning the octave.

4. This is also related to syncopation; that is when two semiminimae follow a minima or semibrevis either in a syncope or having a small dot descending by steps, one or both dissonances are sustained.

The first or both dissonances are sustained if the note which precedes is consonant. This note is generally a minima and sometimes a semibrevis.
If the second half of the semibrevis is dissonant or if the semibrevis has a small dot, the former semiminima is consonant. If both of these conditions exist, then consonance is established.
Note this:

1. When the note which follows the semiminimae ascends in leaps, then the next semiminima is consonant.

2. Among the semiminimae progressing in this manner, the first and last are generally consonant.

3. Progressions of this type which hasten through a false fifth are not frequently used (especially in ascending movement).
4. Sometimes two or three dissonances are permitted to follow themselves in this manner, especially in many voices.

5. If many voices are joined in a syncope, then they are arranged in consonant proportions either with a dissonant syncope or the following note in which the syncope is resolved. As has been pointed out, one voice is unable to resound in unison in the octave except when eight voices or thereabouts are joined together, which is not frequently done except in cadences.

The Use of Syncopation

The syncope has much usefulness, for it not only adds a great amount of sweetness to the following consonance, but it also does much to vary the harmony and to point out the text. When a theme is continued on the same key for a long time on account of the nature of the text, its harmony, which otherwise because of the repetition and immobility of the
same consonances offers weariness to the ears, by benefit of
the syncopes, it is able to be varied and adorned in a
marvelous manner as can be pointed out by the many examples
of good authors.
Chapter XV

Concerning the Formal Cadences

Musicians designate a cadence as a movement of melodic structure in which harmony, by some well-rounded part of the text, inclines and passes to a rest of distinction.

Cadences are produced and distinguished, just as a speech, by commas, colons, and periods, lest the sense of the text be confused and the listener be left with uncertainty. Thus good harmony, lest a confused clamor of sounds arises and weariness be offered equally to the ears and the mind, on behalf of the nature of the text, is distinguished by the native cadences, the primary, the secondary, the tertiary, and by the perigrinae, and is cut into certain parts by the perfect and imperfect.

All cadences are composed of three notes: the ante-penultimate, the penultimate, and the ultimate.

The antepenultimate is formed in a threefold manner. It is established either in complete dissonance in the syncope, especially in more difficult passages, or in complete consonance, if in the place of a fourth, a fifth is chosen, or finally the first part is consonant and the second part is dissonant. The latter is the best and most
frequent arrangement.

Indeed, if cadences are united with a dissonant syncope, they admit grace and pleasure.

The penultimate then descends behind the syncope. However, the ultimate, by which the chief cadence is confirmed and effected, arises from the harmonic triad and ascends behind the penultimate.

Thus an ascent so much as a descent is made through a minor semitone so much in these keys, which naturally separate them by an interval, as in other keys which are able to be led back to the semitone through this chromatic sign #. The nature of these seeks an interval in these places, although a chromatic sign may not have been written.

Lest a repetition of uniform notes brings boredom and so that the text may be connected more properly, the small notes in cadences are frequently varied in this manner:
The cadences are distinguished as 1. perfect, and imperfect, and 2. primary, secondary, tertiary, and peregrinæ.

The perfect cadences are those which are ended in perfect consonance as the unison and the octave.

Those which end on the unison either come together on the unison from a semitone by contrary motion or ascend to the unison by leap from a major third.

Cadences which are terminated on the octave are of the same kind, for the major third which is elevated to the unison through a fourth, is lowered by a fifth. Then the minor third, which is depressed in cadences of unison only through the octave, is put into a major sixth under the penultimate, and passes into the octave by contrary motion.
Note: When a cadence is formed in this manner on the key of e on a regular system, then if many voices are added to the ultimate, the lowest related voice is able to join with a sixth and fall into a fifth so that a non-harmonic relation may be avoided. Sometimes also a heavy choice is raised up by means of the penultimate of the cadence and will be distant from the ninth syncope through the octave and will descend into the twelfth.
The imperfect cadences are those which do not bring the harmony to a rest, but suspend it in some manner, as well as designate that there is a progression by modulating when the ultimate note of the cadence either of the unison or the octave has been removed from its own designated and appropriate foundation, and it winds into other imperfect consonances, especially the third, the sixth, and the fifth.

Cadences (as spoken about just now) are distinguished in the primary, the secondary, and the tertiary forms from
the particular harmonic triad of their mode, the same which
the authentic has with its remission and springing up in
the peregrinae.

The primary cadences are formed on the lowest tone of
the harmonic triad or the final key.
The secondary cadences are formed on the highest key.
The tertiary cadences are formed on the middle key.
The peregrinae are cadences which are recited from a
harmonic triad of another mode$^{24}$ outside the ordinary.
Truly they are to be employed judiciously so that they may
join together and a song when it appears to be inclined and
led back through them into another mode, through the approp-
riate cadence of its own triad, especially the first cadence,
may be called back regularly and led back into order.
The Ionian primary cadence is formed in the lowest
part of its own triad of the regular system on C; the secen-
dary on the highest G; and the tertiary in the middle on E
in this manner:

\begin{center}
\includegraphics[width=0.8\textwidth]{diagram.png}
\end{center}

The Dorian and Hypodorian primary cadence is estab-
lished on D; the secondary on A; and the tertiary on F.

$^{24}$This is, of course, referring to the tonus
peregrinus (double or two tonalities) which has a different
tenor for its first and second half.
The Phrygian and Hypophrygian primary cadence is formed on E; the secondary on B; and the tertiary on G.

Note: It comes to be observed that musicians very often use the Aeolian cadence on A and the Ionian cadence on C in place of the secondary because a cadence cannot be formed on B Mi with other voices in the rest of the mode on account of F Fa with which it does not agree.

The Lydian and Hypolydian primary cadence is formed on F; the secondary on C; and the tertiary on A.

The Mixolydian and Hypomixolydian principal cadence is established on G; the secondary on D; and the tertiary on
Note: This mode also departs somewhat by its form of cadences. The tertiary on the B₄ on Mi so that it rejects the harsher and in place of it very often assumes the Ionian cadence on C.

Finally the Aeolian and Hypoaeolian primary cadence is established on A; the secondary on E; and the tertiary on C.

However, the primary, secondary, tertiary, and _peregrinae_ cadences are not to be employed without distinction and are indeed used in their own definite place and time.

Since the primary has a position of harmony in the

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25Crüger does give b₄, not b₃. This is substantiated by his note following the musical example.
beginning, the middle, and the end and cannot be led into another mode and another through other cadences, the true mode becomes conspicuous. However, it is customarily made with preparation and understanding, at the end of either the entire melody or periods.

The secondary occasionally forms the beginning and is expressed by a colon or is arranged by the thought set forth by the text, as in questions and at the end of parts of melodies as it indicates to pause somewhere after the entire melody.

The tertiary and sometimes the peregrinæ are expressed by commas and aid in guiding the disposition of the text, notwithstanding the importance of good judgment, lest in a mode of this kind through the peregrinæ cadences, the harmony is absolutely destroyed by change.

Therefore the end (as said before) is established in the primary cadence of the mode which is appropriate and most perfect: in the secondary, tertiary, and peregrinæ, it is not able to be done, for these cadences, by an imperfection of their harmony, can make the mode rather uncertain and they suspend the harmony and lead it over into this form, so that the listeners in hope and expectation of the future anticipate something more perfect where the end is established. Therefore one should not violate this common rule of musicians: at the end of tone, it will be seen. Indeed the mode of harmony is revealed especially at the end
from which everything beneficial, all elegance, and perfection is judged.

Although contrary examples of this may be found among good authors, one will find, upon examination of the agreement of the harmony with the wording, that those examples have been used neither by chance nor without serious purpose.

The following are examples of establishing formal cadences in many voices.
The four voice examples, so much of the regular as the transposed system to all modes, the authentic as much as the plagal follow, adapted to their own formal cadences, from which it is possible to see in what manner the key signatures of the melody of the four principal voices are to be arranged in every mode, and how much the melodic structure ought to ascend and descend according to the prescribed range of its scope.

(The footnotes for the following musical examples are to be found at the end of this chapter.)
Example of the 4th durus Ionian with its own formal cadences.
Example of the $b$ mollis
or transposed Ionian.
Example of the b-durus Hypolionian with its own formal cadences.
Example of the b Mollis Hypoionian.
Example of the b dorus Dorian.
Example of the 7 durus Hypodorian in song
Example of the Phrygian in the regular system
Example of the system in the transposed Phrygian
Example of the transposed system
It is transposed thus:

Example of the regular Hypolydian
Thus in a mollis song
Example of the $\textit{b}$ durus Mixolydian in song
Example of the regular Aeolian
It is transposed thus:

Example of regular Hypoaeolian
It is transposed thus:
Footnotes for the Musical Examples

26 In the original manuscript, a sharp sign is placed before the eighth note on the pitch a. This must be an error. The sharp sign should probably have been placed before the eighth note on the pitch Bb to serve as an indication of the cancellation of the flat.

27 The manuscript has e, which is undoubtedly an error.

28 In the manuscript, the use of this placement of the F clef was the error of either Crüger or the printer. The clef should have been placed as it appears in the transcription. It was incorrectly placed only in the first score of the manuscript.

29 The sharp is odd but it does appear in the manuscript.

30 This is atypical and is the first instance of tying from a quarter note.

31 This figure is normally used as an ornamentation of a resolution and the preceding tone is "always" a resolution. However, this is not the case here. The manner in which the figure is employed presents an unusual idiom.

32 Here the composer has simply changed the clefs and added the necessary flat to lower the pitch a fifth.

33 The composer has again simply made the change of clefs and the addition of a flat, but this time the pitch is raised a fourth.

34 This sign is probably to remind the singer that this is b♭, for the note above la is always sung as fa.

35 This note should most likely be a b♭ because it is almost immediately preceded by a b♭ and also closely followed by a b♭.

36 The composer has simply changed the clefs and added a flat to lower the pitch a fifth.

37 The composer has simply changed the clefs and added a flat. This time the pitch is raised a fourth.
Chapter XVI

Concerning the Fugue

Fugue is the embellishment of all musical embellishments so that it is the most respected today, the most difficult, the most ingenious, the most effective, and is held in great value among erudite musicians so that a song is not regarded as skillfully done if it does not abound and is not made up of a most elaborate formation of these.

If anyone dedicated to the study of music has progressed in any manner to mixing consonances and dissonances and to forming cadences, he learns, from experience in zealously fashioning and elaborating fugues, that they are considered the most ingenious musical device.

The fugue, moreover, is a certain repetition and imitation of any melodic structure whatsoever of which there are two parts. The first voice is the one which precedes and executes the duty of the leader, and thus signified by the name dux. The other is the voice which follows, whether one or many, and it is called the comes. When the comes follows the dux in close order, the fugue is considered to be better and more easily observed and perceived by the ears. Because in fashioning fugues in this manner, few modes of variation are allowed, the time is written only
through pauses of order until the harmony is able to assume one form and then another.

The practice of establishing the fugue is beginning the mode in which the harmony is formed in one part of the triad where it should be observed that the comes follows the dux and sometimes begins with the same intervals—major seconds, minor seconds, major thirds, minor thirds, etc., and then the fugue is appropriately able to be termed as more delightful and more laborious. When the comes follows the same progression as the dux on the lines and spaces, but not on the same intervals, it is called imitation. Indeed, fugues by name include either arrangement.

Here the verses of Venceslaus Philomanthes\textsuperscript{38} are observed.

\footnotesize
\textsuperscript{38}Venceslaus (Václav) Philomanthes (b.?–d.?) was born in the second half of the fifteenth century in Neuhaus in Bohemia. He was a singer, composer, and teacher and based his music lessons on the hexachord system. According to Félig, Philomanthes was a bell caster in Vienna around 1496. In 1512 he published his Musicorum libri quatuor in Vienna. See: Jeroslav Bužga, "Venceslaus Philomanthes," Die Musik in Geschichte und Gegenwart: allgemeine Enzyklopädie der Musik, ed. Friedrich Blume (Kassel: Bärenreiter, 1949–), X, 1209-1210. See: "Venceslaus Philomanthes," Biographie Universelle des Musiciens et Bibliographie Générale de la Musique, revised and enlarged by F. J. Félig (2nd ed.; Paris: Didot et Cie, 1883, VII, 40-41.
What voice seems best for you to place first
Let it proceed fuguing and the other follow it
by fuging
With a similar melodic structure which
the octave
And unison create, the fourth or fifth. 39
He, who wishes to compose subtle and excellent
fugues, needs talent, for there is nothing
more demanding than those.

Furthermore, the fugue is either ligata or soluta.
The ligata is that which progresses with only one written
dux through a whole song. At other times it is written with
a certain title which musicians call a canon where there is
an interval of time in which the comites follow the dux.
This method of singing is designated as: the fugue at the
unison, the fifth, the fourth, the major third, etc., after
one measure, after two measures, after a half measure.

The fugues are called soluta which are made in only
one part of a song and when an imitation has been omitted,
fugues convert themselves and are loosed into cadences.

Then, whether ligata or soluta, the fugue is either
the same melodic structure or different melodic structure.

A fugue is of the same melodic structure when the
voices proceed in equal, not very discrepant motions of
arrangements in ascending or descending, either in unison,
or in other intervals.

A fugue is of a different melodic structure when the

39 This refers to the use of the tonal answer and the
real answer.
comes proceeds in contrary motion with the _dux_ and ascends as far as the _dux_ descends; or when they are discrepant by the quantity of figures, they, nevertheless, reveal the fugue clearly; or when different fugues are combined.

Note: _Ligata_ fugues in this manner, alone for the pleasure of training the intellect, have been found most useful for comparing the custom of craftsmen most trained in drawing out harmony. Therefore because of their difficulty and rare use in musical works, they should not be undertaken by beginners.

Example of _fuga soluta_ of the same melodic structure.
Example of *fuga soluta* through contrary motion.

Example of *fuga ligata* of the same melodic structure at the octave above after two measures.
Example of fuga ligata in which the comes follows the dux in contrary motion at a minor third above after two measures.

Example of soluta imitation
Example of ligata imitation at a major third above after time
Canon à 3 at the fifth
Footnotes for the Musical Examples

4.0 This sign indicates where the second voice should come in the fugue.

4.1 This sign indicates the final note of the upper or second part.

4.2 This sign indicates the final note of the upper part.

4.3 The sign indicates the final note of the lower part (that is, the voice part immediately below in canon).

4.4 In order to be consistent in his usage of the sign ♫, Crüger should have placed the sign here to indicate the final note of the upper part (that is, the voice part immediately above in canon).

4.5 This F clef is placed incorrectly on the first score of the manuscript. The actual clue and proof of this is the use of the "correct" one in the successive pages.

4.6 This sign indicates the final note of the voice immediately below in contrary motion.

4.7 In the original manuscript, the f♯ and b♯ each appear having the value of a quarter note. This notation is, however, incorrect and the proof is found in Crüger's 1654 manuscript of the same canon in which each of the notes in question are given the value of a half note.
Chapter XVII

Concerning Various Kinds of Compositions

At the present time, various kinds of compositions dedicated to ecclesiastical use, as much as ethical, political, and economic use, are employed either with or without a text not only among the Italians, the French, and the English, but also the Germans. The most usual kinds of compositions with a text which are employed partly in sacred things and partly in profane things are: concerti, motets, madrigals, dialogues, villanelle, canzoni, serenata, ballati, aria, and others.

The works without text are 1. preludia, such as the symphony, fantasy (Italian: Sinfonia, Fantasia), sonata, toccata; 2. choral\footnote{Dances.} which have either a fixed pace\footnote{This might also be interpreted as "combination of steps."} as the pedovana, passamezzo, and the galliard, or those which are unfixed such as the courante, bransle, volta, allemande, mascharada\footnote{This word is defined as "masquerade" or "mummery." Crüger’s spelling, however, is interesting and varies from the Italian spelling mascarata because in seventeenth century Latin, there was a frequent interchange of certain letters, such as d for t and vice versa. Crüger’s spelling is also similar to the Spanish spelling mascarada.} , and others. For a sufficient explanation of
all these forms and their application, see Volume III in the first part of the *Syntagma Musicum* by Michael Praetorius.

These works are almost rules which have seemed necessary for arranging good harmony both purely and ornately. Let a cataloguing be substituted here in place of an appendix, so that it may follow a song composed according to the musical rules of progressing and modulating, finally in the last act with the good grace of the listeners to its own last end. For all compositions especially the concerti (in this day and age, the most frequent, the most used, and thus the sweetest and most effective kind of composition) require a singer not less eminent in judgment than in voice so that the dexterity of art with the pleasantness and elegance of the voice, especially in distributing accents with reason and also in using and employing other Italian measures (which are the tremulo, gruppo, tirata, trillo, passagi, etc.) with good judgment and a moderation of the voice dexterously and appropriately (not always where certain natural tremuli are accustomed to be cumulative by benefit of the throat, but in its own time and place), for exciting and moving feeling in the minds of the listeners. However, I will pass by those matters for certain reasons and reserve them for another time and place.

Meanwhile you, kindly reader, who has been dedicated to this divine study—be content, in turn, with this present synopsis and be occupied in studying various others approved
authors (as are Orlando di Lasso, Luca Marenzio, Giovanni Gabrieli, Giacomo Finetti, Lodovico de Vadiana, Agostino Agazzari, Johann Hermann Schein, Heinrich Schütz, Michael Praetorius, Christoph Demantius, Christoph Thomas Walliser, and others) through their examples as they are available and through compositions by imitating their works, according to the established musical rules. Thus you will begin a very distinguished style in writing harmonies for the sake of God and man.

Enough concerning these matters. Time and use will offer other appropriate things. God helps. Farewell.

The End
CHAPTER III

COMMENTARY

Johann Crüger's principal and most significant theoretical works are the treatises published in 1625, 1630, and 1654. The purpose of this commentary is to discuss and evaluate these publications on a comparative basis. The next most important texts are the ones dating from 1650 and 1660, though they are not as comprehensive as the others.

In his theoretical writings, Crüger supported several eminent music theorists from whose works he more or less wisely extracted subject matter, occasionally making an almost literal transference of text and musical examples. The theorists whom Crüger supported are Gioseffo Zarlino (1517-1590), Johannes Lippius (1585-1612), whose theoretical masterpiece Synopsis Musica (1612) reveals also the influence of Zarlino, Christoph Thomas Walliser (1568-1648), Seth Calvisius (1556-1615), Michael Praetorius (1571-1621), and Johann Andreas Herbst (1588-1666). Crüger's rudimentary studies are related to the writings of Heinrich Faber (c. 1520-1552) and Nikolaus Listen(ius) (c. 1500-d.?). Crüger's progression of theoretical thought is clearly based on the works of these earlier writers, for he presents the older threads of thought as are still found later in the
writings of Wolfgang Kaspar Printz (1641-1717), Friderich Erhard Niedt (1674-c. 1717) and Andreas Werckmeister (1645-1706). ¹

Crüger's first theoretical text was published in 1625 by George Runge and Johann Kalle. The treatise is written in Latin and its full title reads as follows: Praecepta Musicae Practicae figuralis. Ea, qua fieri potuit facili ac succincta methodo in gratiam & usum studiosae juventutis Gymnasiij Berlinensis: Conscripta et ad incipientium captum inprimis accommodata. ² In this text, Crüger organizes and arranges his subject matter by chapters and, within the chapters, employs the ancient and traditional pedagogical device, the "question and answer" method.

The Synopsis Musica of 1630 is Crüger's most significant theoretical work and is one of the earliest complete books on composition written in the seventeenth century. It also serves as a reasonably clear compendium of the theoretical thought of its time. Gustave Reese states that "this book is clearly representative of the transitional character of its time, as may be seen in its simultaneously


conservative and progressive nature."

The *Synopsis Musica* of 1630 represents an absolute point of view as a textbook of practical composition. To define it more specifically, it is a logically and efficiently organized text for methodical instruction in music theory. The characteristic frontispiece of the *Synopsis Musica* still places music within the frame of the seven liberal arts (grammar, rhetoric, logic, music, arithmetic, geometry, and astronomy) as in the Middle Ages and in the humanistic tradition of the sixteenth century.

The most detailed and significant sections of this treatise are concerned with the combining of melodies with one another, that is, counterpoint; the rules for the harmonic progression of a particular chord, and the *ornamentis harmonise*. The subject matter is organized by chapter.

The second edition (1654) of the *Synopsis Musica* certainly deserves and receives the same statements of definition that were given earlier to describe the 1630 treatise. The text is also written in Latin; its size is small and manageable, but, at times, the print is very indistinct and defective. This treatise was published in 1654 by the author and Christopher Runge. The exact title of the *Synopsis* is as follows:

---

With regard to its contents, it does not differ fundamentally from its forerunner, the 1630 edition. There are, however, a few additions, namely the section in Chapter I on musica practica and poetica and the small appendix concerning general bass located at the end of the text and written in German. The remaining alterations in the text occur where minor improvements, already introduced (meanwhile in the publication of the Quesstiones musicae practicae in 1650), are accepted or where greater clearness of expression is needed. The latter is particularly true in the case of Chapter XV on the fugue and the composition instructions contained there. In this Synopsis, the text and musical examples are presented and employed in a thorough and methodical manner. As a textbook for school teaching, the Synopsis of 1654 is unquestionably based upon

---

4 Musical Synopsis containing 1. A Method of Establishing Agreeable Harmony, Purely and Skillfully, 2. Concise Instruction, on How to Sing Melodies Elegantly (appropriately Applying and Modulating Accents from One Tone to Another). To which 3. A Short Discourse in Idiomatic German concerning the Basso Continuo Is Added to Please the Younger Instrumental Musicians, especially the Beginning Organists. Written with Various Examples.
Crüger's experience as an instructor at the Grauen Kloster in Berlin.

The chronology of the 1630 and 1654 treatises, however, is subject to much confusion because of the indiscriminate acceptance of an assertion in a certain lexicon. The entirety of the enigma is yet to be explained, although Fétis in his Biographie Universelle des Musiciens has located the basis for the discrepancy. In lexicons by Walther (Musicalishes Lexicon, 1732, p. 194), Forkel (Allgemeine Literatur der Musik, 1792, p. 421), Gerber (Hist. biog. Lexikon der Tonkünstler, 3rd ed., 1812, Vol. I, p. 287), Lichtenthal (Dizionario e Bibliografia della musica, Milan, 1826, IV), Grove (Dictionary of Music and Musicians, 1954-61, Vol. II, p. 546) and others, the first edition of the Synopsis in 12º is cited as being from 1624 with the title, Synopsis musices, continens rationem constituendi et comparandi melos harmonicum, Berlin, 1624. Some of these references also designate the Synopsis of 1630 as a changed second edition. In the Tonkünstler-Lexikon Berlins (p. 97), Ledebur also mentions a publication from 1624 having the exact title of the Synopsis of 1654.

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6Ibid., XII, 612.

7Ibid.
The edition, which Ledebur cites as being printed in 1624, also has the dedicatory entry, "dem Churf. Fr. W. Ded." ("dedicated to the Elector Fredrich Wilhelm"). This, however, is an obvious inaccuracy for Fredrich Wilhelm did not ascend the throne until 1640. The publisher must have unquestionably been dealing with the copy of the 1654 treatise in the Berlin State Library. Furthermore, the cause of the entire error is disclosed here, for the printing of the year on the title page is blurred and indistinct and could have been misread. 8 Langbecker, in Johann Crügers Choralmelodien (Berlin, 1835, p. 7), gives the title of the Synopsis of 1624 as its predecessor, but states the size of the book as 4°. 9

Therefore the authenticity of the 1624 publication is unsubstantiated and no copy of such a publication has been preserved. In addition, the 1630 publication bears no evidence of having been preceded by an earlier edition. For this reason, Fétilis questions the accuracy of the assertion that a 1624 edition exists and, in relation to this, cites a 1634 publication in 12° with 232 pages. This treatise is found in his library and is also recorded in the Breitkopf Katolog of 1763. Its title agrees almost verbatim with the title of the 1654 Synopsis and is even listed next to the

8 Ibid., 612-613.
9 Ibid., 613.
1654 edition in the Katalog. There the date of the letter Synopsis is also printed unclearly.\textsuperscript{10}

Gerber also cites a third edition designated as "3. Aufl. von 1734. 12."; the title fully agrees with that of the 1654 Synopsis. The date 1734 is, however, incorrect and Gerber's use of this year results from the fact that he referred to the Breitkopf Katalog where the date is in error and is considered a misprint; the date should be 1634 rather than 1734.\textsuperscript{11} For the same reason, Langbecker in his Johann Crügers Choralmelodien (Berlin, 1835, p. 7), cites a third edition of 1734.\textsuperscript{12}

Though the questionable copy of the 1634 treatise agrees with the extant copy of the 1654 in its known details, it has not yet been located. There is a possibility that the 1624 edition leads to the 1634 edition with the indistinct date. In a thorough investigation of the dates for these treatises, 1654 would be questionable. It should also be kept in mind that the title of the 1624 publication given by Walther and Forkel does not agree with that of 1654, but more closely resembles that of 1630. In any case, the problem cannot be fully solved until copies of the 1624 and 1634 are located.\textsuperscript{13}

\textsuperscript{10}Ibid.
\textsuperscript{11}Ibid.
\textsuperscript{12}Ibid.
\textsuperscript{13}Ibid.
As previously stated, the subject matter in the 1625, 1630, and 1654 treatises is organized by chapter as is shown in the comparative table which follows. Note the additions and changes in the order of chapters among these publications.
TABLE 1

CONTENTS OF THE TREATISES

Add. = Additions to subject matter
Chs. = Change in the sequence of material
Dele. = Deletions in subject matter
Pos. Chs. = Change in the position of chapter

<table>
<thead>
<tr>
<th>1625</th>
<th>1630</th>
<th>1654</th>
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<tbody>
<tr>
<td>Chapter I is preceded by an introductory section consisting of questions with answers. The questions concern musica practice, the elements of music considered to be the most necessary for the student to learn first, and the musical system or staff.</td>
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I. Concerning the Notes or Pitches.  
II. Concerning the Vocables.  

II. Concerning the Simplest Sound or Monad and Its Foundation. Add.  

I. Concerning the Definition, Division, and Subject of Music. Add. to 1625 and 1630; Chs.  
II. Concerning the Relations of Sound; the Quantity and Quality. Add. to 1625 and 1630. Dele. from the 1625.  

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<thead>
<tr>
<th></th>
<th>1625</th>
<th>1630</th>
<th>1654</th>
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<tbody>
<tr>
<td>III.</td>
<td>Concerning the Musical Signs.</td>
<td>Concerning the Nemes of the Sonorities.</td>
<td>Concerning the Quality of Sound and the Appearance of the Keys.</td>
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<tr>
<td></td>
<td>Pos. cha.</td>
<td>Pos. cha.; Dele.</td>
<td></td>
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<tr>
<td>IV.</td>
<td>Concerning the Intervals.</td>
<td>Concerning the Figures or Signs of the Sounds</td>
<td>Concerning the Vocables and the Conjunction and Mutation of Them With the Keys. Pos. cha. from 1630; Add to 1630.</td>
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<tr>
<td></td>
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<td>Pos. cha.; Dele.</td>
<td></td>
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<tr>
<td>V.</td>
<td>Signs Which Occur Often in Compositions</td>
<td>Concerning the Tactus. Add.</td>
<td>Concerning the Differences of Sounds and Intervals. Add. to 1630.</td>
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<tr>
<td>VI.</td>
<td>Concerning the Proportions.</td>
<td>Concerning the Intervals Pos. cha.; Add.</td>
<td>Concerning the Composed Part of a Harmonic Song, the Diad, and the Triad. Cha. (combines Chapters VII and VIII of 1630)</td>
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<tr>
<td>1625</td>
<td>1630</td>
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<tr>
<td>VIII. Concerning the Musical Triad. Add.</td>
<td>VIII. Concerning the Joining and Placement of Sounds and Melodies So That Harmonic Melodies May be Produced. Add. to 1630; Cha. (includes material of Ch. XII in 1630 MS); Dele.</td>
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<tr>
<td>IX. Concerning the Form of Harmonic Song and the Setting of the Text. Add.</td>
<td>IX. Concerning the Principles or Rules Observed in Writing Good and Pure Harmony. Add to 1630; Cha. from 1630; (includes material of Ch. XII in 1630 MS)</td>
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<tr>
<td>X. Concerning the Four Principal Melodies. Add.</td>
<td>X. Concerning the Progression of Imperfect Consonances. Add. to 1630</td>
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<tr>
<td>XI. Concerning the Modes. Pos. cha.; Add.; Dele.</td>
<td>XI. Concerning the Modes. Add. to 1630</td>
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<td>1625</td>
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<td>1654</td>
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<tr>
<td>XII. Concerning the Conjunction and Arrangement of Melodies, That Accordingly Project and Give Rise to the Harmony of the Melody. Add.</td>
<td>XII. Concerning the Ornaments of Harmony.</td>
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<tr>
<td>XIV. Concerning Syncopation Add.</td>
<td>XIV. Concerning the Form of Cadences. Add. to 1630</td>
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<tr>
<td>XV. Concerning the Form of the Cadences. Add.</td>
<td>XVI. (XV) Concerning the Fugue. Add. to 1630</td>
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<tr>
<td>XVI. Concerning the Fugue. Add.</td>
<td>XVI. Concerning the Text. Pos. cha. from 1630 (was contained in Ch. IX of 1630).</td>
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\(^{a}\)This is redundancy in the original.  
\(^{b}\)In the treatise, Chapter XV is misnumbered as XVI.
### TABLE 1—Continued

<table>
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<tr>
<th></th>
<th>1625</th>
<th>1630</th>
<th>1654</th>
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<tbody>
<tr>
<td>XVII. Concerning the Various Kinds of Compositions.</td>
<td>XVII. Concerning the Various Kinds of Compositions.</td>
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</tr>
<tr>
<td>Appendix: Concerning the General Bass or Continuo. Add. to 1630 (not contained at all in 1630)</td>
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</tbody>
</table>
Prior to the beginning of Chapter I in the Praecepta Musicæ Practicæ figurālis, there is an introductory section in which Crüger poses and answers the following questions:

What is musica practica?
It is an excellently and skillfully measured science.\textsuperscript{14}

What rules of music are necessary for the student to investigate first of all?

Wishing for free and exact instruction of this kind, one looks back to attain knowledge and observes the following:

1. Keys
2. Vocables
3. Figures
4. Intervals
5. Signs occurring in compositions
6. Proportions
7. Modes\textsuperscript{15}

Which are contained collectively and separately in the musical system.

What is the system?

The musical system is two-fold: simple and conjunct.

\textsuperscript{14}Crüger enlarges this definition in the 1630 and 1654 treatises.

\textsuperscript{15}Here Crüger is actually presenting the order of chapters for the treatise.
The single comprises five lines and four spaces, where the lines as much as the spaces proceed upwards numbered in this manner:

\[
\begin{array}{c}
\hline
5 \\
4 & 4 \\
3 & 3 \\
2 & 2 \\
1 & \text{Spaces 1} \\
\hline
\end{array}
\]

The conjunct contains all the gradations of sound in ascending order.

In Chapter I Grüber discusses the seven musical notes (A b c d e f g) and their function; the G, F, and C keys and their placement; the *Intelluctae* notes A b c d and their arrangement; and the significance of the \( \flat \) sign in regard to its presence or absence in the key signature.

The contents of Chapter I in the 1630 treatise are discussed in Chapter II of the 1654. Therefore, it is in Chapter I of the 1654 edition that the first new subject matter is inserted; it consists of a discussion of *musica practica* and *musica poetica*. From this chapter I quote as follows:

I think that music (found first among men in jubilation and lamentation to the son of God and afterwards attended to by religious persons, not common people and fools, and cared for by the most select minds in our own generation) is the chief of all pious, useful, and pleasing works.

For this reason, lest we covet things unnecessarily, uselessly, and noxiously, and thereby
staining our lives, I propose that we, by means of our skill for creating harmony, prepare our hearts to praise Him who created us; to celebrate Him who restored us when we were destroyed; and to extol Him who sanctified us when we were restored. Therefore I plan to write this work for a discordant generation and pray that it will be guided by divine auspices.

Music possesses a two-fold nature: poetica and practica.

Poetica is to compose and establish a composition skillfully and prudently.

Practica is the duty of man to perform a composition (whether by voice or musical instruments) for the sake both of just performing it and also performing it to the glory of God.

In Chapter II of the 1625 treatise, Chapter III of the 1630, and Chapter IV of the 1654, Crüger discusses the voces musicales which is probably translated best as "musical vocables" (commonly termed "syllables" today).

George Lange, the author of the profound and thorough study on the "Geschichte der Solmisation," seems to be entirely unfamiliar with Crüger's role in the history of solmization. Throughout his life as a musician and a music theorist, Crüger pondered a great deal on the subject of solmization. It is evident that he was already seriously occupied with the problem in 1625 in both the Praecepta Musicae Practicae figuralis and the Kurtzer und verstandlicher Unterricht recht und leichtlich singen zu lernen.

In the former, Crüger defines the voces musicales as "devised syllables [or vocables] by which sounds ascending and descending are expressed."

16 Fischer-Kruckeberg, XII, 620.
In the 1625 texts, he advocates the use of bocedisation or the seven Belgian vocables (bo, ce, di, ga, la, ma, ni). This system was introduced around 1547 at Antwerp by Hubert Waelrant (1517-1595), a Flemish composer (chiefly of madrigals and motets) and teacher. Waelrant probably did not utilize the system until the 1570's.

In the Prsecepta Musicae Practicae figuralis, Crüger states that the vocables progress from certain pitches, and the pitch on which they start depends on whether the melody is duralis or mollis. The small portion of material concerning the latter is borrowed literally from Lippius. Crüger also recognizes, parenthetically, the existence of the six vulgata voces musicæs, Ut, re, mi, fa, sol, la, thus revealing his attachment to both systems.

Crüger, especially in the Kurtzer, made an attempt to establish bocedisation in the Berlin school teaching with the same status as solmization. Thus, originally, Crüger was a fervent supporter of the voces belgice. When the objections to mutation (which were already pronounced by


18 Richard Lane Poole, "Hubert Waelrant (Walrand)," Grove's Dictionary ......., IX, 86.


20 Fischer-Kruckeberg, p. 621.
the middle of the sixteenth century) began to become more dominant and when the suggestions concerning this began to circulate, use of bocedisation spread in Belgium and, to some extent, in Germany.\textsuperscript{21}

In Germany, the Belgian vocables appear to have been first introduced by Seth Calvisius in his \textit{Exercitationes Musicae Duae} of 1600 and are again included in his \textit{Musicae artis praecepta nova} of 1612, the third edition of the \textit{Compendium Musicae}.\textsuperscript{22} However, Calvisius soon dropped bocedisation in favor of the seven syllable solmization, while Lippius included the Belgian vocables in his \textit{Synopsis} of 1612. As for Crüger, he attached himself to both positions. The Belgian vocable series was started from C for the \textit{cantus b} duralis and from F for the \textit{cantus b} mollis. Also the rule for the placement of the \textit{b} rotunda is that it "comes forth in the series ni through ps." As was stated previously, the small amount of material concerning this in the 1625 text is borrowed literally from Lippius.

Five years later, Crüger tacitly returns to the use of the six syllable (Ut, re, mi, fa, sol, la) series of solmization and presents himself as a decided advocate of this method in his \textit{Synopsis} of 1630. He also supports the use of the six syllable series in the 1654 treatise.

\textsuperscript{21}Ibid.

\textsuperscript{22}Ibid.
Another method of singing being used in teaching in the schools was the naming of the tones by letters (A b c d e f g h). Crüger was not at all in favor of this approach. In his last theoretical work, Der Rechte zur Singekunst (1660), he still positively supports solmization and makes favorable mention of the seven syllable series (including altered syllables) which uses the following syllables:

\[
\text{Do di, Re ri, Mi ma, Fa fi, So si, La lo, Ni na.}^{23}
\]

In Chapter III of the 1630 text and in Chapter IV of the 1654, the three types of hexachords are presented: the durus on G, the mollis on F, and the permanens on C. In connection with this, there is a brief discourse on mutation in the 1630 text (Chapter III) and a much more detailed account in the 1654 Synopsis (Chapter IV). Following this, Crüger discusses (at the end of Chapter III in the 1630 and in Chapter IV of the 1654) the formation of both the scale patterns in the cantu duro and mollis; this material is transferred from the Compendium Musicae of Adam Gumpeltzhaimer (1559-1625),\textsuperscript{24} German composer of sacred and secular songs and cantor at St. Anna in Augsburg from 1581 to 1621.\textsuperscript{25}

\textsuperscript{23}Ibid., p. 622.

\textsuperscript{24}Ibid., p. 621.

Crüger discusses proportions in Chapter VI of the 1625 text, Chapter IV of the 1630, and Chapter II of the 1654. These chapters include the *tripla* and *sesquialtera* proportions and major and minor hemiola. Sextupla proportion is added in the 1654 text. The *tripla* and *sesquialtera* call for a diminution of note values in the ratios of 1:3 and 2:3 respectively. Crüger states that the *proportio tripla* $\frac{3}{1}$ "uses either a brevis with a semibreves, or six minimae, or any of the corresponding values which are equivalent to one tactus." The *sesquialtera* $\frac{3}{2}$ uses ternary groups (*tempus perfectum*) in the proportion and also binary groups (*tempus imperfectum*) in the *integer valor*.\(^{26}\) Crüger states that the *sesquialtera* "uses either a semibrevis with a minima, or three minimae, or six semiminimae, or any of the other equivalents of one tactus." He uses the $\Phi$ sign for the *tripla* proportion and the $\circ$ and $\odot$ signs for the *sesquialtera*. However, in the case of the last sign, he does not explain the dot. In white mensural notation, the dot placed in the center of the sign $\odot$ indicates perfect prolation, or more specifically *tempus perfectum* with perfect prolation.

---

\(^{26}\) *Integer Valor* refers to the normal values of the various notes.

In the 1654 treatise, Crüger describes the sextupla proportion as follows:

The sextupla occurs when either six minimae or twelve fusae or other equivalent values are equal to one tactus. Thus the first three semiminimae or other notes corresponding in value are employed in depression while the last three are adapted to the elevation to a tactus.

The sign of the sextupla is either $\begin{array}{c} 6 \\ 4 \end{array}$, indicating that six minimae in this proportion are equivalent to four semiminimae in integer valor, or $\begin{array}{c} 8 \\ 4 \end{array}$ indicating six minimae are related to one tactua.

In his discourse on the hemiola, Crüger states that "major hemiola is nothing else but tripla; minor hemiola is nothing else but sesquialtera proportion." In his examples, the notation for the major and minor hemiola is the same as for the tripla and sesquialtera proportions respectively except that the notes are blackened.

Crüger presents the musical signs in Chapter III of the 1625 text, Chapter IV of the 1630, and Chapter II of the 1654. In these chapters, he discusses the kinds of notes and rests, the meaning of the dot, and the ligatures. Crüger gives the kinds of notes as follows:

\[
\begin{array}{cccccc}
\text{Semi-} & \text{Semi-} & \text{Semi-} \\
\text{Maxima} & \text{Longa} & \text{Brevis} & \text{Brevis} & \text{Minima} & \text{Minima} & \text{Fusa} & \text{Fusa} \\
\end{array}
\]

Notes:

\[
\begin{array}{cccccc}
\hline
\text{I} & \text{I} & \text{I} & \text{I} & \text{I} & \text{I} & \text{I} \\
\text{L} & \text{L} & \text{L} & \text{L} & \text{L} & \text{L} & \text{L} \\
\end{array}
\]

Rests:

Crüger does not give examples of rest signs for the maxima and semifusa.
Regarding the treatment of the ligatures, it is noteworthy that a much more detailed explanation (as well as more musical examples) of them is given in the 1625 text than in the later theory works of 1630 and 1654. By the time of the publication of these two treatises, Crüger apparently considered an explanation of the kinds of ligatures and their proper manner of execution to be unnecessary since they were no longer employed.

Other signs which occur in compositions are described in Chapter V of the 1625 text, Chapter IV of the 1630 and Chapter II of the 1654. In the Praecepts, Crüger discusses mainly the rotunda $b$, the quadrata $h$, and the cancellatum $\#$. He also briefly explains, but not too adequately, the following signs.

These figures with the addition of the $\Upsilon$ sign are explained in a more lucid manner in the 1630 and 1654 treatises. Crüger defines the $\Upsilon$ as a sign of finality and cadence "indicating cessation of all voices." It is also noteworthy to mention here a subsequent second use of the sign. In the 1630 and 1654 treatises in the examples of canonic writing, the $\Upsilon$ sign is employed in the dux and is placed above the final note of the canon, thus indicating the final note of the comes.
In relation to this discussion of signs, it is to be observed that Crüger was involved in the early beginnings of the use of key signatures. Like Galeazzo Sabbatini\(^{27}\) (b. ?, c. 1590-d?, 1662), Crüger recognized only two key signatures, the one with a flat and the one without it. Lorenza Penna\(^{28}\) (1613-1693), though he alludes to the practice of "modern" composers employing as many as three sharps or flats in a key signature, usually distinguishes only between signatures with a flat and those without one.

Crüger's discourse on the intervals is found in Chapter IV of the Praecepta, Chapter VI of the 1630 Synopsis, and Chapter V of the 1654 Synopsis. In the 1625 text, he defines an interval as "a certain distance between two sounds." He states that after the unison, there are seven kinds of intervals: seconds, thirds, fourths, fifths, sixths, sevenths, and octaves. He then adds that all of these intervals may be perfect or major and imperfect or minor. Crüger then describes each interval, giving ample musical examples. Valid definitions are given for all the intervals except for one, the semitone (minor second). Crüger correctly states that the minor second may be classed according to its notation as either a major semitone or


\[^{28}\text{Ibid., p. 135.}\]
minor semitone; however, the error is made when he reverses the definitions of the major semitone and minor semitone. This does become perplexing because with this reversal, the minor semitone is defined as being either naturale or fictum and this is erroneous, for it is the major semitone which possesses the dual classification. Therefore, the musical examples, being also reversed, are likewise subject to mis-identification. This error, however, is completely corrected in the 1630 treatise and is again correctly presented in the 1654 text.

In the Praecepta, Crüger's nomenclature of the intervals is also interesting, especially for the fourth and the fifth. He describes the tritone as a perfecta quarta containing three whole tones, and the diatessaron (perfect fourth) as an imperfecta quarta containing two whole tones and a semitone. He also employed the perfecta and imperfecta classifications for the fifth. This time, the tritone, considered as a diminished fifth, is referred to as imperfecta and the perfect fifth is therefore classed as perfecta, whereas the perfect fourth was called imperfecta. The major sixths and sevenths are classed as perfecta, the minor sixths and sevenths as imperfecta and only major and minor sevenths are discussed. The perfect octave or diapason is classed as perfecta and the diminished octave or semidiapason is called imperfecta; the use of the latter interval is prohibited.
In the 1630 and 1654 treatises, Crüger classes all the intervals, with the exception of the octave, as either major or minor. The augmented fourth and the perfect fourth are designated as the major and minor fourths respectively; the diminished fifth is referred to as a minor fifth and the perfect fifth, as a major fifth. Crüger also states that the minor second may be classed as either a major or minor semitone; furthermore, the major semitone may be either naturales or fictum.

In Chapter VII of the 1630 text and Chapter VI of the 1654, Crüger arranged the consonances in the order of their perfection as follows: (1) the octave, (2) the fifth, (3) the fourth, (4) the major third, (5) the minor third, (6) the major sixth, and (7) the minor sixth.

Crüger, like Calvisius\textsuperscript{29}, divides dissonances into two groups: (1) dissonance by itself and (2) dissonance by accident. In other words, dissonant diads are dissonant in themselves and are absolute dissonance or are dissonant by accident. The absolute dissonances are the major and minor seconds and sevenths. Diads which are dissonant by accident are classed as either diminished (diminuta) or augmented (superflua). Intervals designated as augmented abound in semitones; intervals lacking semitones are called diminished.

\textsuperscript{29}Ralph Harold Robbins, \textit{Beiträge zur Geschichte des Kontrapunkts von Zarlino bis Schütz} (Berlin: Trilltsch & Huther, 1938), p. 86.
Crüger states that the augmented fourths are either ordinaria or extraordinaria. An ordinaria augmented fourth proceeds upward from the note F in the ♭ quadrata to ♭♮, or from the note B♭ to e. Extraordinaria augmented fourths are those in which the highest notes are sharpened. Crüger gives examples of augmented and diminished fourths, fifths, and octaves. He further states that from the dissonance by accident, a common rule in the harmony is established, in the fact that it is not proper to place Mi against Fa in consonance.

As far as his theoretical framework is concerned, Crüger extended it to include more than just diatonic tonality. In continuance of Zarlino's concept and mode of thought, he considered the triad to be the center of theoretical thought. In relation to this, Lippius, the Alsatian theorist and theologian, was one of the first to regard the trias harmonica perfecta as the symbol of the Divine Trinity. Though Crüger did not possess as keen a theological focus as Lippius, he still supported and remained very near the principle of trias harmonica perfecta which was fundamental to Baroque musical perception up to J. S. Bach. Crüger's emphasis on the triad with its resultant harmonic implications can be noted as a forward-looking aspect,
though he actually has said little that was not already stated by Zarlino in 1558. The trias is discussed in Chapter VIII in the 1630 treatise and Chapter VII in the 1654 text.

Crüger also continued with the old proposition, "mi et fa sunt tota musica" (originally indicating the practice of solmization with the discrimination of b♭ and b♭), which is fundamentally and universally determined as the discrimination between major and minor.\(^{32}\)

Crüger's discourse concerning the modes appears in Chapter VII of the Praecepta and in Chapter IX of both the 1630 and 1654 treatises. In the 1625 text, he defines the modes as "certa harmoniae genera quae omnem melodiam intra certos fines ac terminos continent, & ad peculiarem affectum inflectunt."\(^{33}\) This definition is varied only slightly in the later texts with really no change in the basic meaning. In all three works, Crüger states that there are seven modes, but that when each is extended by the interval of a fourth, there are, of course, fourteen modes. He still retains the names of the twelve church tones including the Ionian and Aeolian. The thirteenth and fourteenth modes, which he calls the Hyperaeolian and Hyperphrygian, are more

\(^{32}\)Ibid.

\(^{33}\)"A certain kind of harmony which contains all melodies within certain boundaries and limits, and which inflects them with particular affects."
commonly known as the Locrian and Hypolocrian. Crüger gives the Ionian and Hypolionian modes as the first modes; the Dorian follows as the second mode. Here he is truly modern for he is using Zarlino's new numbering and Glareanus' full series of modes (set up in 1547), though Glareanus rejected the thirteenth and fourteenth modes. Crüger states further that the modes are classed as either authentic or plagal and discusses the basis and manner of this classification. He defines the authentic modes as those having the combination of a triad with a fourth written above it, and the plagal modes as those with a fourth written below; each authentic mode and its corresponding plagal mode have the same triad.

In the 1630 and 1654 treatises, Crüger states that modes are naturallyiores, if they begin with harmonica naturaliori (major) triads, and molliores, if they begin with molliori (minor) triads. Therefore the naturallyiores include the Ionian, the Lydian, and the Mixolydian; the molliores, the Dorian, the Phrygian, and the Aeolian. Since Crüger divides the modes into these two categories, he is thus revealed as being conscious of the foundation or groundwork of the major and minor system.

Crüger derived the thirteenth and fourteenth modes by the construction of triads from the Hypophrygian on b ♭ (f is raised to f♯) and the hypoaolian on e (e is lowered to e♭). Crüger referred to the transposed triads as triades
In regard to his treatment of the modes, Crüger generally follows Calvisius and Lippius, except for his method of transposition which is new and originates with him. He proceeds from the aesthetical consideration, not from the practical, as Calvisius. For example, the Hypoionian, the Mixolydian, and the Aeolian are usually transposed a fifth below, but because of their deep, dark, and melancholy timbres, they are (according to Crüger) more satisfactorily transposed a fourth below enabling the generation of a more "gladsome" harmony. Therefore Crüger, in a most interesting manner, advocates choosing and transposing the modes in accordance with whatever "affect" the composer wishes to depict.

In the Praecepta, Crüger, after his discussion of the modes, presents twenty-two four-voice canons employing the different modes. The examples are set to text with the texts being made up primarily of adages and homilies. Crüger cites no sources for these texts; however, according to Cassell's New Latin Dictionary (pp. 70, 610 and 353), the verses of examples III, VIII, and XIV may be ascribed to Horace, Vergil, and Cicero respectively.

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34 Blankenburg, II, 1806.

35 Fischer-Krückeberg (XII, 616) states that there are twenty-one canons. There are, however, twenty-two, for the twenty-second canon is again numbered twenty-one.
<table>
<thead>
<tr>
<th>Example</th>
<th>Text</th>
<th>Mode</th>
<th>Composer</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>Initium sapientiae timor Domini (The beginning of wisdom is the fear of the Lord)</td>
<td>Ionian, Hypoionian</td>
<td>Crüger</td>
</tr>
<tr>
<td>II</td>
<td>Aurora, musis amica (Dawn, friend to muses)</td>
<td>Ionian, Hypoionian</td>
<td>Crüger</td>
</tr>
<tr>
<td>III</td>
<td>Semper avarus eget (Always the covetous man is in need)</td>
<td>Aeolian, Hypoaeolian</td>
<td>Crüger</td>
</tr>
<tr>
<td>IV</td>
<td>Nufquam tuta fides (Always keep faith)</td>
<td>Lydian, Hypolydian</td>
<td>Adam⁶⁶ Gumpeltzheimer</td>
</tr>
<tr>
<td>V</td>
<td>Pudicitia non auro vendenda (Virtue is not gold for selling)</td>
<td>Mixolydian, Hypomixolydian</td>
<td>Crüger</td>
</tr>
<tr>
<td>VI</td>
<td>Laus excitat ingenium (Praise arouses talent)</td>
<td>Aeolian, Hypoaeolian</td>
<td>Crüger</td>
</tr>
<tr>
<td>VII</td>
<td>Ora &amp; labora (Pray and labor)</td>
<td>Aeolian, Hypoaeolian</td>
<td>Adam Gumpeltzheimer</td>
</tr>
<tr>
<td>VIII</td>
<td>Trahit sua quemque voluptas (Pleasure for its own sake attracts everyone)</td>
<td>Dorian, Hypodorian</td>
<td>Christoph Thomas Walliser</td>
</tr>
<tr>
<td>IX</td>
<td>Opus sunt iritmenta malorum (Wealth is the incentive of evil)</td>
<td>Dorian, Hypodorian</td>
<td>Crüger</td>
</tr>
<tr>
<td>X</td>
<td>Mundana gloria vana (Worldly glories are vain)</td>
<td>Mixolydian, Hypomixolydian</td>
<td>Crüger</td>
</tr>
<tr>
<td>XI</td>
<td>Fides est anima virae</td>
<td>Mixolydian</td>
<td>Adam</td>
</tr>
</tbody>
</table>

⁶⁶ At the beginning of some of the musical examples, examples, the initials "A.G." and "C.T.W." are found. These are the initials of Adam Gumpeltzheimer and Christoph Thomas Walliser.

See: Fischer-Krückeberg, XII, 616.
sicut anima est vita corporis (Feith is the breath of man, just as breath is the life of the body)

XII Bleif from(m) und halt dich recht. (Stand devout and hold yourself right)

XIII Festina lente (Hasten slowly)

XIV Ordo memoriae lumen afferit (An orderly memory affords insight)

XV Discite eunt anni more fluentis aquae (Learn that the years pass as the flowing of water)

XVI Ingenium industria alitur (Industry nourishes talent)

XVII Virtus sudore paratur (Virtue is obtained by labor)

XVIII Vexatio dat intellectum (Vexation grants per-ception)

XIX Obedientia mater felicitatis (The mother of happiness is obedience)

XX Variam dant otiam mentem (Leisure bestows a varied mind)

XXI Non tibi per ventos affa columba venit (Not to you does the dove of peace fly through the winds)
In the 1630 and 1654 treatises, Crüger devotes a large amount of space to extensive musical examples of the modes and transpositions of the modes. These examples are not the same as those appearing in the Præcepta and they are not set to text. The $\times$ sign is employed in the musical examples sometimes to indicate the cancellation of a flat and, at other times, to designate the function of the $\#$ sign. These musical examples alone provide an interesting study in such matters as the treatment of dissonance, chord doublings, and harmonic progressions.

The following examples are to provided to show the difference in Crüger's notation of modal examples in the 1625, 1630, and 1654 treatises. Here is the second canon as Crüger notates it in the Præcepta.
These examples are contained in the 1630 Synopsis.

Exemplum Aëolii Regularis
The following example is from the 1654 Synopsis.
Even though Crüger's works and writings in the early Baroque show an indication of a growing instrumental sense, his emphasis is still primarily on the composition of vocal music. Gustave Reese makes special mention of the fact that Crüger advocated the use of a bass rather than a cantus firmus as the point of departure for a composition. 37 This particular stress is seen even more poignantly in the 1654 treatise than in the 1630. In relation to vocal composition, the various kinds of vocal ornamentation, which were merely named in the closing chapter of the 1630 text, are fully explained in the 1654 treatise at the end of Chapter XVII on the various kinds of musical forms. Here a lengthy section is devoted entirely to the discussion of the vocal ornaments; many musical examples accompany the definitions. The types of ornamentation discussed are as follows: accentus, tremulus, gruppo or groppi, tirata, trillo, passaggio, and exclamatio. Crüger's connection with Andreas Herbst's textbook of 1660 is evident in that he still presents himself as an essential mediator of Zacconi's method of detached grace notes (Gesangsmanier) of the seventeenth century. His treatment of diminution and articulata pronuntiata are also significant. 38

In Chapter XII of the 1630 Synopsis and in Chapters

37 Reese, p. 60.

38 Blankenburg, II, 1808.
VIII, IX, and X of the 1654 text, the principal subject matter is the composition and arrangement of melodies, the rules of harmonic progression, and the progression of imperfect consonance. Crüger's harmony rules are, for the most part, rather conservative and centered chiefly around his interpretation of triad harmony. Thus, he really makes no major changes in the concept of harmony in the modern sense. Crüger presents his principles of harmonic progression in a very methodical manner, first giving the rules for the proper progression of the perfect consonances and then the rules for the imperfect consonances. In the 1654 treatise, Crüger devotes an entire chapter to the progression of imperfect consonance, but he really says nothing which differs fundamentally with the 1630 text.

Chapter XV of the 1630 Synopsis and Chapter XIV of the 1654 are concerned entirely with the clausulis formalibus. The contents of Crüger's rules on the formation of cadences and on voice leading are derived from the writings of Calvisius. Moreover, several of the musical examples are copied from Calvisius' Melopoeia which was published in Erfurt in 1592 and Magdeburg in 1630. Crüger presents twenty examples of cadences of which the seventeenth (à 6) is probably the most noteworthy. This example contains a

39 Robbins, p. 96.

40 George Grove, "Seth Calvisius," Grove's Dictionary
common, but interesting Baroque suspension. Here I have reduced the six staves to three.

This particular \(6\frac{5}{4}\) structure is termed by Glen Haydon one of the variations of the auxiliary six-four chord that developed in the first Netherland School (1400-1450). Concerning this he states the following:

Later, as the feeling for dissonant treatment became more refined and as the value of the use of the dissonance in producing strong rhythmical effects was more clearly appreciated, another variation came into more common use, namely the \(6\frac{5}{4}\) form.\(4\frac{3}{4}\)

In this \(6\frac{5}{4}\) structure, the sixth progresses to the fifth, forming a \(5\frac{4}{4}\) dissonance before the fourth resolves to the third. Haydon states further that his was used on the fifth or the first degree of the scale.\(4\frac{2}{2}\)


\(^{42}\)Ibid.
Crüger classifies the cadences as follows: (1) the perfect and imperfect cadences, and (2) the modal cadences (the primaria on the tonic; the secundaria, on the dominant; the tertia, on the mediant; and the peregrina, on a tone or semitone above one of the three notes of the triad). Werckmeister, like Crüger, was a church musician and he also regarded a knowledge of the modes as a necessary requirement for the really competent musician. He also prescribed the use of these same cadence formulas. 43

Crüger then follows with a brief and almost superficial discussion of the fugue which he regarded as "a truly estimable embellishment of music." He considered the fugue as difficult to deal with from a compositional standpoint, but he felt that it was certainly an ingenious and effective form and a most valuable contribution to musical scholarship. Crüger defined the fugue as a certa modulationis using at least two voices (the dux and the comes), for the most part, in imitation and repetition. The term modulationis has traditionally meant the change of pitch in a single line and therefore refers to melody. Hence the term certa modulationis is probably best translated in this particular context as "a certain melodic structure (or procedure)." Crüger then goes on to describe the fuga ligata (strict imitation) and fuga soluta (free imitation). He further

states that, whether *ligata* or *soluta*, the fugue is either *eiusdem modulationis* (same melodic procedure) or *diversa modulationis* (different melodic procedure) and then explains, in more detail, the differences between these latter classifications. It is noteworthy that Crüger rejects the counterpoint rules of Jan Pieters Sweelinck (1562-1621), and this provides positive proof that Sweelinck's rules originated before Crüger's text.\(^{44}\) In the 1654 treatise, minor improvements in the text were made in the chapter on the fugue, but none of them are of major concern.

In Chapter XVII of both the 1630 and 1654 treatises, Crüger discusses kinds of musical forms. He states that compositions may be employed for ecclesiastical purposes, or they may be devoted to other areas such as ethics, politics, and economics. Crüger classifies compositions into two large groups, those with text and those without text. Under the first classification, he names the concerto, the motet, the madrigal, the dialogue, the villanella, the canzona, the serenata, the ballata, and the aria. The second classification, the works without text, is still further divided into *preludia* and *chorea*. The *preludia* include such forms as the symphony, the fantasy, the sonata, and the toccata. The *chorea* include dance forms such as the padovena, the passamezzo, the galliard, the courante, the bransle, the

\(^{44}\text{Fischer-Krückeberg, p. 615.}\)
volta, the allemande, the mascherada, and others.

Crüger only lists these forms with no explanation of their origin, design, or structure. He states that sufficient information concerning these forms and their application may be found in the third volume of the *Syntagma Musicum* of Michael Praetorius.

The last item for discussion is the small appendix, written in German, which Crüger added to the 1654 *Synopsis*. It concerns the general bass and, for the most part, is transcribed word for word from the sixth chapter of the third volume of the *Syntagma Musicum* of Michael Praetorius, published in 1619. The title, "De Basso Generali, seu continuo," is also the same for the chapter mentioned in Praetorius text. Crüger briefly describes the general bass as the fundamental voice part for compositions such as concertos or motets. He also credits Lodovico da Viadana (1564-1645) with the invention of the general bass. It is to be noted that in the beginning of the appendix Crüger emphasizes strongly the usefulness of the general basses for conductors. He followed with the practical application of this by adding a figured bass, as well as a *basso seguente*, to his magnificats for double chorus, in which the organ has explicit instructions to remain silent at certain times. In this appendix, Crüger presents a set of principles concerning

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45 Arnold, p. 93.
the arrangement and figuring of the basses. He describes continuos which are based on stepwise progressions or in seconds and others using larger intervals mainly, i.e., thirds, fourths, and fifths; the includes examples.

In regard to the figuring above the basses, Crüger indicates that the b and # signs above the bass always apply to the note a third above the continuo bass note. In the case of a double figure such as 43, the first denotes the nature of the dissonance in relation to the bass and the second, the note to which it resolves. The figures 43 and 4# indicate suspensions in which the third is delayed in a root position triad; similarly, 76 is used to indicate a delayed root in a chord of the sixth. He also gives the figures 765, 565, 343, and #4# with these accompanying examples.
Crüger uses a 7 to designate the seventh chord in root position and a 6 for the chord of the sixth.

One last item to be mentioned is the errata notabiliora which Crüger inserts between Chapter XVII and

\[ \text{This is surely a printing error and should be 8.} \]
the appendix. The errata gives the page number and line on which the error occurs and the correction. Among the three treatises examined here, the 1654 is the only one containing a table of corrections.
CHAPTER IV

CONCLUSIONS AND SUMMARY

As a music theorist, Johann Crüger truly possessed a dual nature characterized by an avowed conservative attitude with a modern or progressive approach. Moreover, he was sufficiently objective to avoid purely emotional considerations.

Crüger based his works largely on the theoretical writings of Gioseffo Zarlino, Johannes Lippius, Seth Calvisius, Michael Praetorius, and Andreas Herbst, occasionally making a literal transference of material from their texts.

Crüger's earliest theoretical works, the Praecepta Musicæ Practicæ figuralis (1625) and Kurtzer und verstandlichcr Unterricht recht und leichtlich singen zu lernen (1625) are designed primarily as elementary studies in music theory and are related to the rudimentary theoretical writings of Heinrich Faber and Nikolaus Listenius). In the Praecepta, the most important chapters are those devoted to bocedisation and the modes.

The Synopsis Musica of 1630 is an excellent example of one of the earliest complete composition textbooks written in the seventeenth century. Gustave Reese states
that "this book is clearly representative of the transi-
tional character of its time, as may be seen in its simul-
taneously conservative and progressive nature."¹ This trea-
tise also serves as a clear compendium of the theoretical
thought of its time. Its second edition, the Synopsis
Musica of 1654 is equally deserving of the same statements
of definition. In comparison to the 1630 Synopsis, the work
does contain certain changes in the sequence of material, as
well as some additions. Both texts have some extremely
interesting discussions, the most essential and significant
ones being those concerning the intervals, the trias
harmonica perfecta, the rules of harmonic progression, the
consonances and dissonances, the modes and their transposi-
tion, solmization, and the basso continuo. The latter is
discussed only in the Synopsis of 1654. Crüger does not
generally expand the proportions of the Synopsis of 1630,
but the new revision of 1654 appears to have been acknowl-
edged as a separate and distinguished work.

Crüger plays an interesting role in the history of
solmization. Throughout his life as a musicien and theo-
rist, he pondered much of this subject. In the theoretical
work of 1625, he clearly supports the use of bocedisation or
the Belgian vocables which were devised by Hubert Waelrant.
However, in a parenthetical manner, Crüger did mention the

existence of the six syllable solmization (Ut, re, mi, fa, sol, la), thus revealing his attachment to both positions. By 1630 Crüger had become a decided advocate of the six syllable solmization and continued to support this series in his Synopsis Musica of 1654. In his last theoretical work, *Der Rechte zur Singekunst* (1660), Crüger also expressed a favorable attitude toward the employment of the seven syllable series (Do di, Re ri, Mi ma [the flatted mi], Fa fi, So si, La lo [the flatted la], Ni re [the flatted ni]).

Crüger was also involved in the early beginnings of the use of key signatures. He recognized only two, the one with a flat and the one without it.

In regard to the modes, Crüger uses Zarlino's new numbering and Glareanus' full set of modes plus the thirteenth and fourteenth modes which Glareanus rejected. In his treatment of the modes, Crüger proceeds from the aestheticical consideration, not from the practical as Calvisius. Therefore Crüger advocates choosing and transposing the modes in accordance with whatever "affect" the composer wishes to depict.

Crüger extended his theoretical framework to include more than just the diatonic tonality. In continuance of Zarlino's concept and mode of thought, he considered the triad to be the center of theoretical thought. In relation to this, Johannes Lippius was one of the first to regard the
triss harmonica perfecta as the symbol of the Divine Trinity. Though Crüger did not possess as keen a theological focus as Lippius, he is still very near to the principle of triss harmonica perfecta which was fundamental for Baroque musical perception up to Bach.

Crüger really made no significant change, in the modern sense, in the concept of harmony, which primarily fulfills the aim of a universal understanding of the words in the German musical perception of the Baroque. With this in mind, Crüger's interpretation of the triad harmony is provided in the Baroque Affektenlehre (doctrine of affections) which is revealed to be firmly established in his system. This is already shown in his tonal aesthetics, in which he expanded the respective ranges within the individual modes. His connection with the Affektenlehre is clearly disclosed by his treatment of words and texts. Even though Crüger's writings and works in the early Baroque reveal an indication of a growing instrumental sense, his composition lessons are focused mainly on vocal composition.

From 1640 till about 1653, Crüger's creative poetical power was at its peak and his abilities as a composer and an editor began coming together. Much of Crüger's fame rests on his many fine chorale melodies which were the products of his compositional work with Johann Franck, Johann Heermann, and Paul Gerhardt. The fine quality of composition is found in such chorales as Jesu, meine Freude (1653); text by
Franck), *Nun danket alle Gott* (1648; text by Martin Rinkart),
*Jesus, meine Zuversicht* (1653; text is attributed to Luis
Henriette, Electressa of Brandenburg [1627-1667]), *Was ist
die Ursache aller solcher Plagen?* (1640; text by heermann),
*Schmücke dich, o liebe Seele* (1649; text by Franck), *Du, o
schönes Weltgebäude* (1649; text by Franck), *Ach Gott und
Herr* (1640; text probably by Martin Rutilius) and others.

Alec Harman states the following concerning the chorale com-
position.

The development of German Protestant music was
profoundly influenced by the Lutheran congregational
hymn or "chorale" (see p. 299). Although new texts
and tunes continued to be published throughout the
seventeenth century, not all of these found a per-
manent place in the service hymnbooks. The melodies
of Johann Crüger 1598-1662 and the poems of Paul
Gerhardt 1607-1676 represent the highest achieve-
ments of this second period of chorale composition.2

Though Crüger really introduced very little new mate-
rial in his writings, he was skilled in gathering and organ-
izing logically and efficiently the many theoretical ideas.
Johann Crüger cannot be classed as an equal with the
greatest masters of the century, but he is held in more
esteem than many composers for his theoretical principles
and his rare versatility as a theorist, composer, teacher,
director of choral music, editor, and organist are indubi-
tably worthy of much respect. In *Die Musik in Geschichte

und Gegenwart, Walter Blankenburg very appropriately states in his article on Grüger that the German cantor gave a decided character to the musical life of Berlin in the middle of the seventeenth century, and was certainly one of the most influential music theorists of seventeenth century Germany.
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