

# J.S. BACH

## 413 CHORALES ANALYZED

A STUDY OF THE HARMONY OF J.S. BACH



CHRISTOPHER CZARNECKI



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### ANALYZED

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## Introduction

This unique edition of the Bach chorales is the end result of my own journey into these works to glean what I could from the great master in order to improve myself as a musician and gain deeper insights into harmony and composition as well. From the first time I heard some of these chorales played in my music theory course at a local community college I have had an ongoing fascination with the logic and beauty of them. That which began as a simple notion towards deepening my understanding eventually grew into this book. When I consider that countless musicians have dissected these works for more than 200 years and the mania about all things regarding J.S. Bach I was surprised to find that there was nothing similar to this book already in existence.

After analyzing all 413 chorales I can truly say that my initial, if simple, objectives at musical self-improvement have been succeeded many times over. Often, many of my suppositions about harmony were turned upside down (or perhaps rightside up) and I was forced to alter or abandon some of the ideas about music that I had adapted from my own formal music education. J.S. Bach's adherence to the now outdated thorough-bass style of composition resulted in viewpoints and musical solutions that are most often lost on this generation of musicians who are trained under an altogether different paradigm. It is my hope that this edition might, in some small way, provoke a re-examination of the older style in order to regain some of the lost gems of our collective musical heritage.

I am certain that anyone who undertakes a similar course of study will be rewarded with a breadth of musical wisdom that can only enhance one's understanding not only of the music of J.S. Bach but all the great musicians who followed after him. I am also certain that this book will make the course of study considerably easier for the eager musician to take as the seemingly endless insights and principles are made plain here with hundreds of notes and helpful pointers. My objective in presenting this edition is to allow the modern musician an easier path into understanding the musical logic and methods of J.S. Bach. Anyone who wishes to truly master the depths of harmony will find no better resource than the chorales of J.S. Bach.

I wish to express my gratitude to the many people who have helped me in the process of bringing this book to completion. I am especially indebted to John Ferrara, Dr. Clive Henery, Mark Martufi, Dr. Donald Miller, and Dr. Douglas Rubio for giving me advice, encouragement, insight, and a generous portion of their valuable time.

Soli Deo Gloria  
Christopher Czarnecki



# Preface

This study of the chorales of J.S. Bach is intended to be limited to the harmony and harmonic vocabulary of this great master using modern chord symbols and harmonic analysis. The nature of 18th-century music however necessitates that the reader not neglect the melodic content at the expense of the beauty of the harmony. Bach's music is so intertwined with the warp of melodic content and the woof of the resulting harmonies that it is often difficult, if not impossible, to separate the two. Keeping this in mind, this study is not meant to be a comprehensive treatment of the thorough-bass system that Bach championed, but rather a contemporary look at these masterpieces in terms that the modern musician will find more accessible than the largely lost art of figured bass.

In the course of preparing this study it became evident that several of the chords and other recurring harmonic phenomena that Bach uses throughout these chorales simply do not fit so nicely into the common modern chord notational system or the typical Roman numeral harmonic analysis. These chords and harmonic phenomena have been marked by an asterisk and helpful footnotes. A brief explanation of these items can be found throughout the remainder of this preface.

The music student who wishes to delve further into the treatment of Bach's harmonic aesthetic is strongly urged to study C.P.E. Bach's treatise *Essay on the True Art of Playing Keyboard Instruments*. It is from this book that most of the unusual insights about Bach's music that would otherwise have eluded a 21st century person were gained. I would also point the diligent reader to Johann Philip Kirnberger's book *The Art of Strict Musical Composition*. Kirnberger was one of J.S. Bach's more famous students, and although he began to incorporate Rameau's ideas into his work (which Bach rejected), there are many helpful items to be found there. I would be remiss if I didn't include F.T. Arnold's massive two volume work *The Art of Accompaniment from a Thorough-Bass* as a most excellent source of information regarding 17th- and 18th-century music. Bach himself is known to have kept a copy of the music theory book *Thorough-Bass Accompaniment according to Johann David Heinichen* in his personal library, which is also a useful resource on this topic. Finally, Bach's method of thorough-bass instruction has been preserved for us in the book *J.S. Bach's Precepts and Principles for Playing the Thorough-Bass or Accompanying in Four Parts*, which was allegedly dictated by Bach to one of his students at Leipzig.

The logic of Bach's "musical science," which might not be so evident to the modern musician, has much to do with the preparation, application, and resolution of various dissonances<sup>1</sup> and the many ingenious ways that he brings resolution out of tension. The treatises and essays that I have listed above will give the earnest music student a more precise understanding of the paradigm and processes of Baroque-era music that Bach operated in than simply approaching it from a modern viewpoint.

I should point out to the musicology enthusiasts that the large number of chorales in this collection unfortunately do not reflect newfound treasure that was unearthed in some private collection but rather are the result of combining existing Bach collections and finding a few items that were not found in all of them. In the interest of thoroughness I decided to include all of the different pieces even when the variations were somewhat minor.

## The Modern Chord Symbols

Over the past several decades the modern musician has developed and used a form of notational shorthand whereby the chord that is intended to be played at any given time is notated above the staff. I have followed this practice here as a way of easily identifying the harmony as it progresses. However, since there is not necessarily a universally accepted standardized chord symbol system, I have borrowed freely from across the modern notational spectrum in order to form a cohesive and consistent system in this collection. The symbols that I have selected for use are based on brevity as well as clarity, because Bach's harmonic rhythm can at times change on every 16th note, and the horizontal space that is available is not always conducive to such notation. In a few instances I have had to invent symbols in order to articulate what Bach is doing that the modern system has no form for. The symbols I employ in this text are explained below.

### Triads

Shown below is a C Major scale harmonized with the attendant triad for each note in the scale. The Major Triads (found on the 1st, 4th, and 5th degree of the scale) are simply designated with the corresponding capital letter.

The Minor Triads (found on the 2nd, 3rd, and 6th degree) are distinguished by including a lower case "m" after the upper case letter. The Diminished Triad (occurring only on the 7th degree in major) has a small circle "o" attached directly after the upper case letter.

<sup>1</sup> Bach considered any intervals above the bass other than octaves, perfect 5ths (in most situations), 3rds, and 6ths (in most situations) to be dissonances. See (6), (7) & (8) in C.P.E. Bach's Chord Catalogue below.

1 2 3 4 5 6 7  
C Dm Em F G Am B<sup>o</sup>

Melodic Minor  
Cm<sup>Δ</sup> Dm7 E<sup>b+Δ</sup> F7 G7 A<sup>o</sup> B<sup>o</sup>

Here is the same concept as applied to the minor modes:

Natural Minor  
Cm D<sup>o</sup> E<sup>b</sup> Fm Gm A<sup>b</sup> B<sup>b</sup>

Harmonic Minor  
Cm D<sup>o</sup> E<sup>b+</sup> Fm G A<sup>b</sup> B<sup>o</sup>

Melodic Minor  
Cm Dm E<sup>b+</sup> F G A<sup>o</sup> B<sup>o</sup>

Notice that the only new type of symbol appears at the 3rd degree of the Melodic and Harmonic Minor scales. The Augmented Triad (which only appears on the 3rd degree of these minor scale types) is notated by placing a “+” after the upper case note designation.

The four types of triadic chord symbols are:

- C Major (1,3,5)
- Cm Minor (1,<sup>b</sup>3,5)
- C<sup>o</sup> Diminished (1,<sup>b</sup>3,<sup>b</sup>5)
- C+ Augmented (1,3,<sup>#</sup>5)

### Seventh Chords

The symbols for the seventh chords that appear in the common scales are illustrated in a like manner below:

Major  
C<sup>Δ</sup> Dm7 Em7 F<sup>Δ</sup> G7 Am7 B<sup>o</sup>

Natural Minor  
Cm7 D<sup>o</sup> E<sup>bΔ</sup> Fm7 Gm7 A<sup>bΔ</sup> B<sup>b7</sup>

Harmonic Minor  
Cm<sup>Δ</sup> D<sup>o</sup> E<sup>b+Δ</sup> Fm7 G7 A<sup>bΔ</sup> B<sup>o7</sup>

There are seven different types of seventh chords found in the family of Major and Minor Scales. They are clarified in the list below.

- C<sup>Δ</sup> Major Seventh (1,3,5,7)
- Cm7 Minor Seventh (1,<sup>b</sup>3,5,<sup>b</sup>7)
- C7 Dominant Seventh (1,3,5,<sup>b</sup>7)
- C<sup>o</sup> Diminished-Minor Seventh (1,<sup>b</sup>3,<sup>b</sup>5,<sup>b</sup>7)
- C<sup>o</sup>7 Diminished Seventh (1,<sup>b</sup>3,<sup>b</sup>5,<sup>b</sup>7)
- Cm<sup>Δ</sup> Minor-Major Seventh (1,<sup>b</sup>3,5,7)
- C+<sup>Δ</sup> Augmented-Major Seventh (1,3,<sup>#</sup>5,7)

The reader should note that I have used the symbol “Δ” to indicate whenever a Major Seventh is present in a chord. The last two chords on the list above are somewhat rare in the chorales, but they do occur at times (usually in a passing chord/passing note situation).

### Ninth Chords

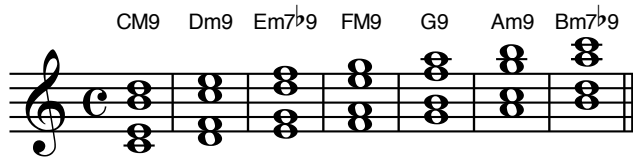
Bach uses several situations where a ninth is present in the chord construction. The first and most common type of this sort is what might be considered an “Add9 Chord” to the modern reader. It is simply a triad with an added ninth. (ex. C,E,G,D or 1,3,5,9) This particular chord is most often a part of a 9-8 suspension in the chorales. It should be noted that, although it may seem odd, Bach has no aversion to use a minor ninth (m9) at times in his music. When the minor ninth is present I have notated the difference in the chord symbol by placing a flat in front of the nine. In order to save space I have abbreviated these (add9) symbols by replacing the word “add” with a forward slash (/):

Ex. C/9 Dm/9 Em/<sup>b</sup>9 etc.

The second common type of chord found in the chorales that employs an interval of a ninth in its construction is very much like the modern type of “Ninth Chord” that is used today. In Bach’s time this chord was called a “Nine-Seven Chord” (see C.P.E. Bach’s Chord Catalogue below). In this situation, the chord consists of a root note, a third, a seventh, and a ninth. (ex. C,E,B,D or 1,3,7,9) This note grouping occurs most often in root position but there are times when other inversions can be found in the chorales. Because the fifth is not included in this forma



tion, there are no Diminished or Augmented types of this chord. The chord symbols for the most commonly used types of Ninth Chords are illustrated in C Major below:



There are two other types of “Ninth Chords” that Bach uses in his music (the Nine-Six Chord and the Nine-Four Chord). Below I give some examples of the symbol for a “Nine-Four Chord.” This chord can be viewed as a triad with the octave and the third replaced by the ninth and the fourth respectively. It can be the result of passing tones, or of an appoggiatura, or the dissonant nine and four can be prepared according to the strict form of a suspension (or, in this case, a double suspension). In strict form, the nine and the four resolve down by step into the consonant chord tones.

Ex. Nine-Four Chord (1,4,5,9)  
 A/9sus B/9sus D/b9sus E/b9sus F/9sus

I describe the Nine-Six Chord and the Nine-Four Chord in greater detail below (in C.P.E. Bach’s Chord Catalogue). They require special attention as they are not so familiar in our time.

### Miscellaneous Chord Symbol Items

The most common type of suspension that occurs in the chorales is the 4-3 suspension where the fourth above the root position bass resolves to the third. Such a chord can be referred to in our times as a “Sus4 Chord.” Typically, the Major or Minor Triad is arrived at upon resolution although C.P.E. Bach allows for the Diminished Triad to be treated in this way as well (see The Five-Four Chord below). I have notated the symbol by shortening it as illustrated here:

Ex. Suspension (1,4,5)  
 Gsus Asus B<sup>b</sup>sus Csus Dsus

On a few occasions Bach executes a 4-3 suspension where both the third and the fourth are present simultaneously. So one could say that the note grouping would be (1,3,4,5 or, perhaps more clearly 1,3,5,11). In these instances I have opted to symbolize such a harmonic grouping as an “Add11 Chord” (/11) for lack of a better designation. Also, this same grouping of notes occurs more frequently in 1st inversion. I have designated these chords as “/11” chords as well. These types of chords occur most frequently as passing tones/non-resolving chords but, due to the figured-bass practice, C.P.E. Bach names them Nine-Six Chords (see below). Any type of triad can be used in

this type of situation. Here are some examples as I have symbolized them in the chorales:

Ex. F<sup>#</sup>/11 G/11 Am/11 D/11 F+/11

Often in the chorales, as the result of passing tones in the bass voice, one can find a situation where a triad in the upper three voices is on top of a non-harmonic tone in the bass. Rather than not symbolizing such instances, I have opted to notate this common phenomenon by using a “Slash Chord” type of symbol wherein the triad is named followed by a forward slash “/” followed by the letter note that is in the bass. (ex. C/F, Dm/G, Em/A, etc.)

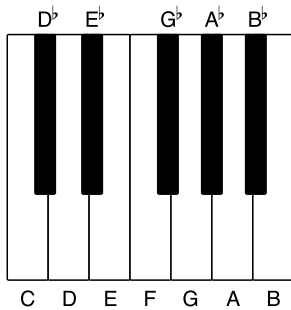
To summarize the use of slashes in my symbolism, if there is a number after the slash (ex. C/9, Dm/9, G/11, Am/11, etc.) it means there is a triad with an added dissonant tone in one of the upper three voices. However, if there is a letter after the slash (ex. C/F, Dm/G, Em/A, etc.) it means there is a triad formed in the upper three voices and the dissonant tone is in the bass voice.

Finally, chords appearing on the beat that are incomplete, or which might be considered as non-harmonic passing tones, or which might otherwise merit closer inspection are enclosed in parenthesis. (ex. (Em) (G7) (Dm7), etc.) Passing type chords that occur in between beats that contain dissonances that do not immediately resolve or have the characteristics mentioned in the sentence above I have surrounded with square brackets.

Ex. Passing and Non-Resolving type Chords  
 [C/11] [Dm7] [(Dm7)] [Dm9] [(Dm9)] [G7sus] [Asus] [(A)]

### Roman Numeral Analysis

Similar to the divergent systems of chord symbol shorthand described above, there are different schools of thought about Roman numeral harmonic analysis as well. There is no standardized system of Roman numeral harmonic analysis and most pedagogical systems differ on points here and there. While persons and schools may have their preferred system of harmonic analysis, my own observation is that no system is an air-tight model of the music that is being analyzed and is only an approximation. Therefore, I have borrowed across various systems and arrived at what I consider to be a consistent and sensible solution in this text. The main differences between the system of harmonic analysis found in this text and in some which are already in use are to be found in the treatment (here) of the minor modes. I have chosen to emphasize the differences (chromatic and otherwise) that are found in the 3 types of minor keys as compared against the major key. This can be seen clearly when we once again compare a parallel major and minor key as shown on the following page.



**Triads in Major**

<b>I</b>	<b>ii</b>	<b>iii</b>	<b>IV</b>	<b>V</b>	<b>vi</b>	<b>vii°</b>
CEG	DFA	EGB	FAC	GBD	ACE	BDF

**Triads in Minor**

<b>i</b>	<b>ii°</b>	<b>♭III</b>	<b>iv</b>	<b>v</b>	<b>♭VI</b>	<b>♭VII</b>
CE♯G	DFA♯	E♯GB♯	FA♯C	GB♯D	A♯CE♯	B♯DF

**Triads in Harmonic Minor**

<b>i</b>	<b>ii°</b>	<b>♭III+</b>	<b>iv</b>	<b>V</b>	<b>♭VI</b>	<b>vii°</b>
CE♯G	DFA♯	E♯GB	FA♯C	GBD	A♯CE♯	BDF

**Triads in Melodic Minor**

<b>i</b>	<b>ii</b>	<b>♭III+</b>	<b>IV</b>	<b>V</b>	<b>vi°</b>	<b>vii°</b>
CE♯G	DFA	E♯GB	FAC	GBD	ACE♯	BDF

With the major scale/key considered as the archetype against which the minor scales/keys are compared, we can see that the alterations in root notes include ♭III, ♭VI, and ♭VII. When you see these “flattened” Roman numerals you will know that the passage has been interpreted as being in some kind of a minor mode. There are instances in the chorales where Bach moves back and forth between different minor modes within the same chorale and even within the same phrase at times. This type of ambiguity, I felt, was easiest to interpret by using the Roman numeral system illustrated above, as it allows for a clear delineation between the different chord roots of the sixth and seventh degrees in particular. Another way of thinking about the “flatted” Roman numerals is to consider the root note of a flat three, a flat six, or a flat seven Roman numeral to be the equivalent of a minor third, a minor sixth, or a minor seventh interval away from the tonic note, respectively.

The reader should find it useful that I have used upper case Roman numerals to indicate chords containing a major third in their construction (Major Chords and Augmented Chords) and I have used lower case Roman numerals to indicate when the minor third is present in the chord construction (in Minor Chords and Diminished Chords).

In the same manner as the Modern Chord Symbols (above), I have used the “+” symbol to indicate an Augmented type of chord and I have used the “o” symbol to indicate a Diminished type of chord.

Here is an example showing the parallel modes with both the chord symbols and the Roman numeral system:

**Major**

**Natural Minor**

**Harmonic Minor**

**Melodic Minor**

The great majority of chord types in the chorales consist of Triads and Seventh Chords. Each of these chords can appear in any different inversion at any given time. Shown directly below are examples of the Roman numeral analysis for the inversions of Triads and Seventh Chords (for the tonic C Major Chord).

**Inversions for Triads**

C

**Inversions for Seventh Chords**

CΔ

Harmonic Analysis for Add9 Chords

C/9 Dm/9 Em/b9 etc.

I<sup>9</sup> ii<sup>9</sup> iii<sup>9</sup>

Harmonic Analysis for Ninth Chords

CM9 Dm9 Em7/b9 FM9 G9 Am9 Bm7/b9

I<sup>9</sup> ii<sup>9</sup><sub>7</sub> iii<sup>9</sup><sub>7</sub> IV<sup>9</sup><sub>7</sub> V<sup>9</sup><sub>7</sub> vi<sup>9</sup><sub>7</sub> vii<sup>9</sup><sub>7</sub>

I have made note of many instances of non-resolving/passing chords that are often discounted as non-harmonic passing tones. These can easily be spotted in most instances as they often include three figures stacked on top of each other in the analysis. The modern student may wish to simply disregard these as most modern music theory courses consider them practically inconsequential. I have, after much deliberation, decided to include them because (a) J.S. Bach himself considered it necessary for his own students to become familiar with even the most unusual figures (b) C.P.E. Bach mentions such items in his Essay (even if only briefly) and (c) they are so prevalent in the chorales and function in such a consistent way that I felt they ought to be noted.

In the spirit of point (a) (above), I have also included the 3 tiered figures that describe the many accented passing tones that are found in the chorales. In short, the majority (but not all) of the three-tiered figures point out items that are usually considered as some sort of an accented passing tone (or non-harmonic passing tone, or non-chord tone). I have borrowed entirely from the thorough-bass system to arrive at these figures.

Here are some of the most common examples of three-tiered harmonic analysis figures:

Dm [C/11] C/F C C/D C

ii I<sup>9</sup><sub>3</sub> I<sup>7</sup><sub>2</sub> I<sup>6</sup> I<sup>7</sup><sub>4</sub> I

Also, as I mentioned in the preceding Modern Chord Symbol notes section (above), I have indicated what I consider to be incomplete chords by placing the Roman numerals in parenthesis as well.

Bach frequently uses altered tones in his chorales that result in secondary dominant and secondary leading tone

chords. I have notated the harmonic analysis in the way illustrated below.

Ex. Secondary Dominant & Leading Tone Harmonic Analysis

V/V V<sup>6</sup>/V vii<sup>o</sup>/V vii<sup>o6</sup>/V

Finally, I have not followed the common modern systems in notating the suspension when it is found in the bass voice. Whereas many would notate a suspension in the bass as (for example) V<sup>2-3</sup>, I have followed the thorough-bass figuring shown below. See: "The Five-Two Chord."

F Csus C

IV I<sup>5</sup><sub>2</sub> I<sup>6</sup>

**Thorough-Bass Notes**

At the outset of this section it should be noted that, as useful and common as the above-mentioned Roman numeral harmonic analysis is today, Bach simply did not conceive of his music in that way.<sup>2</sup> The notion of the "fundamental bass" of any given chord inversion is an idea that comes from the writings of Jean Philippe Rameau (1683-1764). Bach was aware of the emerging new system of thought but thoroughly rejected it in favor of the older thorough-bass system which he considered to be superior. As such, it appears that Bach was not so much concerned with what the fundamental root note was at any given time but rather what note was sounding in the bass and what were the particular intervals above that bass note.

Being that thorough-bass is a largely forgotten and by-passed system long since replaced by Rameau's theoretical conception, I had initially intended to simply include the basic Roman numeral harmonic analysis (which is based on Rameau's theory). However, the more I delved into Bach's chorales the more I found that the modern system of harmonic analysis was not always adequate to the task of explaining certain areas in the chorales. So, at the risk of over complicating this study, I have included various notes and thorough-bass figures throughout this text which help to explain many of the otherwise baffling or obscure harmonic ideas contained here. As mentioned above, these unusual items are often marked by a three-tiered figuration or with an asterisk with notes on the bottom of the page, or both.

<sup>2</sup> See William J. Mitchell, ed., introduction to *Essay on the True Art of Playing Keyboard Instruments*, by Carl Philipp Emanuel Bach, trans. Mitchell (W.W. Norton & Company, Inc., 1949), pp. 17-19.

## C.P.E. Bach's Chord Catalogue

Perhaps the best way to gain an appreciation as to how Bach looked at chords is to examine his son C.P.E. Bach's list of chords and their explanation as found in his book *Essay on the True Art of Playing Keyboard Instruments*, as he is the direct inheritor of the Bach school of composition (which he calls "the learned style," as opposed to the newer galant style that was then beginning to supersede the older form). I have recreated a very brief summary of the list below. It is instructive to the modern musician to consider how much differently Bach conceived of his chords (and their usage) as you look closely at how he classified and described his chords. Once again, keep in mind that the intervals that are mentioned below are all to be considered in relation to what interval is above the bass note. Also, when considering intervals, the simple and the compound intervals often have the same meaning and are interchangeable in the descriptions that follow. (ex. M2 = M9; M6 = M13, etc.)

### 1) The Triad

This consists of only major and minor chords in root position. It is comprised of a root, third, and fifth (m3 or M3, P5, 8va). This is considered to be the most perfect consonant chord. Diminished and/or Augmented triads are considered "unnatural" and are not included here. They are classified below.

### 2) The Chord of the Sixth <sup>6</sup>

This chord is the 1st inversion triad. It may consist of a minor sixth or a major sixth (m6, M6). It is comprised entirely of consonances (third, sixth, and octave). Interestingly, the Diminished and Augmented triads in 1st inversion could be included in this category.

### 3) The Diminished Triad

This chord contains a minor third (m3), a diminished fifth (d5), and an octave (8va). It is essentially a diminished triad in root position. Since the diminished fifth interval is a dissonance, C.P.E. Bach states that it should be prepared in the previous chord and resolve downward by step.

### 4) The Augmented Triad

The Augmented triad consists of a major third (M3), an augmented fifth (A5), and an octave (8va). The augmented fifth, being a dissonance, should in most instances be prepared. The resolution of the augmented fifth is upward by step.

### 5) The Six-Four Chord <sup>6</sup>/<sub>4</sub>

The Six-Four chord is the second inversion triad. It contains a fourth (d4, P4, A4), a sixth (m6, M6), and

an octave (8va). All three types of fourth can be used in this chord (diminished, perfect, and augmented). Both the minor and the major sixth can be used. Since even the perfect fourth was considered by Bach to be a dissonance, all three types of them ought to be resolved (unless used as a passing interval). The perfect and diminished fourths resolve downward by step. The augmented fourth frequently resolves upward by step. Only the diminished fourth requires preparation.

### 6) The Four-Three Chord <sup>4</sup>/<sub>3</sub>

Here, in modern terms, is the 2nd inversion seventh chord. This chord can consist of the minor or major third (m3, M3), the perfect or augmented fourth (P4, A4), and the minor, major, or augmented sixth (m6, M6, A6). In this category Bach includes the Major Seventh Chord, the Minor Seventh Chord, the Dominant Seventh Chord, the Diminished Seventh Chord, the Half-Diminished (Seventh) Chord, and the Augmented Sixth Chord of the "French" variety. In this type of chord the third is treated as the dissonance and the fourth does not have the kind of restraints placed on it as mentioned above. This becomes obvious to the modern musician when we consider that the third above the bass is actually the seventh of the seventh chord and the fourth above the bass is actually the root of the chord. Generally the third—being considered dissonant here—ought to be prepared and resolved down by step. The fourth either remains in place or ascends (especially in a Dominant Seventh Chord).

### 7) The Six-Five Chord <sup>6</sup>/<sub>5</sub>

The first inversion seventh chord. This chord can consist of a minor or major third (m3, M3), a diminished or perfect fifth (d5, P5), and a minor, major, or augmented sixth (m6, M6, A6). Similar to above, the fifth above the bass is treated as a dissonance when it is accompanied with a sixth. As such, the fifth ought to be prepared and progress downward by step (unless the chord is a passing chord). In modern terms, the fifth above the bass in a first inversion seventh chord is the seventh of the chord. The Augmented Sixth of the "German" variety is included among this type of chord.

### 8) The Chord of the Second <sup>4</sup>/<sub>2</sub>

In modern terms this chord is the third inversion seventh chord. This chord may consist of a minor, major, or augmented second (m2, M2, A2), a perfect fourth or augmented fourth (P4, A4), and a minor sixth or major sixth (m6, M6). The bass is considered the dissonant tone and can be prepared or not (if used as a passing tone), and should always resolve down by step. Once again, in contemporary terms, the bass note here is the seventh of the seventh chord. The second above the bass can move freely as it is considered to be a consonance in this instance.

### 9) The Five-Two Chord <sup>5</sup>/<sub>2</sub>

This is a suspended chord with the suspension in the bass, which like all chords of the second, is considered dissonant. It resolves downward by step into a first inversion triad. This chord is comprised of a major second (M2) and a perfect fifth (P5). Either of these intervals may be doubled. Although Bach uses many of these chords in his chorales, they were already considered somewhat archaic by the end of his life. On occasion, in instances with accented passing tones, an augmented fifth can be used with this chord. (see page v)

Three-Two Chord showing two types of resolution

C (G7) G7 C C (Em7) G Am

I<sup>6</sup> V<sup>5</sup>/<sub>2</sub> V<sup>4</sup>/<sub>3</sub> I I iii<sup>5</sup>/<sub>2</sub> V<sup>6</sup> vi

### 10) The Five-Four-Two Chord <sup>5</sup>/<sub>4</sub>/<sub>2</sub>

Here is a Dominant Seventh Suspended Chord with the suspension in the bass. The intervals above the bass are the major second (M2), the perfect fourth (P4), and the perfect fifth (P5). The dissonant bass tone should be prepared in the previous chord and resolve downward by step into a first inversion Dominant Seventh Chord. This figure also appears frequently in a non-resolving/passing function in the chorales.

Five-Four-Two Chord in strict form

C (G7) G7 C

I V<sup>5</sup>/<sub>2</sub> V<sup>6</sup>/<sub>3</sub> I

Five-Four-Two Chord as the result of a passing tone in the bass

Em (B7) B7 Em

i<sup>6</sup> V<sup>5</sup>/<sub>2</sub> V<sup>6</sup>/<sub>5</sub> i

### 11) The Three-Two Chord <sup>5</sup>/<sub>3</sub>/<sub>2</sub>

This chord can be considered a second inversion seventh chord with the resolution of the bass retarded (delayed from above). This rare chord consists of a minor or major second (m2, M2), a minor or major third (m3, M3), and a perfect fifth or augmented fifth (P5, A5). Again, the bass is the dissonant and should be tied (or prepared), and resolves by descending stepwise. C.P.E. Bach also allows for this chord as the result of an 'irregular' (accented) passing tone wherein the dissonant bass resolves downward by step into a second inversion seventh chord. This type of chord is used sparingly in the chorales. Although this figure often resolves into a second inversion seventh chord it is not required to do so in all instances. I have given an example of each treatment of this figure below.

### 12) The Chord of the Seventh <sup>7</sup>

Here is the root position seventh chord. All types of seventh chords are included in this category. C.P.E. Bach notes three different forms of figuration regarding this chord: (1) consisting of a root, a third, a fifth, and a seventh; (2) consisting of a root, a third, a seventh, and an octave; and (3) consisting of a root, a doubled third, and a seventh. The seventh is considered a dissonance. It may or may not be prepared. In most instances (except for the major seventh interval) the seventh should resolve downward. C.P.E. Bach includes the 7-6 suspension in this category.

Chord Of The Seventh - 3 different types

Dm7 (Dm7) (Dm7)

A typical 7-6 suspension

G (Am7) G

I vii<sup>o</sup>7-6 I<sup>6</sup>

### 13) The Seven-Six Chord <sup>7</sup>/<sub>6-5</sub> <sup>7</sup>/<sub>6-5</sub>/<sub>4-3</sub>

This interesting chord exists in two forms, according to C.P.E. Bach. One consists of a major third (M3), a minor or major sixth (m6 or M6), and a minor seventh (m7). The second form is the same except it contains a perfect fourth (P4) instead of the above-mentioned major third. Normally, both the sixth (thirteenth) and the fourth ought to be present in the preceding chord and resolve down by step forming a Dominant Seventh Chord in root position. The modern musician who is somewhat familiar with jazz harmony might recognize this chord as a Dominant Thirteenth Chord and the Dominant

# Index of the Chorales

1. Ach bleib bei uns, Herr Jesu Christ
2. Ach Gott, erhör' mein Seufzen!
3. Ach Gott und Herr
4. Ach Gott und Herr
5. Ach Gott, vom Himmel sieh' darein
6. Ach Gott, vom Himmel sieh' darein
7. Ach Gott, vom Himmel sieh' darein
8. Ach Gott, wie manches Herzeleid
9. Ach Gott, wie manches Herzeleid
10. Ach, was soll ich Sünder machen
11. Ach wie flüchtig, ach wie nichtig
12. Allein Gott in der Höh' sei Ehr'
13. Allein Gott in der Höh' sei Ehr'
14. Allein Gott in der Höh' sei Ehr'
15. Allein Gott in der Höh' sei Ehr'
16. Allein zu dir, Herr Jesu Christ
17. Allein zu dir, Herr Jesu Christ
18. Alle Menschen müssen sterben
19. Alle Menschen müssen sterben
20. Alles ist an Gottes Segen
21. Als der gütige Gott
22. Als Jesus Christus in der Nacht
23. Als vierzig Tag' nach Ostern war'n
24. An Wasserflüssen Babylon
25. Auf, auf, mein Herz, und du mein ganzer Sinn
26. Auf meinem lieben Gott
27. Auf meinem lieben Gott
28. Auf meinem lieben Gott
29. Auf meinem lieben Gott
30. Auf meinem lieben Gott
31. Aus meines Herzens Grunde
32. Aus tiefer Noth schrei ich zu dir
33. Befiehl du deine Wege
34. Christ, der du bist der helle Tag
35. Christe, der du bist Tag und Licht
36. Christe, du Beistand deiner Kreuzgemeinde
37. Christ ist erstanden
38. Christ ist erstanden
39. Christ lag in Todesbanden
40. Christ lag in Todesbanden
41. Christ lag in Todesbanden
42. Christ lag in Todesbanden
43. Christ lag in Todesbanden
44. Christum wir sollen loben schon
45. Christ, unser Herr, zum Jordan kam
46. Christ, unser Herr, zum Jordan kam
47. Christ, unser Herr, zum Jordan kam
48. Christus, der ist mein Leben
49. Christus, der ist mein Leben
50. Christus, der uns selig macht
51. Christus, der uns selig macht
52. Christus, der uns selig macht
53. Christus ist ersanden, hat überwunden
54. Da der Herr Christ zu Tische sass
55. Danket dem Herren, denn er ist sehr freundlich
56. Dank sei Gott in der Höhe
57. Das alte Jahr vergangen ist
58. Das alte Jahr vergangen ist
59. Das neugeborne Kindelein
60. Das walt' Gott Vater und Gott Sohn
61. Das walt' mein Gott
62. Den Vater dort oben
63. Der du bist drei in Einigkeit
64. Der Tag, der ist so freudenreich
65. Des heil'gen Geistes reiche Gnad'
66. Die Nacht ist kommen
67. Die Sonn' hat sich mit ihrem Glanz
68. Dies sind die heil'gen zehn Gebot
69. Dir, dir Jehova, will ich singen
70. Du Friedensfürst, Herr Jesu Christ
71. Du Friedensfürst, Herr Jesu Christ
72. Du Grosser Schmerzensmann
73. Du, o schönes Weltgebäude
74. Du, o schönes Weltgebäude
75. Durch Adams Fall is ganz verderbt
76. Durch Adams Fall ist ganz verderbt
77. Ein' feste Burg ist unser Gott
78. Ein' feste Burg ist unser Gott
79. Ein' feste Burg ist unser Gott
80. Ein Lämmlein geht und trägt die Schuld
81. Eins ist noth, ach Herr, dies Eine
82. Erbarm' dich mein, o Herre Gott
83. Erhalt' uns, Herr, bei deinem Wort
84. Ermuntre dich, mein schwacher Geist
85. Ermuntre dich, mein schwacher Geist
86. Ermuntre dich, mein schwacher Geist
87. Erschienen ist der herrlich' Tag
88. Erschienen ist der herrlich' Tag
89. Erschienen ist der herrliche Tag
90. Erstanden ist der heilig' Christ
91. Es ist das Heil uns kommen her
92. Es ist das Heil uns kommen her
93. Es ist das Heil uns kommen her
94. Es ist das Heil uns kommen her
95. Es ist das Heil uns kommen her
96. Es ist genug
97. Es spricht der Unweisen Mund wohl
98. Es steh'n vor Gottes Throne
99. Es wird schier der letzte Tag herkommen
100. Es woll' uns Gott genädig sein

1.  
**Ach bleib bei uns, Herr Jesu Christ**  
 (Abide With Us, Lord Jesus Christ)  
 B.A 39, N° 1/BWV 253

A E A (F#m7) G A D A E F#m D G#o

I V<sup>6</sup> I [I<sup>7</sup>] IV<sup>7</sup> V I I V<sup>7</sup> vi I<sub>4</sub> IV<sup>6</sup> vii<sup>0</sup>

4 A E<sup>sus</sup> E A A E C# F#m F#m7 B B7

I I<sup>6</sup> V<sup>4</sup> I<sup>0</sup> V<sup>7</sup> I I V<sup>7</sup> [V<sup>6</sup>/ii] ii<sup>7</sup> V

7 E (F#m7) E C# F#m D A F#m A E<sup>sus</sup> E A

I<sup>6</sup> vii<sup>0</sup> I V/vi vi I<sub>4</sub> IV<sup>6</sup> I V<sub>3</sub> vi<sup>6</sup> vi I<sup>6</sup> V<sup>4</sup> I<sup>0</sup> V<sup>7</sup> I

35.  
**Christe, der du bist Tag und Licht**  
 (Christ, Who Art Day And Night)  
 B.A. 39, N° 22/BWV 274

$i^6$   $v^4_3$   $i$   $i^6$   $v$   $i^6$   $vii^{\circ 6}$   $i$   $6$   $ii^{\circ 6}_3$   $V$   $7$   $i$   $[vi]$

$vi$   $vi^6$   $I^6$   $IV$   $I^{\flat}_4$   $[ii^{\flat}_2$   $I^{\flat}_7$   $vii^{\circ}$   $V^{\flat}_3$   $I$   $I$   $ii^{\flat}_7$   $I^6$   $V^{\flat}_2$   $ii^6$   $V^7$   $iv^6$   $\flat VII^{\flat}_2$   $\flat VI$   $V^6$

$i$   $i^6$   $vii^{\circ 6}_3$   $V$   $7$   $i$   $V$   $i$   $i^6$   $v$   $i^6$   $vii^{\circ 6}$   $i$   $vii^{\circ 6}_3$   $V$   $7$   $I$

\* [3] This somewhat unusual figure is listed by Johann Philipp Kimberger (1721-1783) in the *Table of Consonant Chords with One or More Nonessential Dissonances as Suspensions* found in his book *The Art of Strict Composition in Music*.  
 \* [5] This figure is also listed by Kimberger in his *Table of Seventh Chords and Its Inversions with One or More Nonessential Dissonances as Suspensions*.



300.  
**O Lamm Gottes, unschuldig**  
 (O Innocent Lamb Of God)  
 B.A. 39, 148/BWV 401

F [C7sus] F Dm7 F7 B $\flat$ 9sus\* C7 F C Dm7 G C Am  
 I V $\frac{4}{3}$  I $^6$  vi $\frac{4}{3}$  V $\frac{6}{3}$ /IV IV $\frac{9-8}{4-3}$   $^7$  V $\frac{2}{2}$  I $^6$  V $\frac{4}{4}$  vi $\frac{3}{3}$  V/V  $^7$  V iii

3 Dm/9 (Em7) F B $\flat$  F C F F Dm G7 A  
 Dm C [Dm/E] Am (c7) F $^{\#4}$  Dm7

6 Dm Dm7 C F7 B $\flat$  F C $\text{sus}$  F F7 Gm/9 D $\text{sus}$  Gm  
 C G G7 E $^{\circ}$  C7sus C B $\flat$  F $^{\#7}$  Gm D G7

9 C Dm/9 (Em7) F/9 F Dm Gm7 C F  
 C7 Dm C F F $^{\#4}$  [F/B $\flat$ ] [F] F C7

ii I $^6$  ii $\frac{6}{3}$  V  $\frac{4}{2}$  I] V $\frac{3}{3}$ /IV IV vii $\frac{9-8}{3}$  I V $\frac{3}{2}$  V $\frac{3}{2}$  V $^6$  I IV $\frac{6}{4}$  V $\frac{7}{4}$ /IV [vii $^{\circ 7}$  i $^{\circ 8}$  V $^{+3}$ ] ii $^6$  V $\frac{6}{3}$ /V

V  $^7$  vi $^{\circ 9-8}$  V $^{\circ 7-6}$  I $^{\circ 9-8}$   $^7$  I $^6$  I $\frac{7}{2}$  I $\frac{6}{4}$  vi I $\frac{6}{4}$  ii $\frac{6}{3}$  V  $^7$  I

\* [ ] "Nine-Four Chord" - A chord consisting of a 9th, 5th, and 4th above the bass note. The fifth may be diminished, perfect, or augmented. The 4th should always be a P4. The 9 and 4 are prepared here (in the preceding chord) and resolve down according to form.

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- Friederick Chopin

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- Robert Schumann

*"...the most stupendous miracle in all music!"*  
- Richard Wagner

*"O you happy sons of the North who have been reared at the bosom of Bach, how I envy you."*  
- Giuseppe Verdi

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