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Application of Figurations to Keyboard Improvisation

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FLORIDA STATE UNIVERSITY

COLLEGE OF MUSIC

APPLICATION OF FIGURATIONS TO KEYBOARD IMPROVISATION

Ву

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To my parents, who always support my decisions, and love me unconditionally.

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ABSTRACT

Although there already exists a large number of theoretical and methodological works that deal with the subject of improvisation, this treatise differs from them because it focuses specifically on one major component of the improvisatory vocabulary: figuration. It explores and clarifies the importance of figuration to improvisation and demonstrates that this type of harmonic embellishment can be a powerful tool towards achieving skills in tonal improvisation.

In this treatise, the term "improvisation" refers to any change, arrangement and embellishment of an extemporized or already written piece or progression. Figurations are by no means presented in an exhaustive manner. The focus is towards the techniques of their application to the harmony in an improvisational setting.

This is done by: 1) giving the model of the basic technique of applying figuration to the harmony; 2) extracting rules and examples from selected historical thorough-bass methodologies; 3) analyzing written examples by Carl Czerny's from his Op. 200; 4) giving a variety of applicable examples of common figurations found in twentieth-century harmony textbooks that address improvisation.

INTRODUCTION

Statement of the Problem

Improvisation is commonly considered among today's classical pianists as 1) some kind of a talent and a special gift that is acquired at birth, and 2) only relevant to jazz musicians. However, both of these assumptions are not true. First, improvisation in the classical style can and should be taught—there exists a variety of historical treatises on keyboard improvisation that deal with that subject. And second, keyboard improvisation has existed much before the birth of jazz music in the early twentieth century, and it was of significant importance during the previous centuries of music history. Unfortunately, during the course of the nineteenth century the art of classical improvisation was nearly lost.

There are at least three main reasons for the decline of improvisation and they are all interrelated. First, the nineteenth century was a time when the complexity of the musical structure became too intricate to allow such flexible treatment of the musical material.

Second, at that time the composer claimed the right to be the one that determines every detail of the musical structure, not leaving much toward the performer's discretion. Improvisation even lost its home-territory, the concerto cadenza, and the cadenzas became commonly fully-composed. Probably the only purpose of improvisation at that time was for the performer to show his technical virtuosity, but even this declined after the second part of the nineteenth century.²

¹ For a good reference on historical treatises on improvisation the interested reader may consult Mayumi Ogura Randall, "The History of Piano Improvisation in Western Concert Music." D.M.A. Dissertation, (College-Conservatory of Music, University of Cincinnati: 1993).

The third reason, concerning keyboard improvisation in particular, is the disappearance of the thorough-bass notation. In the seventeenth and eighteenth centuries, the most important responsibility of a keyboardist was to be able to "realize" a thorough-bass or figured bass notation (with or without numerical notation above), with the purpose of providing extemporaneous accompaniment to another instrument or a singer. During that time the improvisational skills were taught using the principles and rules of figured bass notation. Together with the decreasing need of improvisational accompaniment in the nineteenth century, the thorough-bass principles of the past were also disappearing.

Beginning in the twentieth century, a new interest in improvisation can be noticed, both from the composers and the performers. The demand of improvisational skills for today's advanced and professional piano players is significant. Probably every pianist, in the course of his study or later in his professional career, experiences moments that require at least some improvisational skills. For example, this would be valuable when accompanying or solo-playing from a chorale-like texture or music that has not been arranged well and thus is not very impressive for a performance; this is very often the case when performing church music. Another example would be playing for ballet classes, where not only is it desirable to arrange a piece of music "in real time" so it better suits the mood of a dance, but very often a piece of music needs to be transformed drastically by changing the rhythms, adding measures, making cuts, and so on; very often, a piece needs to be "composed" at the moment. Furthermore, without a doubt, it will only enrich a pianist to be able to produce his own music spontaneously, which will contribute to his overall musical growth.

² As observed by K. Hamilton in *The Cambridge Companion to Liszt*, such a remarkable improviser as Liszt even publicly regretted his extemporaneous liberations of his early years.

This treatise is for those who have realized that demand, feel a certain gap in their pianistic ability and education, and are looking for text materials that deal with the subject.

Historical Perspective and Definitions of the Key Terms

Improvisation in music has a very broad meaning, but it certainly is not a random sequence of sounds and follows certain logic that relies upon the foundation of the style, in which the work exists.

Carol Gould, in her noteworthy article "The Essential Role of Improvisation in Musical Performance," proves that improvisation is not randomness and can include different degree of spontaneity. She states:

Many improvised performances are carefully preconceived according to patterns and formulae known to be appropriate in a particular structure. 3

One of the more or less fixed parameters in tonal improvisation concerns the harmony. Carol Gould speaks on that in the same article:

The concept of harmonic progression is itself one of the fixed fundamental structures comprising the scaffolding of the Western musical tradition. While some players improvise with great abandon, they nonetheless must respect both the limits of the genre and of the musical logic itself.⁴

If it is essential for improvisation in the classical style to respect the rules and the logic of the harmony of the style period (with its typical harmonic progressions), then the same importance would have to be given to another aspect of the musical language that concerns the texture and, specifically, the figure patterns that embellish the harmonic progression.

 $^{^3}$ Carol Gould, "The Essential Role of Improvisation in Musical Performance," The Journal of Aesthetics and Art Criticism, vol. 58, no. 2, Improvisation in the Arts (Spring 2000): 143-8.

⁴ Ibid.

The chord elaboration or the "figuring," is one of the most important components in the keyboard improvisatory vocabulary. Regardless of whether the performer uses a written chord progression, a previously memorized one, or an extemporized one, only rarely is it executed in block-chord harmonies. With the capacities that keyboard instruments give to the performer, a skillful pianist can present and vary this structure any way he wishes at the particular moment and situation.

The term "figuration" has various meanings and a look at commonly used reference materials proves this.

The New College Encyclopedia of Music considers the repetition of a certain figure as the most important feature of figuration:

The consistent use of a particular melodic or harmonic figure. 5

And "figure" as:

A short musical phrase — too short to be a genuine 'theme' — but achieving, through repetition, a distinctive character in the course of a composition. 6

The New Grove expands the meaning of the previous source and defines that figuration may or may not be made of figures, which will be evident later in this treatise for more virtuosic settings:

A kind of continued measured embellishment, accompaniment, or passage-work. In principle, figuration is composed of 'figures', or small patterns of notes occupying a beat or two of time; often, however, the term is used loosely for passage-work not readily divisible into 'figures', such as long scales or arpeggios... Sometimes it is freshly composed to accompany a slower-moving melody or to display the virtuosity of a soloist.⁷

 $^{^{5}}$ "Figuration," The New College Encyclopedia of Music, (1960).

⁶ "Figure." The New College Encyclopedia of Music, (1960).

⁷ David Fuller, "Figuration," *Grove Music Online*, ed. L. Macy; available from: http://www.grovemusic.com.proxy.lib.fsu.edu; Internet; accessed 25 September 2007.

The New Oxford Companion to Music allows an even broader meaning of the term and focuses on the "distinctive shape" of the figuration:

A term used loosely to describe passage-work or accompaniment with a distinctive shape (e.g. scales, arpeggio patterns) often derived from the repetition of an easily identifiable figure or motif....

The definition of "figure" in the same source sheds more light on the meaning of figuration:

A brief, easily distinguishable melodic or rhythmic motif which may be as long as a few bars or as short as two notes. On its own or along with more substantial ideas it may form the basis for the construction of a piece or movement; the first prelude of Bach's Das wohltemperierte Klavier is entirely built on one such musical figure. Used repetitively, often at varying pitches, a figure may play an important part in sections of thematic development. A persistent use of figures in keyboard accompaniments for songs (e.g. the leaping triplet figure in the piano part of Schubert's Die Forelle) is particularly common. Such extended use of figures in accompanying parts or in passagework may be termed figuration.

The terms "diminution" and "division" seem to be very much connected with the origin of figuration in the sixteenth and seventeenth centuries. Although they are both described as "the breaking up of notes into figures which decorate the original pitches with little garlands of quick notes or connect one pitch with another," they also differ.

Diminution, (not to be mistaken here with the other use of this term as the opposite of augmentation), "served to decorate the transition from one note of a melody to the next with passage-work, giving scope for virtuoso display." As it seems that it is applicable

^{8 &}quot;Figuration," The New Oxford Companion to Music, (1984).

⁹ "Figure," The New Oxford Companion to Music, (1984).

¹⁰ David Fuller, "Figuration," Grove Music Online, ed. L. Macy; available from: http://www.grovemusic.com.proxy.lib.fsu.edu; Internet; accessed 25 September 2007.

toward a specifically melodic embellishment, it is not a surprise, that in the sixteenth and seventeenth centuries, singers were trained to use diminution formulae, which they could apply to any piece of music.

Division, "a term used in England during the seventeenth century for a technique of improvised variation in which the notes of a cantus firmus, or ground, are divided into shorter ones," seems to have a more broad application than diminution, and thus it is more applicable in terms of the historical background of specifically keyboard improvisation. In his article in the *Grove Music Online*, Frank Traficante suggests that Christopher Simpson, in his "The Division-Violist," gives probably the best historical information for division. Simpson separates its application in three categories: "[1] breaking the ground, in which the ground bass itself is ornamented...[2] descant, which consists of dividing imagined melodies above the ground...[3] mixed division, which is a mixture of the first two." Although, the rules he gives can be applied to the study of composition, they were meant to be especially helpful to improvisers.

The beginning of the seventeenth century, when "for many composers the art of composition was more than anything the art of figuration," 14 might have been the golden era for the art. However, in the following centuries, the "symbiosis" of improvisation and figuration will remain and be a driving structural element for

¹¹ Greer Garden, "Diminution," Grove Music Online, ed. L. Macy; available from: http://www.grovemusic.com.proxy.lib.fsu.edu; Internet; accessed 25 September 2007.

¹² Frank Traficante, "Division," Grove Music Online, ed. L. Macy; available from: http://www.grovemusic.com.proxy.lib.fsu.edu; Internet; accessed 25 September 2007.

¹³ Ibid.

¹⁴ David Fuller, "Figuration," Grove Music Online, ed. L. Macy; available from: http://www.grovemusic.com.proxy.lib.fsu.edu; Internet; accessed 25 September 2007.

improvisers and composers. This treatise will focus on this symbiosis when applicable to keyboard instruments.

Purpose of the Study

This topic will be explored in order to clarify the importance of figuration to improvisation, and to demonstrate that this type of harmonic embellishment can be a powerful tool towards achieving skills in tonal improvisation. This will be done by 1) giving the model of the basic technique of applying figuration to the harmony found in Friedrich Niedt's The Musical Guide, Part I; 2) extracting rules and examples from selected historical thorough-bass methodologies, that demonstrate how improvisers were taught to embellish the chord structure, summarized in two very valuable modern textbooks-Figured Bass Accompaniment by Peter Williams and The Art of Accompaniment from a Thorough-bass as Practised in the XVIIth & XVIIIth Centuries by F. T. Arnold; 3) analyzing written examples found in probably the most influential work on improvisation in the nineteenth century-Czerny's treatise, A Systematic Introduction to Improvisation on the Pianoforte, Op. 200; 4) giving a variety of applicable examples of common figurations found in harmony textbooks that address improvisation, namely-Tonal Harmony for the Keyboard: With an Introduction to Improvisation by Gary E. Wittlich and Deborah S. Martin, Harmonization at the Piano by Arthur Frackenpohl, Keyboard Harmony: A Comprehensive Approach to Musicianship by Isabel Lehmer, Keyboard Skills by Winifred Knox Chastek, and Harmony in Pianoforte-Study by Ernest Fowles.

Although there already exists a large number of theoretical and methodological works that deal with the subject of improvisation, this treatise differs from them because it focuses specifically on one major component of the improvisatory vocabulary: figuration.

Assumptions

In this treatise, the term "improvisation" will refer to any change, arrangement and embellishment of an extemporized or already written piece or progression. I assume a comprehensive knowledge of harmony and voice leading. Although it may be helpful to performers of other keyboard instruments and music majors in general, this treatise is specifically designed for piano performance majors.

CHAPTER I

BASIC TECHNIQUE OF APPLYING FIGURATIONS

The harmonic triad has its real use in composition,...the thorough-bass is a start in composing and can actually be called a composition¹⁵ made by him who performs the thorough-bass...I am convinced that an eager learner who understands this well has already grasped a large part of the whole art. 16

This is how Friedrich Niedt starts his Chapter V, "On the Harmonic Triad," of Part I of his theory work in three volumes called *The Musical Guide*. His strong statement about the importance of the triad seems very understandable. Without a triad a thorough-bass is just a bass. The importance of a harmonic chord as a primary building element of the harmony seems well understood in the following centuries when "composition became subsumed in the concept of harmony."¹⁷

According to Niedt, the triad, also called *Radix unitrisona*, is to be taken as a primary, indivisible unit, and can be separated into three categories: *Radix simplex*, a triad that consist of three notes only, *Radix aucta*, triad with a doubled octave, and *Radix diffusa*, a fuller harmony based on the triad notes, distributed freely over more octaves.

The last of this, Radix diffusa, and the concept of thinking about the chords in that fashion seems very important for any keyboard improviser. After all, the main reason for the tremendous use and need of keyboard instruments in music, compared with other instruments, is

 $^{^{\}rm 15}$ J.S.Bach, in his ${\it Precepts}$ and ${\it Principles},$ uses here "extemporaneous composition."

¹⁶ Friedrich Erhardt Niedt. *The Musical Guide* (1700); trans. Pamela L. Poulin and Irmgard C. Taylor (Oxford: Clarendon Press, 1989), 32.

¹⁷ Carl Dahlhaus, "Harmony," Grove Music Online, ed. L. Macy; available from: http://www.grovemusic.com.proxy.lib.fsu.edu; Internet; accessed 25 September 2007.

their ability to produce harmony, as well as melody. Will the importance of any given keyboard instrument be the same if it was only able to produce three or four sounds simultaneously? With certainty this would not be the case! Carl Philipp Emanuel Bach says: "Their excellence [of the keyboard instruments] would be easy to prove, for in them are combined all the individual features of many other instruments. Full harmony, which requires three, four, or more other instruments, can be expressed by the keyboard alone." Or as Niedt put it, "If an organist is well trained, and powerful music employing from ten to twenty, up to thirty or more voices is played, then he can also play the fundamental notes on the pedal with his feet and thus demonstrate his art at will." The rest of the keyboard instruments, in comparison with the organ, may not be able to produce as full a structure as the one described by Niedt, but today's piano can come close to that in the hands of a virtuoso.

However before one goes that far in his "fancy", there are certain steps one must understand and acquire. In his Chapter VII, Vol. I of *The Musical Guide*, Niedt succeeds in giving good examples of the principal technique of this art.

After first providing a very simple four-voice chorale-like harmonic progression in C Major, I-V-I-IV-V-I, he states: "But one is not required to play in the same way all the time." Then he follows with two other examples of the same chords inverted and continues:

These few notes can also be varied (and this can be done in all thorough-basses and chorales) in such a way that the consonances…are divided and played one after the other…. In this instance, from a half-note are made two quarters or four eights,

¹⁸ Carl Philipp Emanuel Bach. Essay on the True Art of Playing Keyboard Instruments, trans. William Mitchell (New York: W. W. Norton, 1949), 27.

¹⁹ Niedt, 28.

²⁰ Ibid., 35.

and this is called 'broken'.... One can vary the bass in the same way. 21



Example 1.1. Friedrich Niedt, The Musical Guide Vol. I, Chapter VII

The examples of these simple steps, although demonstrating just a small part of the available possibilities for keyboard elaboration of a given chord structure, present the basic technique for application of rhythmical patterns or figures toward improvisation or composition. Of course, if the patterns or figures are built only on the chord's notes as in Niedt's example, they will tend to sound unsatisfying in most instances and even sterile. Therefore, for most written and improvised music, "figuration" has a much broader meaning and employs dissonance as well as consonances, neighbors, passing tones, scales, etc.

The importance of these principles toward composition and improvisation is discussed by Robert Gauldin in his textbook A Practical Approach to Eighteenth-Century Counterpoint. He states, "During the seventeenth-century composers might write a series of

²¹ Niedt, 36.

harmonic progressions in whole notes, and the performer was expected to supply his own rhythmic elaboration." 22

As Gauldin points out, this occurs in the autograph score of the C Major Prelude initially published by J.S.Bach in *Clavierbüchlein for Wilhelm Friedemann Bach*, later to be recomposed and published in *Well-Tempered Clavier*, Book I. Here it is evident that the arpeggiation is written out only in the initial measures and then assumed that it continues for the rest of the piece.



Example 1.2. J.S.Bach, Prelude in C Major from Clavierbüchlein for Wilhelm Friedemann Bach, later in WTC I 23

Robert Gauldin, A Practical Approach to Eighteenth-Century Counterpoint (Prospect Heights, IL: Wave land press, Inc., 1988), 102.

The facsimile page taken from Joel Lester, "J.S. Bach Teaches Us How to Compose: Four Pattern Preludes of the Well-Tempered Clavier" College Music Symposium; available from: http://symposium.music.org/cgi-bin/m symp show.pl?id=19#6; Internet; accessed 28 October 2007.

We have evidence to believe that the simplicity of this prelude was deliberate, since J.S.Bach's aim was to teach his students how to extemporize or compose a prelude. The prelude is worth-examining for the purpose of this study because of its clarity in applying the figurations.

The opening half-measure figure contains all the notes of the chord in five-part writing. This writing is consistent throughout (except in the last two measures) and all the notes are part of the chord, hence no use of neighbors and chromatic tones or doubling in another register than the ones already introduced in the beginning of the piece. It is evident that every measure literally repeats the pattern. This is the reason why J.S.Bach did not feel that it was necessary to write the figuration pattern all the way to the prelude's end. It was expected from the student or the performer to be extremely easy to continue the use unvaryingly until the last two measures. Furthermore, this might have been Bach's demonstration of the technique of employing figuration patterns.

The employment of consistent figurations can be observed in several other preludes from the WTC, Book I; Nos. 2, 5, 6, 15, 21. Although some of the preludes included in Book II employ this technique in certain sections (for example No. 12), in general, they tend to be more complex and imitative than the ones from Book I.

The C Minor prelude from Book I demonstrates a consistent figuration in its first section (mm. 1-24). The texture is in six voices (Ex. 1.3, A). Unlike the C Major prelude there are added neighbor tones in the figures (Ex. 1.3, B), which are sometimes diatonic and sometimes chromatic (as in m. 2 of Ex. B, in the right hand) which demonstrate more advanced elaborative technique:



Example 1.3. J.S.Bach, Prelude in C Minor from WTC I, meas. 1-3

In comparison with the C Major prelude, whose figures are made up entirely of broken chords (and thus seems understandable why Charles Gounod used the piece purely as an accompaniment for his *Ave Maria*), the figures of the C Minor prelude are more complex and represent figuration and motivic work at the same time.

David Fuller states in *The New Grove* that in comparison with motives, figuration "implies something more neutral perhaps more mechanical or stereotyped - than motivic work."²⁴ However he agrees that at times "figuration may be derived from thematic material, as it often is in Beethoven."²⁵ In addition to that, looking into the C Minor prelude it becomes evident that figures and motives can also be united into a new whole in such a way that the figures become motives and the motives become figures.

The Dissertation "Improvisation of Keyboard Preludes in the Style of J.S.Bach: A Practical Method Comprising Techniques Derived from Selected Keyboard Works" ²⁶ by Vidas Pinkevicius is a method designed to teach improvisation of preludes. It contains practical musical exercises, based on preludes included in the *Clavierbüchlein* for Wilhelm Friedemann Bach. Each unit deals with a separate figure and

²⁴ David Fuller, "Figuration," Grove Music Online, ed. L. Macy; available from: http://www.grovemusic.com.proxy.lib.fsu.edu; Internet; accessed 25 September 2007.

²⁵ Ibid.

²⁶ Vidas Pinkevicius, "Improvisation of Keyboard Preludes in the Style of J.S.Bach: A Practical Method Comprising Techniques Derived from Selected Keyboard Works" (D.M.A. diss., University of Nebraska, 2006).

provides steps towards improvising a prelude on that figure. The study is based on the assumption that "preludes from the Clavierbüchlein for W.F.Bach may also have served as models for improvisation and/or composition."

In the introduction chapter, Pinkevicius makes a basic observation that in Baroque music the three most evident compositional devices are cadences, sequences, and figures. According to him, figures are "one of the primary ways of achieving unity in a piece." As a footnote, the author defines the term "figure", as follows: "In this method, I use the term 'figure' in a more extended way. Sometimes, the figures will be as long as half a measure or even one measure and refer not only to separate voices but a texture as well." 29

His subsequent chapters are built as exercises, based on the existing composition from *Clavierbüchlein*. The three most important baroque compositional devices are studied in this order: figures, cadences, sequences.

Chapter I, for instance, is based on this figure:



Example 1.4. Pinkevicius, p.4

The texture is described: "The right hand notes are arpeggiated notes of the chord...the harmonic rhythm moves in half notes. The left hand moves in quarter notes." 30

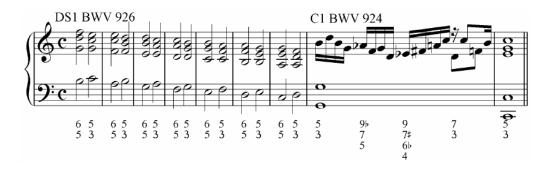
²⁷ Pinkevicius, ix.

²⁸ Ibid., 2.

²⁹ Ibid.

The next step in the unit is giving a cadence taken from another Bach piece (BWV 846a) in block-chords which is described as a "typical opening formula in many of Bach's pieces"; first in C Major and then in the relative A Minor. The major-minor shift is a very interesting, important and useful technique in improvisation, which will be discussed later in Chapters III and IV.

In the next exercises the author gives a rather common descending sequence taken from BWV 926 in block-chord, a closing cadence taken from BWV 924, and then an example of these two combined:



Example 1.5. Pinkevicius, p.7

A few pages later in the same chapter and after another exercise there is an interesting example concerning the application of the texture of the first example to the chord structure. In a footnote the author states: "The half notes in the original will become quarter notes when applying F1 [figure 1]. In order not to repeat the same bass note twice, you may play the first note an octave lower or choose the second note from one of the chordal notes that are being played in the right hand." This is important because it allows for options and the matter of choice, which is very important for improvisation.

³⁰ Pinkevicius, 4.

³¹ Ibid., 12.



Example 1.6. Pinkevicius, p.13

The chapter ends with a written composition of the whole prelude, including all of the components that were exercised during the previous ten pages. The result may seem to be somewhat of a "musical Frankenstein," built from so many different parts taken from other compositions, however one needs to keep in mind that this is done for a teaching purpose only. A masterful improvisation should be much more creative.

What is most important in this method is that it practically shows a way of breaking the improvisational process into different components. One of them, the process of the application of the figures to the harmonic progression demonstrates how ready and previously composed figures can be applied to a new harmonic progression. This is important because it suggests that the same technique can be used in applying figurations that are already existent in one's technical vocabulary.

CHAPTER II

THOROUGH-BASS ELABORATION TECHNIQUES FROM THE SEVENTEENTH AND EIGHTEENTH CENTURIES

Keyboard improvisation in the seventeenth and eighteenth centuries, based on the thorough-bass principles, had in most instances the purpose of providing accompaniment to another instrument or a singer. This is not the case when the improvisers were extemporizing a free fantasy, a genre which had the specific purpose of highlighting a performer's technical virtuosity. As Mayumi Ogura Randall observes "many of the written-out fantasies during this period included rapid passages, toccata-like figurations and arpeggio figurations." The real "show-off" improvisatory era would come a century later and culminate in the middle of the nineteenth century. In the seventeenth and eighteenth centuries, the most important responsibility of a keyboardist was to be able to add improvisatory embellishments and patterns to a written bass line (with or without numerical notation above), called thorough-bass or figured-bass, in order to produce suitable accompaniment.

The ability to just play the correct harmonies based on the bass line may have not been sufficient, as observed by Mayumi Ogura Randall. The author states that, "the success of good accompaniment depended on the performer's abilities to vary the texture to suit different musical needs." She adds, "The style of a figured bass part varies from simple block chords to more involved, rich improvised passages." Passages."

³² Mayumi Ogura Randall, "The History of Piano Improvisation in Western Concert Music." (D.M.A. diss., College-Conservatory of Music, University of Cincinnati, 1993), 22.

³³ Ibid., 18.

Although her assertions are very true and valid, in order for one to have a more detailed look at the actual techniques and ways of achieving a good accompaniment based on the thorough-bass, much more than two sentences are needed.

Fortunately there exists two very valuable modern textbooks that contain certain chapters dealing with this exact problem: Figured Bass Accompaniment by Peter Williams and The Art of Accompaniment from a Thorough-bass as Practised in the XVIIth & XVIIIth Centuries by F. T. Arnold. Both books assemble information about thorough-bass methods from a wide variety of sources between 1600-1800, and contain selected advice and examples from historical tutors such as Türk, Heinichen, Mattheson, Kollmann, and others. Although both textbooks are concerned with the thorough-bass techniques of achieving accompaniment skills, they also prove to be valuable to solo performance improvisation.

Figured Bass Accompaniment by Peter Williams starts with a chapter called "The Chords." Along with other musical advice, this chapter shows two examples of application of parallel scale motion in both hands in 3^{rds} or 10^{ths} (Ex. 2.1). Williams and the authors he is citing³⁶ does not mention anything about passing or neighbor notes in these instances; hence the scale is taken as a ready figuration that is applied to the harmony suggested by the bass:





Example 2.1. Williams, p.6-7

 $^{^{34}}$ Randall, 17.

³⁵ Peter Williams, Figured Bass Accompaniment, vol. 1 & 2 (Edinburgh: University Press, 1970); F. T. Arnold, The Art of Accompaniment from a Thorough-bass as Practised in the XVIIth & XVIIIth Centuries (London: Oxford University Press, 1931).

³⁶ C.P.E. Bach and Albrechtsberger

Chapter 2 of the same work "Hints on Accompanying," contains observation taken from J.F.Daube³⁷ that differentiates three basic accompanimental types with a suggestion of their common use:

'The simple or common': simple 3-4 part chords, left hand having the bass line only.

'The natural': following the mood of the piece, in recitatives or if the singer has a long note. Use arpeggio and broken chords, especially in the right hand.

'The artificial or composite': for pieces with one or a few performers. The right hand can imitate the solo part, adding a second melody below/above the solo line, using embellishments, suspensions, counter-subjects, or enlivening the bass line.

J.S.Bach could do this extempore, but 'exceptional caution is required'. 38

In order to show ways of breaking the chord as a way of embellishment, Williams observes musical examples by Niedt and C.P.E.Bach³⁹. The Example 2.2a shows broken chord in the bass, Ex. 2.2b in both hands. Ex. 2.2c is for the right hands and shows employment of neighbor tones in the accompanimental figure:



Example 2.2. Williams, p.36

The following Example 2.3 (taken by Williams from St-Lambert⁴⁰) seems to demonstrate a very important feature of most left hand figures: they commonly have the function of not only decorating the

 $^{^{\}rm 37}$ Daube, J.F. Genral-Bass in drey Accorden. (Leipzig, 1756). Reference by Williams.

³⁸ Williams, 29.

³⁹ Niedt, F.E. *Musicalische Handleitung* I (Hamburg 1700); Bach. C.P.E. *Versuch über die wahre Art das Clavier zu spielen* 2 vols. (Berlin 1753/1762). Reference by Williams.

⁴⁰ Saint-Lambert, M. de. *Nouveau Traité de l'Accompagnement du Clavecin, de l'Orgue* (Paris 1707). Reference by Williams.

harmony but also maintaining a constant beat. Thus, some of the lefthand figures, with their typical rhythms, become in the later centuries emblematic to a certain form or style:



Example. 2.3. Williams, p.37

Arpeggios are the most common way of embellishment and prolongation of the harmony. In order to demonstrate the various ways of treatment of arpeggios, Williams gives a musical example by Kollmann⁴¹. The particular example shows arpeggio figurations in a free manner that are not metrically grouped. Thus, they seem appropriate for mostly a Recitative type of accompaniment:



Example 2.4. Williams, p.38

The Art of Accompaniment from a Thorough-bass as Practiced in the XVIIth & XVIIIth Centuries by F. T. Arnold is an indispensible collection of selected advice and examples that concern different problems of thorough-bass performance practice. The author of the book gives his valuable observations of selected historical materials.

In Chapter III called "The General Character of Figured Bass Accompaniment" Arnold comments:

The fullness of the harmony [is] to be varied according to the circumstances.

 $^{^{41}}$ Kollmann, A.F.C."A Second Practical Guide" (1807), $2^{\rm nd}$ edn.?. Reference by Williams.

It must always be remembered that the accompanist is at all times free to vary the number of parts at his discretion. This variety is one of the greatest beauties of a good accompaniment. 42

The following Chapter IV, titled "On Certain Niceties of the Accompaniment," goes into more detail in this matter and seems particularly relevant to this study. In the "Introductory," Arnold states that this chapter deals with the historical evidence of how "to make the accompaniment flow, instead of presenting a series of perpendicular blocks of harmony." Later in the chapter Arnold successfully summarizes the most common uses of "niceties":

With regards to the means to be employed with a view to the embellishment of the accompaniment, the two most important points are, broadly: (1) the avoidance of monotony in the upper part, and (2) the establishment of a certain *continuity* by means of connecting links between the successive harmonies.

In the attainment of both objects great use is made of passing notes, bridging the interval of a Third, in any of the upper parts, or even...in the Bass itself.

Sometimes, when the Bass lends itself to such treatment, and when the effect of the principal part is in no way discounted thereby, an upper part may move in Thirds (or occasionally Sixths) with the former, thereby contributing to a general fluency of effect....

...Sometimes, again, the harmonies may be broken up in some form of arpeggio. 44

Arnold points out that probably the most valuable textbooks that deal with this type of embelishment are Mattessheson's Organisten-Probe, 1719, and Heinichen's General-Bass, 1728.

Mattessheson's Organisten-Probe (Organists Test) 45, is described by Arnold as "in no sense a School of Accompaniment," 46 and his figured

⁴² Arnold, 348.

⁴³ Ibid., 438.

⁴⁴ Ibid., 439.

⁴⁵ Johann Mattheson, 1681-1764. Exemplarische Organisten-Probe im Artikel vom General - Bass. Hamburg : Schiller und Kissnerischer Buchladen),

bass examples "designed as the foundations of independent improvisations, and not, like most of the examples given by Heinichen and Ph.Em. Bach, as subservient to imaginary principal parts." 47

Three interesting examples of Mattheson's work are presented by Arnold. All of them seem to be based on a harmonic sequence employing arpeggio figures. As an alternative to plain chords, Mattesson recommends the following elaborations, known in German as Brechnung:



Example 2.5. Arnold, p.444

The other work that is considered by Arnold very important to the subject of "niceties" of an accompaniment is Heinichen's General-

^{1719;} later to appear as $Grosse\ General-Bass\ Schule\ (Great\ Thorough-Bass\ School),\ 1731.$

⁴⁶ Arnold, 438.

⁴⁷ Ibid., 440.

Bass. 48 Arnold describes Chapter IV, Part I, called "On the Embellishment of a Thorough-Bass and the Further Practice of a Beginner" as "illuminating" and "the most systematic treatment of the subject." 49 In his chapter Heinichen first states in a general manner:

The art of embellishing a Thorough-Bass consists in not always merely striking plain chords, but in occasionally introducing a grace in all the parts and thereby giving more elegance to the accompaniment; this can be done with every comfort in an accompaniment of four, and, upon occasion, from five to six parts. ⁵⁰

Then Heinichen divides these "graces" in two classes; the first class includes "those small graces which always remain invariable" such as trills and mordents; and "the second class embraces those kind of graces which must be invented by ourselves, and which depends on the fancy of the individual; these are (1) Melody, (2) Passages, and (3) Arpeggios or broken harmonies."51

The use of arpeggios (as we are told by Arnold) in playing from a figured bass is comprehensively studied by Heinichen, and the subject is presented with many examples and explanations by Arnold. In his attempt to summarize Heinichen's rules, Arnold makes an important observation. He states:

...When an Arpeggio...is used in the right hand, the order in which the respective intervals are taken is purely a matter of taste, but when it occurs in the left hand, the Bass of the chord must always be the first note struck.⁵²

The first group of examples cited by Arnold as Ex. 15, 16, and 17 (here Ex. 2.6), shows the use of arpeggios only in the right hand. The left hand is playing plain chords most of the time, which we are told

 $^{^{48}}$ Johann David Heinichen, 1683-1729. Der General-Baß in der Composition. (Dressden : Bey dem autore), 1728.

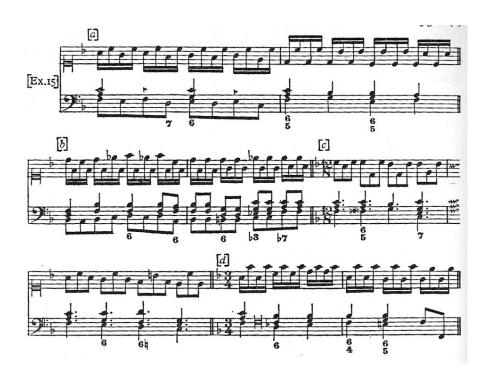
⁴⁹ Arnold, 438.

⁵⁰ Heinichen quoted by Arnold, 448.

 $^{^{51}}$ Ibid.

⁵² Ibid., 457.

by Heinichen "does not always really need to be so very full." In any case the examples shown, without being in any way exhaustive, present a good variety of improvisatory embellishments based on the Arpeggio⁵³. Some of the figures can be easily recognized from the piano literature as being used excessively in the compositions of later centuries. Probably the most obvious example of this is Ex.16b in Arnold's book, which figure clearly resembles the so-called Alberti Bass, however applied in the right hand. All of the examples look very "convenient" and "applicable" as Arnold puts it. They are used consistently as ready formulas or slightly varied but preserving their rhythmical structure. Most of them also allow a presentation of a compound melody:



Example 2.6. Arnold, p.458-9 (continues)

⁵³ Heinichen's use of "arpeggio" is in broad sense, including any broken harmonies and figures based on even a two-part harmony. His use seems close to the German *Brechnung* mentioned earlier in the observation on Matheson's work.



Example 2.6. Arnold, p.458-9 (continued)

Arnold continues with Examples 18, 19, and 20 (here 2.2), where he demonstrates an application of the same technique in the left hand. The right hand is playing chords and creating simple melodies in the top of the chords. The bottom stave in each example shows the written bass, and the top two staves represent its actual execution with both hands:



Example 2.7. Arnold, p.460-1 (continues)



Example 2.7. Arnold, p.460-1 (continued)

The examples included in Arnold's book as 21, 22, and 23 (here 2.8) present application of broken harmony in both hands in two, three, and four-part harmony. In some of the examples the figures in the both hands are moving in parallel motion, in others, in contrary motion:



Example 2.8. Arnold, p.461-2 (continues)



Example 2.8. Arnold, p.461-2 (continued)

When comparing all the musical examples and observations given in these two important books, several points recur. The most evident is that arpeggios in various ways deriving from the breaking of the chords are the most common and easiest way of escaping monotony in the accompaniment. Other figures are based on scales with different lengths, depending on the harmonic rhythm. Sometimes these scales are in one hand only, sometimes in both hands and moving in different intervals, most commonly thirds, sixths, and octaves. Although the scale passages can be explained with the contrapuntal rules for passing tones, as it was pointed out earlier, they are applied as ready formulas, directly substituting the chords.

The main technique of embellishing an accompaniment is by shortening the values of the notes called diminution. The notes of the chords are freely doubled and distributed in different registers. In recitative accompaniment the rhythm is much freer, but in most instances the adorning notes are rhythmically shaped. Commonly these structures called "figures" are well suited for the hands and once presented they can usually be kept unaltered for a certain section or a short piece of music since the harmonic progression will bring the necessary development and continuity. They were particularly useful for the harpsichord and much less for the organ. This can be explained by the differences in the sound production and sound qualities between these two instruments. While the organ's sound can be prolonged as much as the keys or the pedals are pressed, the short, dry sound of the harpsichord can only have a longer life if repeated or alternated with other notes of the harmony. The sound-production of the fortepiano and today's piano are closer in this matter to the harpsichord than to the organ and thus arpeggio figurations continue to be common in the later centuries. They seem particularly convenient for the purpose of varying and escaping the monotony because they fit well into the hands of a keyboard performer and, a large variety of figures could be invented. Some of the figures proved themselves to be more valuable than others and as a result were excessively used by improvisers and composers alike. This is certainly the case with the so-called Alberti Bass named so only because this figure was constantly used by Domenico Alberti (c1710-1746). Nonetheless, it is evident that the technique seems to be very close to the one shown in the simple examples by Niedth in the previous chapter of this treatise.

CHAPTER III

NINETEENTH CENTURY ELABORATION TECHNIQUES OBSERVED IN CZERNY'S OP. 200

Czerny's treatise, A Systematic Introduction to Improvisation on the Pianoforte, Op. 200, is one of the most essential works concerning keyboard improvisation. According to the translator and editor Alice Mitchell, the book "does not actually teach us inspired improvisation." The work is important, however, because it includes a vast number of written examples for preludes, fermatas and cadenzas, and fantasy-like improvisations, which demonstrate the new liberties taken by nineteenth-century keyboard improvisers.

The nineteenth century was a time when "it was increasingly and ultimately the composer of keyboard music, and not the improvising keyboardist, who determined the density or sparseness of texture in any given passage." Together with the decreasing need for improvisational accompaniment, the thorough-bass principles of the past were disappearing also. Mitchell comments on that in the "Translator's Foreword" to Op. 200:

Although the nineteenth century still preserved thorough-bass as a quasi-catechism for musical grammar and syntax, improvising of realizations as a critical component of the keyboardist's performance technique had virtually disappeared well before 1836, the publication date of Czerny's Op. 200. 56

Nevertheless, neither the improvisation nor the improvisational principles deriving from the thorough-bass were lost completely during

 $^{^{54}}$ Alice Mitchell, foreword to Carl Czerny, A Systematic Introduction to Improvisation on the Pianoforte, Op. 200 (New York, N.Y.: Longman Inc., 1983), xiii.

⁵⁵ Ibid., ix.

⁵⁶ Ibid.

the nineteenth century. Instead, improvisation changed its purpose and the "interest in improvisation was toward soloistic display rather than accompanimental propriety." 57

Regardless of whether it is a display of virtuosity or improvisation of an accompaniment for a solo-piano piece, Op. 200 shows that the technique of applying a common or extemporaneous figuration to an existent (or improvised) harmony is still a very powerful tool in keyboard improvisation. Chapters I and IV demonstrate examples of "arranging" a simple harmonic progression as a virtuosic structure and ways of providing an accompaniment specific and emblematic of a certain style.

In Chapter I, "Concerning Preludes," Czerny states, "Since each chord can engender the greatest variety of passagework, then even the simplest modulation⁵⁸ can be spun out into innumerable preludes, both melodious and brilliant".⁵⁹ Then he selects a "very common progression as illustration,"⁶⁰ I-vi-vii/V-I6/4-V7-I:



Example 3.1. Czerny, p.7

Czerny proves his statement masterfully (without any pretension for exhaustiveness) by revealing "what can be made out of this" 61:

⁵⁷ Alice Mitchell in the "Foreword" of Op. 200, xi.

 $^{^{58}}$ Perhaps here Czerny uses the term "modulation" in a broad sense meaning a chord progression.

⁵⁹ Czerny, 6.

⁶⁰ Ibid.

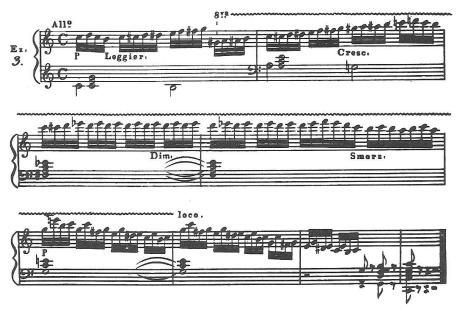
⁶¹ Ibid.



Example 3.2. Czerny, p.7

His Example 2 (here 3.2) demonstrates very little deviation from the initially stated model: the chords have exactly the same functional characteristics, the bass line is kept unchanged (except the addition of I in octave on the first beat), and the harmonic rhythm stays unaffected. Free doubling of the voices is evident, with a liberated distribution of the chords in different registers without any particular search of a prominent top voice in the right hand. The chords are presented with shorter values than in the original example, to complement the new, much faster tempo. It is evident that (as continuously underlined in the previous chapter of this treatise) adding roll-ups and arpeggiations is an easily applied way of elaboration.

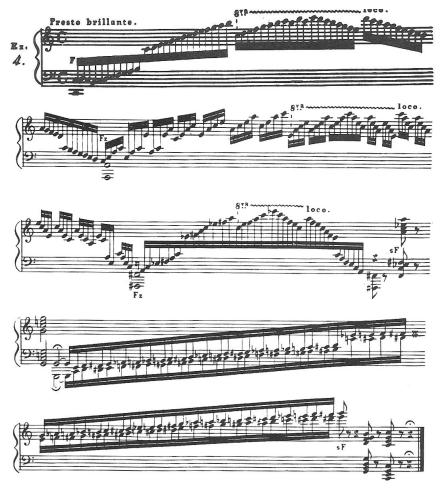
The following Example 3 (3.3) is more developed:



Example 3.3. Czerny, p.7

Here Czerny employs mostly chromatic runs as a means of embellishing the right hand. Chromatics can be seen in their pure appearance for some part (mm. 1-2), but they are also combined with other figurations (measures 5-7, where they are joined with arpeggio-like progressions). The bass in measures 1 and 2 has the addition of passing notes, and thus provides a counterpoint line to the raising chromatics in the right hand. The harmonic rhythm of the vii/V and the I6/4 in this example is augmented and thus forms a short cadenza before the final brief V7-I. The overall effect is one of an improvisatory virtuosity.

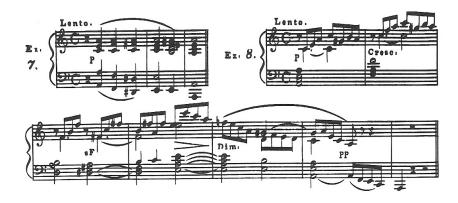
The next Example 3.4 clearly presents a way of turning this very usual chord progression into a brilliant virtuosic composition:



Example 3.4. Czerny, p.7-8

This *Presto brillante* (Ex. 3.4) is presented as an unmeasured cadenza based exactly on the same chords functionality initially stated in the "theme". Each chord is elaborated in a different manner: I is decorated with a diatonic C-Major scale; vi—with arpeggiations of the chord with its inversions; vii/V is presented with a rising and falling arpeggio followed by just the chord with a *sf*, which leads to a dramatic stop on the I_{6/4} and then a long, upward, chromatic passage in both hands suited in thirds over the almost whole keyboard; and finally, simple V7-I chords end the prelude.

Czerny follows this with a few examples that are interesting as a demonstration of a switch from Major to Minor mode. First he presents the initial progression in A Minor, followed by a slow prelude in p^{62} :



Example 3.5. Czerny, p.9

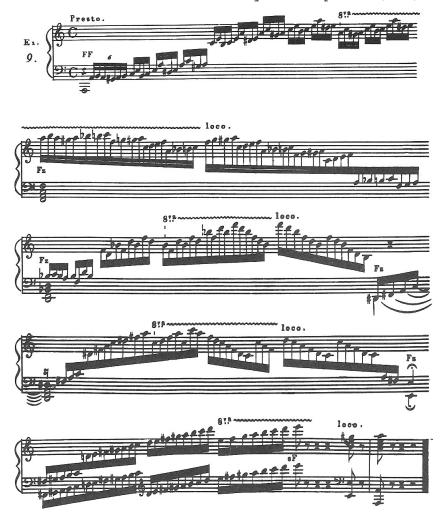
His first minor Example 7 completely follows the harmonic progression, altered to a minor mode, while Example 8 has the addition of a ii6/5 chord (m. 3) after the VI chord. This contributes to the expressiveness of the whole progression, because it triggers chromatically moving tension in the bass line when the ii°6/5 is raised afterwards to the secondary dominant. The figuration chosen to

 $^{^{62}}$ As a footnote (p.9), Alice Mitchell points out that it has become "somewhat stereotypical" for the variations in Minor to be in mostly quiet dynamics in contrast with the ones in Major being presented in usually f and ff.

 $^{^{\}rm 63}$ Additional evidence that this was the effect that Czerny was trying to produce is the sf mark on the secondary dominant.

embellish this progression seems to fully support the expressive qualities of the harmony.

The next Example 9 (3.6) is the minor equivalent of the brilliante "variation" from Czerny's Example 4 (3.4):



Example 3.6. Czerny, p.10

Again, as in Example 4 (3.4), Czerny's Example 9 (3.6) is presented as an unmeasured cadenza containing a variety of figures⁶⁴: first, a combination of broken-chord motion with the addition of chromatic dissonances; then, based on the VI chord, a very interesting

⁶⁴ Czerny's creativity in this regard is endless. One needs just to recall all the figurations employed in his opera of etudes, some of the most helpful and creative study collections ever invented for the piano student.

combination of the previous two elements—every first and fourth note is part of the chord, but all notes in between are mostly chromatically filling the gaps between the chord notes; then the ii6/5 chord from Example 8 has been substituted by a Neapolitan 6 chord and elaborated with arpeggio—like figurations. The remaining chords are presented in almost exactly the same manner as they were in the corresponding "variation" in Major: the vii/V is elaborated with a rising and falling arpeggio followed here by E in octave marked with sf representing the I6/4 and then a long, upward, passage in both hands, here a melodic—minor scale suited in octave; and the whole variation ends again with the simple V7-I.

After a few more examples, Czerny concludes:

Naturally, one must transpose these and similar examples into all keys, alternate the passagework with other suitable sections, and know how to execute everything with such ease and lack of restraint that the preludes maintain the character of the momentary fancy. 65

All of the previously cited examples demonstrate little or no deviation from the initially stated harmonic progression, and slight changes in the harmonic rhythm. Melodic lines are unimportant or even nonexistent in the most virtuosic variations. All figurations were applied in the context of the harmony only.

In Chapter IV, "Concerning Improvisation on a Single Theme,"
Czerny goes further in revealing extemporaneous techniques. The focus is now on the melody or the melodic motives which are then harmonized, elaborated, and "spun-out."

For this purpose Czerny presents a "completely arbitrary theme," 66 (Ex. 3.7) which, he admits afterwards, "is not of the most flexible

⁶⁵ Czerny, 11.

⁶⁶ Ibid., 43.

nature," but "nevertheless lends quite well to realization in [different] styles:" 67



Example 3.7. Czerny, p.43

As evident in Example 3.7 there is a lack of indication of the underlying harmony and there exists more than a few possibilities for harmonization. The overall progression, however, is clearly I--V. The theme (Ex. 3.7) is used by Czerny as the first part of a period, the second part continues the period and, naturally, moves harmonically from V to I.⁶⁸

Czerny subsequently demonstrates how this theme can be applied to "familiar genres for the pianoforte: a. Allegro (probably as the first movement of a sonata); b. Adagio (in the serious style); c. Allegretto grazioso (unadorned, or with embellishments in the gallant style); d. Scherzo presto (à capriccio); e. Rondo vivace; f. Polacca; g. Theme for variations; h. Fugue (also Canon frequently); i. Waltz, Ecossaise, March, and the like:"69



Example 3.8. Czerny, p.44-45 (continues)

⁶⁷ Czerny, 45.

 $^{^{68}}$ For the purpose of this study only the part of the example that corresponds directly to the cited theme will be of interest.

⁶⁹ Czerny, 43.



Example 3.8. Czerny, p.44-45 (continues)



Example 3.8. Czerny, p.44-45 (continued)

The harmonic structure of each variation is as noted below 70:

Theme	c:	I	-	-	V
A.	c:	i5	V9-5?	i 6	ii7-vii6/5
В.	Ab:	I5	V6/5	I6-ii6	I6/4-V5
С.	F:	I5	I5	I5	V4/3
D.	c:	i5	i 5	i 6	V4/3
Ε.	c:	i5	i5	i 5	V4/3
F.	C:	I5	I5	I5	V4/3
G.	c:	I5	vii6/5-V4/3	I-V4/3/V5	V5
I.	c:	I5	I5	I5	V4/3

As evident, the variations are harmonized freely employing inversions and substitutions of the chords. Although this is an important part of bringing interest to each new example, it certainly is only an optional alteration.

Melodically, the theme undergoes several changes. All of the examples show a very free variation of the theme, but they all keep the most prominent features—starting on the first degree of the current tonality and ending on the seventh, and keeping the two most prominent intonations of the theme (the six-five scale degree motion from the second measure and the one-seven scale degree motion from the fourth measure). The melody is then suited in an appropriate texture and ornamented accordingly.

More necessary changes can be seen in the meter and the rhythm of the existing theme. Czerny states:

Every theme, without exception, and even if it were to last for only two arbitrary tones, can serve by means of several

Example "H" is a representation of Fugue and is excluded from this chart. The chart shows only the first 2-5 measures of the actual examples: A, C, D, E, I (mm. 1-4); B, F, G (mm. 1-2); C (mm. 1-5).

modifications in meter and rhythm as the opening of all species of compositions that exist in the realm of music. 71

All of the genres imitated by Czerny have their own specific features, which include a specific rhythmical and metrical pulsation. Therefore, in order for the theme, presented in a 4/4 time signature, to "fit" the new time signatures of the imitated genres, certain changes need to take place. Thus, Example B is suited in a 2/4 time signature, with a harmonic rhythm that is twice as fast as the initial progression (changing twice per measure) and it takes only two measures for the initial progression to be presented. The rest of the examples also have different meters and harmonic tempo than the theme: Example C is in 6/8; D is in 3/4; E in 2/4; F in 3/4, with a very interesting harmonic rhythm, that changes on the first and the third beat in the first measure and on the first and the second beats in the second measure; G is in 4/4 (same as the theme, but the harmonic rhythm is twice as fast); and finally Example I is in 3/4.

In order to successfully imitate these genres, Czerny applies another very important change that concerns the texture—the applied figurations evident in the accompaniment. He is aware that these figures are ready formulas and have become very stereotypical for the composers and improvisers and are important for achieving an immediate association with a certain musical style or genre.

Thus, if variation A is just the theme presented in a fuller texture, most of the other variations demonstrate use of prominent figures. The "Adagio serioso" presented in B offers a graceful slow paced accompanimental figure in sixteenth notes, and a smooth bass line in octaves on the strong beats; the "Allegro grazioso" in C is suited in a very simple harmonic, chord structure in triplets, thus allowing the focus to be fully on the heavily ornamented melodic line; the Scherzo in D offers an appropriate (from both a technical point of view and musically) and somewhat typical accompaniment for the fast Presto tempo; E will be recognized as "Rondo" unmistakably, partially

 $^{^{71}}$ Czerny, 43.

because of its accompaniment figures; the "Polacca" in Example F, with its accented second beat (and not so much because of the figuration used) comes close to a slow Mazurka; G has the prominent overall texture of a "Theme for variation," and accompanying figuration is not needed; I as "Waltz" contains in the accompaniment possibly the most prominent rhythmical figuration of all.

The applied figurations depend heavily on the harmony, and are just a rhythmical elaboration of it, much like the diminution techniques developed two centuries earlier.

CHAPTER IV

APPLICATION OF FIGURATIONS TO THE HARMONY OBSERVED IN TWENTIETH-CENTURY TEXTBOOKS

The value of using figuration in keyboard improvisation within the context of the harmony is recognized in the twentieth century and a variety of harmony textbooks address the problem. Although these materials are mostly concerned with the further study of the harmony itself and only partially connected to improvisation, they contain examples and/or definitions of deliberately simplified common rhythmical elaborations and patterns, and/or some valuable suggestions for their application to the harmonic structure.

Tonal Harmony for the Keyboard: With an Introduction to Improvisation by Gary E. Wittlich and Deborah S. Martin is a textbook aimed towards covering common harmonic patterns illustrated with examples from eighteenth and nineteenth-century music literature. These "fundamental harmonic patterns" then are used as the basis of drills, and undergo elaboration in a number of ways. One of the chapters deals in detail with elaboration of a melody; another provides an introduction to figured bass realization, while other chapters deal with the harmonic elaboration of basic patterns. Certain chapters have sections called "Keyboard Styles" dedicated to different types of keyboard accompaniments, which is of particular interest to this treatise.

The "Keyboard Styles" section of Chapter 4 contains this advice that addresses the necessity of a higher degree of freedom when extemporaneously applying accompaniment patterns to a given melody:

Gary E. Wittlich and Deborah S. Martin, Tonal Harmony for the Keyboard: With an Introduction to Improvisation (New York, NY: Schirmer Books, 1989), vii.

In harmonizing melodies with different styles of accompaniment, you will not need to be as concerned with voice leading and doubling as in the harmonic pattern drills. Often the textures will include more than four voices, and this may cause parallel perfect intervals to arise in the accompaniment. For these drills, other considerations will be more important; for example, spacing of the accompaniment figure and choice of register for the accompaniment.⁷³

This is followed with a few very basic accompanimental-pattern examples, such as: "block or broken octave roots," and "root position block chords in different rhythmic settings." 74

The "New Keyboard Styles" section of Chapter 5 examines "broken chords", "waltz" and "divided block chords"⁷⁵ patterns presented in varied rhythms and meters. The author suggests that these elaborations may appear in both major and minor modes:



Example. 4.1. Wittlich and Martin, p.68

The figures (Ex. 4.1) are further explained:

The broken chord pattern merely arpeggiates the triad or sevenths shown in the models.... The meter can be simple or compound, duple or triple for this style.

 $^{^{73}}$ Wittlich and Martin, 52.

⁷⁴ Ibid., 51.

⁷⁵ Ibid., 68.

In the waltz pattern, as the name implies, the pattern involves a triple division. The root commonly appears on the downbeat in triple meter and on strong beasts in compound duple meter as demonstrated in the models. Other members of the chord may appear on weak beats or beat subdivisions.

The divided block chord pattern is similar to the waltz pattern, as the models demonstrate. Note that the model shown in compound duple meter could also appear in the simpler version shown below it, especially in a fast tempo. 76

What is of importance here is that these figures are defined, and therefore a model of analyzing figurations is offered. The ability to analyze patterns is valuable to an improviser, because this will allow expansion of one's figuration vocabulary. Thus, when finding an appropriate figure for improvisation in the performance literature, one will be able to adopt it and later use it in building an extemporaneous musical structure.

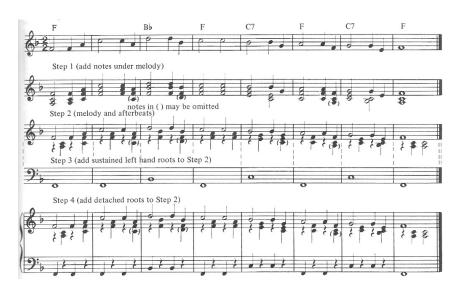
Harmonization at the Piano by Arthur Frackenpohl is a study of "harmony and styles of piano playing through the use of music literature of the common practice period, as well as folk and popular songs." It is intended as a textbook for college-level classes in Keyboard Harmony and Functional Piano, but it is suggested that it may be used for high-school music classes and piano studios. The first chapter of the examined Sixth edition, "Accompaniment and Melodic Patterns," deals with "the three basic styles of piano playing...; one hand accompaniment, two hands accompaniment, and right hand patterns (various treatments of melody and supporting harmonies in the right hand)," divided in A, B, and C sections. In the following chapters, these accompanimental patterns are recommended to be used as a way of arranging simple folk melodies. The "styles" used are very simple and mostly self-explanatory; nevertheless they offer some useful basic ideas for harmonic elaboration with patterns.

⁷⁶ Wittlich and Martin, 68.

 $^{^{77}}$ Arthur Frackenpohl, Harmonization at the Piano (Wm. C. Brown Publishers, 1962), vii.

⁷⁸ Ibid., vii.

While the one and two-hand accompanimental sections (A and B) do not bring too much new to one's figuration vocabulary, section C that deals with the right hand patterns is with a higher value because it shows distribution of the melody and the accompaniment structure in one hand. Example 4.2 offers four steps for understanding this way of elaboration—starting from the simple melody with chord symbols and ending with the harmonized and arranged texture:



Example 4.2. Frackenpohl, p.7, "Melody and Accompaniment," Norwegian

Example 4.2 is important because it shows the way of adding a vertical dimension to the keyboard texture. Variations of this type of texture are very common in keyboard performance literature; Beethoven's "Pathetique," Mvt. II, and the Chopin's Etude Op. 10, No. 3, to mention only a few, offer excellent examples of it.

Keyboard Harmony: A Comprehensive Approach to Musicianship by Isabel Lehmer is concerned with building a "working knowledge of each chord"."⁷⁹ It contains Twenty-Six Units in increasing order of complexity of the harmonic content, each divided into sections.

⁷⁹ Isabel Lehmer, Keyboard Harmony: A Comprehensive Approach to Musicianship, vol. 1 (Belmont, California: Wadsworth Publishing Co., 1967), Preface.

Section III contains short patterns "to develop fluency in the pianistic manipulation of the chord." 80

Unit Two, dealing with the Dominant chord, gives a melody and chord patterns in four-part writing, followed by example of the same melody and harmony with applied accompanimental figures made of closed and open position broken chords (Ex. 4.3):



Example 4.3. Lehmer, p.7

This is followed by a very interesting example (4.4) that uses an Alberti bass. The latter figuration has, perhaps, the most distinct shape of all that exists in the keyboard vocabulary. The New Grove of Music gives the following definition of it:

Left-hand accompaniment figure in keyboard music consisting of broken triads whose notes are played in the order: lowest, highest, middle, highest, and taking its name from Domenico Alberti (c1710-1746). Research has suggested that, obvious as this little figure may seem, Alberti was in fact the first to make frequent use of it. The term ought to be restricted to figures of the shape described and not extended loosely to other types of broken-chord accompaniment.⁸¹

While the early classical literature commonly employs this figure in the strict manner as described above and in a close-chord position, freer modifications of its shape may be noticed in the nineteenth century. Lehmer's example represents both uses—sometimes exactly

⁸⁰ Lehmer, Preface.

⁸¹ David Fuller, "Alberi bass", Grove Music Online; ed. L. Macy; available from; http://www.grovemusic.com.proxy.lib.fsu.edu; Internet; accessed 15 February 2008).

following the shape described but also making a freer use of it in an open-chord or mixed position, which represents perhaps a more "Romantic" style.

In order to fit this accompanimental figure, the melody and the harmony of Ex. 4.3 undergo modification of the meter and rhythm as demonstrated by Lehmer:



Example 4.4. Lehmer, p.8

These examples, and all others to follow, are recommended by Lehmer to be played in both Major and Minor keys, with a note suggesting that when in Minor, the melodic form of the Minor scale should be used in the melody.

Unit Three, concerned with the dominant-seventh chord, shows an elaboration of the melody by using neighboring tones. The four-part harmony of Example 4.5 has been changed to a "triple-meter accompaniment," which affects the harmonic rhythm, and the melody has added passing notes (Ex. 4.6):



Example 4.5. Lehmer, p.15

⁸² Lehmer, 15.



Example 4.6. Lehmer, p.15-16

The accompaniment figuration (Ex. 4.6) is made of broken triads (in close, open, and mixed positions) whose notes are played in the order: lowest, middle, highest, middle, highest, middle. This figure and different variations of it seems appropriate for *Adagio*-like arrangements.

The book *Keyboard Skills* by Winifred Knox Chastek has been compiled to meet the needs of courses in Functional Piano and Keyboard Lab for Beginning Music Theory as well as for "the performer who wishes to play for his own enjoyment." It includes nine sections, each using "carefully selected materials to emphasize the study of particular chords. These chords are intended to be seen, heard, and played in a wide range of accompaniment patterns." The patterns are given in sections for the left hand alone, as well as both hands.

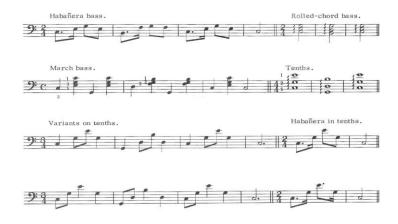
In the "Introduction," the author makes the following remarks on harmonization, that concern the choice of patterns:

Appropriate accompaniment patterns are determined by metric and design qualities of the melody, which tend to suggest a change of chord as well as a choice of inversion. Tempo and mood (style) will further suggest the rate of chord change and the most appropriate harmonic texture. 85

⁸³ Winifred Knox Chastek, Keyboard Skills: Sight Reading, Transposition, Harmonization, Improvisation (Belmont, California: Wadsworth Publishing Company, Inc., 1967), v.

⁸⁴ Ibid.

In the "Accompaniment Patterns" of Section I, the author is listing "the most common rhythmical patterns...in duple and triple rhythms." Along with the already mentioned rhythmical figures from the previous authors, there may be noted some new ones for the left hand (Ex. 4.7):



Example 4.7. Chastek, p.19

It should be noted that one can apply these and some of the previous simple examples of figurations in a more elaborated way by freely playing the single notes on the downbeats in octaves, have fuller chords, etc.

Harmony in Pianoforte-Study by Ernest Fowles is largely concerned with the cultivating of "the power of presenting harmony in [a] florid manner," thus leading to "the ultimate expression of musical thought in free extemporaneous form." The book is organized in eight parts, each containing steps and a great number of notated examples from the performance literature.

Part I is probably of greatest relevance to this treatise and to the book itself; the author describes its mastering as "the

⁸⁵ Chastek, 2.

⁸⁶ Ibid., 18.

 $^{^{87}}$ Ernest Fowles, Harmony in Pianoforte-Study (New York: Schirmer, Inc., 1918), ix.

fundamental and indispensible condition of success." It deals with the harmonies presented in a "simply-embellished form," with the use of only chord notes, distributed freely in different registers in a decorated manner.

Much like the treatise by Niedt and other materials on the thorough-bass principles, the author starts in "Step I" with the simple chord. Note 2 states:

The common chord contains but three sounds; consequently, additional units or parts can be obtained only by repeating or doubling one or more of these sounds. 89

Furthermore, the author gives an example of a simple chord presented in a decorated manner from Piano Sonata Op. 2, No. 3, I, by Beethoven, which represents a free distribution of only-chord tones of the Tonic triad, presented in a figurative manner:



Example 4.8. Fowles, p.2. Beethoven, Sonata, Op. 2, No. 3, Mvt. I

Step II suggests two ways that allow for any chord to be treated decoratively: "(a) By chords presented in the form of figures; or (b) by well-defined passages of broken chords," on the demonstrates with two examples:



Example 4.9. Fowles, p.2-3 (continues)

⁸⁸ Fowles, ix.

⁸⁹ Ibid., 1.

⁹⁰ Ibid., 2.



Example 4.9. Fowles, p.2-3 (continued)

Note 8 summarizes the whole evolution of keyboard figuration—from the necessity to just expand the harmony by breaking up the chord to the realized need of grouping and organizing the notes in a rhythmical structure:

The act of presenting a chord in decorative form is not completed by the mere succession of the sounds in the shape of figures, chordal or otherwise. Something more is required before such a passage can be said to be invested with musical significance. It is a first condition of success that the grouped figures should be presented in rhythmic form;...A second and very important condition is that the problems of stress and repose should receive careful consideration;...The third condition almost claims priority by insisting upon the expression of each progression in some definite form of time.... In brief, the student must not allow himself to ramble amid an incoherent maze of sounds; on the contrary, before reproducing his conception upon the instrument, he must cultivate the power mentally to conceive the type of progression which he desires to express. 91

The author adds to that another very valuable suggestion as Note 9, which none of the previously studied textbooks seem to address, concerning the emotional qualities of the musical structure.

Much can be achieved in the decorative expression of a common chord aided only by the elements of time, accent, and rhythm; to which must, of course, be added emotional conception. 92

This Note is of great importance, because, after all, neither a composition nor extemporization has any value without an emotional aspect.

Part II teaches more ways of decorative treatment of the harmony, by the use of auxiliary sounds. This adds, naturally, much broader

⁹¹ Fowles, 3.

⁹² Ibid., 3-4.

possibilities of elaboration figures that can be used. Diatonic and chromatic scales are treated as "scales-passages," much like the way they were treated in the thorough-bass textbooks discussed in Chapter II of this treatise. A short explanation concerning the use of scale passages in Minor is covered also; the melodic minor scale use is summarized broadly as: "the major 6th and major 7th are employed in ascending passages, the minor 6th and minor 7th in those which move downwards." Also, the author recommends the use of diatonic and chromatic auxiliary sounds in figures that start on one member of the chord and go to another, which is also commonly used in the keyboard literature and was evident in one of the examples in Czerny's Op. 200 discussed in Chapter III.

⁹³ Fowles, 36.

⁹⁴ Ibid., 37.

SUMMARY AND CONCLUSION

The discussion of the textbooks and the historical materials examined in this treatise show that the use of figuration in improvisation in different time periods was very valuable to Western-music tradition. All of the advice and examples included have been selected for the contemporary pianist. It is hoped that today's piano performer would discover that the same principles of figuration applied to improvisation can be still used today, especially because the contemporary piano player possess more theoretical knowledge and technical abilities than ever before in the history of music.

In an attempt to summarize the possibilities that the application of figurations offers, it seems rather appropriate to start, as most of the historical materials do, with the importance of the Chord and the succession of chords, or in short the harmony. The understanding of the harmonic principles of music is of primary importance to those who will attempt to extemporize on keyboard instruments, because as Fowles puts it eloquently,

It is the harmonic substratum which provides a lodgment for his fleeting thoughts; it is the harmonic chain which helps to bind them in a close unity, it is the harmonic divisions which point the way to a true rhythmic alignment, the harmonic colouring which reflects mood and contributes its wealth of effect to the portrayal of climax and repose. 95

One's assortment of memorized and slightly varied harmonic progressions was and still can be one of the most important things to help a keyboard player to extemporize. "But one is not required to play in the same way all the time," as Niedt observes concerning the block-chord harmonies. In the "The Musical Guide," Niedt explains how these harmonies can be varied and presented in a free fashion and his simple examples showed the easiest elaboration deriving from the

 $^{^{95}}$ Ernest Fowles, Harmony in Pianoforte-Study (New York: Schirmer, Inc., 1918), 87.

breaking of the chords. Evidently J.S.Bach found Niedt's technique as remarkably important as he quotes it in his *Percepts and Principles*. In the observation of thorough-bass methods of elaboration, included in Chapter II of this treatise, it is evident that arpeggios in various ways can be derived from the breaking of the chords, and thus, with or without the use of auxiliary notes, a suitable accompaniment or a solo-prelude can be produced. It is also evident that other figures, which are based on scales with different lengths, can substitute the actual chords. This seemed especially useful for more virtuosic settings as evident in the observation of Czerny's Chapter, "Concerning Preludes."

The evolution of the elaboration technique leads one towards the rhythmical and/or melodic grouping of the adorning notes. The formation of groups of notes with a specific shape and rhythm, or what would be called "figure," is evident in the thorough-bass methods cited in Chapter II. Thus, some of them became excessively used because of either their convenience or the appropriateness of their specific rhythmical shape for a particular genre, style, or form. This was evident in the observation of Czerny's Chapter "Concerning Improvisation on a Single Theme," and in the twentieth-century harmony textbooks.

The use of a typical harmonic progression with applied figures alone may have been sufficient for improvising a prelude in the seventeenth century. As shown in the dissertation of Pinkevicius in Chapter I, lifting a characteristic of a particular style or composer' progressions and figurations may be sufficient for even imitating a certain prelude style. However, one does not need to stop there. Before introducing further elaboration techniques it seems that few words about the melody are needed.

For the most part in homophonic music, an improviser can either 1) start from the harmonic progression (written or freshly composed) and then create the melody according to the harmony, or 2) he can

start from the melody, which will then be harmonized with suitable chords, thus providing accompaniment.

For the first process, I shall mention again the way Gounod used the harmonic progression of Bach's Prelude in C Major to add a melody. A simple attempt at the piano will prove that several other melodies (not necessarily of such beauty as Gounod's), can be made on top of the same harmony. In the second process, starting from an existent or extemporized melody, the harmony beneath will inevitably be suggested. In the majority of the existing cases there are, however, more than a few possibilities and it will be a matter of choice to the improviser to freely choose the exact functional characteristics. If this harmonizing can be done extemporaneously or there are suggested chords supplied with the melody, then these harmonies can be embellished using the same technique of elaboration as when starting from the harmonic structure. The melody may also suggest the style, the mood, the texture, the metric and rhythmic qualities, or the harmonic rhythm of the accompaniment. In this case, it is the pianist's choice to pick the most appropriate accompanimental figures, based on his previous experience and musicianship.

It was also shown that it is a matter of choice by the improviser, especially when he is providing accompaniment for his own solo improvisation, if he wishes that the melody heavily influences the accompanimental structure or the exact opposite. One of the biggest pleasures and responsibilities to a piano player is that he has control over the complete texture in his hands. Thus, the piano-improviser has the choice to accept the implications of the melody or to transform it in such a way that the melody is the one that fits its desired accompanimental figuration. This is masterfully demonstrated by Czerny in his examples included in the chapters of Op. 200 "Concerning Preludes," and "Concerning Improvisation on a Single Theme." Lehmer also shows how this is possible (Examples 4.3-6, pp. 47-9 of this treatise).

It is very frequent in performance piano-literature to have accompaniment and melody in one hand. The most common way, for instance (but not the only way), is to have the melody placed in the "top" voice, usually played with the 3-4-5 fingers of the right hand. The beginning of that tradition, as mentioned briefly in Chapter II of this treatise, probably comes from the thorough-bass accompaniments when it was sometimes necessary for the keyboard player to help a singer by giving his notes at the top of the chord. More information for the distribution of a melody and accompanimental figures in one hand was given by Frackenpohl (included in Chapter IV of this treatise), where he shows steps in the distribution of the melody in the top voice and the accompanimental structure played by the rest of the fingers. There is a wealth of performance literature of various figurations that are specific to one part of the hand. If used, these figural patterns can add vast richness to the improvised texture.

Some of the examples show that figures may concern the complete texture, while others may be applied to only the accompanimental part of the textures. However, even if applied to a certain part of the texture, the figures will more or less affect the whole texture. Thus, when applying certain figures, and especially if taken from a virtuosic setting found in the performance literature, it may be the only way to not only take the figuration but also the rest of the texture since this is the way it has been technically mastered. For example, as the previous paragraph suggests, when using figures that are for one part of the hand, the application of the melody will be naturally possible and easily applied in the other part of the hand. Thus, by using a recognized keyboard texture, and harmonic progression that is characteristic to a particular style, it is possible to come closer to a certain style or composer.

All this is a matter of choice to the performer-improviser. After all, it is the degree of the performance freedom that is the most important characteristic distinguishing improvisation from composed music.

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Hristo Birbochukov, a native of Bulgaria, received a Doctor of Music degree in Piano Performance from the Florida State University in 2008. He holds a Bachelor of Music degree in Piano Performance from the State Academy of Music in Sofia, Bulgaria, and a Master of Music degree in Piano Performance from Southeastern Louisiana University.