PART I
MY MOTHER’S DEATH

Part I of a dissertation submitted to the College of the Arts of Kent State University in partial fulfillment of the requirements for the degree of Doctor of Philosophy

By
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TABLE OF CONTENTS

TABLE OF CONTENTS........................................................................................................... iii

ACKNOWLEDGEMENTS........................................................................................................ iv

INSTRUMENTATION AND PERFORMANCE SUGGESTIONS.............................................. v

DEDICATION.......................................................................................................................... vi

MY MOTHER’S DEATH

    I. The Prayer Wheel ........................................................................................................... 1
    II. Leaving the House ......................................................................................................... 28
    III. Diana............................................................................................................................. 59
    IV. Long Walk Home .......................................................................................................... 115
I sincerely thank my dissertation committee members for their time, participation and insightful questions and comments offered during my defense. It was truly an enjoyable event. Also I thank Mr. David Hassler for allowing me to use his beautiful poems that are so personal and private.

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Lastly, I thank my best friend and my loving husband Ed Dauterich for his unconditional love and support throughout the process.
INSTRUMENTATION

1 Flute
1 Oboe
1 Clarinet in b-flat
1 Bassoon
1 Marimba
1 Soprano (off stage)
1 Countertenor
1 Piano
1 Violin
1 Cello

Duration: ca: 14 minutes

PERFORMANCE INSTRUCTION

On a random pitch, beginning with the sound “Boo,” the performer should exhale as long as possible, holding the pitch. Then, the performer should quickly inhale deeply before exhaling again in the same manner. The length of the vocalization may vary depending on the breath length and comfort level of each performer. The process should be repeated in random intervals.
For my loving husband Ed and our seven-month old fetus
Grand-pa held the (with pedal)
unicycle while I balanced on one
wheel.
I wanted to see how far
I could go, to learn something completely new so
when you re-turned, I could say, __________ look at me!
If I pushed off Dad's station wagon
and leaned as though I were falling, but
so my movement forward caught me. There was no other way to go.

I
practiced around parked cars, Leppo's trash cans,
and Bob by's basket-ball hoop. Dressed in coat and tie.
I pedaled circles on, I pedaled
circles on our driveway, the day we waited for your
II. Leaving the House
\( \text{strict tempo} \)
It wouldn't be ours any more,
my father explained. And
I thought I understood that day we carried everything out,
boxes of clothes, kitchen-ware, lamps and books I'd never seen
with pedal

pp
All day and then late into the
night
I helped my father,
we walked up the ramp into the dark mouth of the van,
un-til the cup-boards and clo-sets were bare,
all the rooms opened like trick doors into nothing, the house itself
a big empty box.
That night in
September I kept expecting
to salvager
127

some thing
cresc.

49
in my arms.
As the air grew chill, my father
told me I was a good boy.
freely

Years later, I won't remember what
we did with my mother's clothes.
III. Diana

$\mathsf{\text{\textcopyright 1947 (Renewed) Grammy Award}}$

\text{\textcopyright 1947 (Renewed) Grammy Award}
spoken

f Goddess! Goddess!

f Goddess! Goddess!

f Goddess! Goddess!

p

mf Di - a - na was your name,

p

f Goddess! Goddess!

f Goddess! Goddess!
Goddess! Goddess!

Di - a - na was your name of the moon,

Goddess! Goddess!
god-dess of the forest.  
Now_______it is my_____

69
Goddess! Goddess!

Goddess! Goddess!

Goddess! Goddess!

Goddess! Goddess!

Goddess! Goddess!

Goddess! Goddess!

Goddess! Goddess!

Goddess! Goddess!

Goddess! Goddess!

sprechtstimme

in - vo - ca - tion.

Goddess! Goddess!

Goddess! Goddess!

Goddess! Goddess!

Goddess! Goddess!

Goddess! Goddess!

Goddess! Goddess!

Goddess! Goddess!
Goddess! Goddess!

Di - a - na was your name,
Goddess!

Goddess!

Goddess!

Goddess!

Dia-na was your name,

of the moon,
god-ness of the forest
Now it is my
sprechtstimme

in - vo - ca - tion. in - vo - ca - tion. We
search the heavens in
pa - ja - ma feet, late sum-mer nights on the driv-
telescope, collecting data. I stand be-
hind him, distracted, moon struck.
don't want to take apart the
moon,
spy on craters and
seas.
have maps to tell us where
and the bear are supposed to
be.
Look!
he says. But I cannot
At night e - ve - ry - thing stays on
the stars, Venus, the moon,
your kiss on my cheek. The sky blinks.
Venus lays low.
approximate pitches

(Diana’s spirit: soprano off stage)

whisper

ah-

The moon’s ______ powdered face seems
to know we're looking.
Goddess! Goddess!

Di - a - na was your name,
Di - a - na was your name.
of the moon goddess of the forest.
Now it is my invocation.
attacca
death. But I know you have forgiven
me.

You - knew how ea-si-ly
I lost track of time, hovering above a puddle. That day
I walked the half mile home in two and a half hours, you were
I threw away the stick that kept time on trees and
side walks, that led me astray to poke and stir puddles, where I di-vined
long-legged stri-ders ska-ting a-cross the surface
Diana's spirit (approximate pitches)

\textit{mp} ah-

See p. v for performance instruction.
spoken sofly

I can't say what I discovered that day, what feather
or stone I pulled from the water. But I know you would have listened,
if I had told its story.  Just as now I want to explain where I've been, why I'm late to speak of you
who are the story I’m telling.
PART II

GENERATIVE PRINCIPLES IN SCHENKERIAN PERFORMANCE EXPRESSION

Part II of a dissertation submitted to the College of the Arts of Kent State University in partial fulfillment of the requirements for the degree of Doctor of Philosophy

By

H. Gerrey Noh

August 2013
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
</tr>
</thead>
<tbody>
<tr>
<td>Table of Contents</td>
</tr>
<tr>
<td>List of Figures</td>
</tr>
<tr>
<td>Chapter I: Introduction</td>
</tr>
<tr>
<td>The Art of Performance</td>
</tr>
<tr>
<td>Current State of Music Theory and Performance</td>
</tr>
<tr>
<td>Chapter II: Desired Effect and Motional Profile</td>
</tr>
<tr>
<td>Schenker’s Concept of Performance</td>
</tr>
<tr>
<td>Schenker’s Concept of “Desired Effect”</td>
</tr>
<tr>
<td>Hypothesis I</td>
</tr>
<tr>
<td>Time, Musical Time and Motion in Music</td>
</tr>
<tr>
<td>Motion in Music: Tonal Motion</td>
</tr>
<tr>
<td>Musical Motion from the Perspective of <em>The Art of Performance</em></td>
</tr>
<tr>
<td>Musical Motion as a Generative Source of Emotion</td>
</tr>
<tr>
<td>Functionalist Perspective</td>
</tr>
<tr>
<td>Motional Profile: An Alternative View to the Functionalist Perspective</td>
</tr>
<tr>
<td>Musical Motion: from Neurological Views</td>
</tr>
<tr>
<td>Musical Motion, Tendencies and Inhibitions</td>
</tr>
<tr>
<td>Hypothesis II</td>
</tr>
<tr>
<td>Chapter III: Synthesis, <em>Außensats</em> and the Laws of Composition</td>
</tr>
<tr>
<td>Synthesis from the perspective of <em>The Art of Performance</em></td>
</tr>
<tr>
<td><em>Außensatz</em></td>
</tr>
<tr>
<td>The Laws of Composition</td>
</tr>
<tr>
<td>Hypothesis III</td>
</tr>
<tr>
<td>Chapter IV: Perceptual Boundaries and Musical Groupings</td>
</tr>
<tr>
<td>Hypothesis IV</td>
</tr>
<tr>
<td>Chapter V: Conclusion</td>
</tr>
<tr>
<td>Summary and Presentation of the Theory</td>
</tr>
<tr>
<td>Implications for Further Study</td>
</tr>
</tbody>
</table>
# LIST OF FIGURES

<table>
<thead>
<tr>
<th>Figure</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Chopin, <em>Etude</em>, op. 25, no. 8, mm 1-5</td>
<td>26</td>
</tr>
<tr>
<td>2. Mendelssohn, (Schenker’s example) <em>Songs without Words</em>, op. 62, no.6, mm 19-23</td>
<td>26</td>
</tr>
<tr>
<td>4. Beethoven, Piano Trio, Op. 70, No. 1, mm 1-7</td>
<td>28</td>
</tr>
<tr>
<td>5. Chopin, (Schenker’s example) <em>Polonaise</em> Op. 26, No. 1, mm 3-6</td>
<td>30</td>
</tr>
<tr>
<td>6. C. P. E. Bach, (Schenker’s example) <em>Sonata for Connoisseurs and Amateurs, Third Collection</em>, No. 2, I, mm., 19-22</td>
<td>70</td>
</tr>
<tr>
<td>7. The implied two-voice background structure in the C. P. E. Bach’s Sonata</td>
<td>70</td>
</tr>
<tr>
<td>8. J. S. Bach, (Schenker’s example) English Suite no. 2, Prelude, mm., 23-25</td>
<td>71</td>
</tr>
<tr>
<td>9. Lubben p. 31</td>
<td>75</td>
</tr>
<tr>
<td>10. Lubben p. 31</td>
<td>76</td>
</tr>
<tr>
<td>12. Schenker’s Example 284</td>
<td>81</td>
</tr>
<tr>
<td>13. Chopin, (Schenker’s example) <em>Etude</em> Op. 25, No. 1, m.1</td>
<td>82</td>
</tr>
<tr>
<td>14. Two-voice contrapuntal background structure implied in the opening phrase of Chopin’s <em>Etude</em></td>
<td>83</td>
</tr>
<tr>
<td>15. The comparison of two syntheses</td>
<td>87-88</td>
</tr>
<tr>
<td>16. Clarke’s schematic representation of an idealized knowledge structure</td>
<td>92</td>
</tr>
<tr>
<td>17. Clarke’s illustration of active parts of the generative structure in mid-phrase</td>
<td>93</td>
</tr>
<tr>
<td>18. Clarke’s illustration of active parts approaching a phrase boundary</td>
<td>93</td>
</tr>
<tr>
<td>19. Schenker’s example of tempo modification</td>
<td>100-101</td>
</tr>
</tbody>
</table>
CHAPTER I
INTRODUCTION

The Art of Performance

Austrian music theorist Heinrich Schenker (1868-1935) has profoundly influenced our musical comprehension, particularly in the way we approach musical analysis. Nearly a century later, his theories are being taught as standard methods of musical analysis in many institutions, consequently becoming one of the most ubiquitously accepted analytical languages in music theory. Common understanding of Schenker’s theory and its influences generally refers to the theoretical ideas found in his mature theories, such as his final treatise, Free Composition (1935), which was published shortly after his death. Free Composition was the last volume in his treatise, New Music Theories and Fantasies, a project that had begun with the first volume, Harmony (1906), followed by the second, Counterpoint, in two parts (the first published in 1910, and the second in 1922). His theory of organic unity\(^1\) was finally conceptualized in Free Composition after three decades of evolution. Schenker’s motivation for this life-long project seems to have sprouted from pedagogical reasons. After studying the piano and music theory at the University of Music and Performing Arts in Vienna between 1887 and 1890, he worked as an active free-lancing musician, a performer, critic and composer. But starting around the early 1890s, he focused on editorial work and private teaching of piano and theory that often occupied as much as eight hours of a working day. His pedagogical approaches, which frequently fused performance, composition and

theory, were clearly expressed in the preface of *Harmony*. He stated the purpose of the book was to build “a real and practical bridge from composition and theory,” and he also criticized the inadequacy of the current pedagogical practices in the studies of composition and theory. These pedagogical beliefs had become the central concerns in *New Music Theories and Fantasies*: developing proper analytical tools to understand tonal compositions. However, a better place to find logical connections between theory and performance is in Schenker’s only attempt at a theory of performance, namely *The Art of Performance*. *The Art of Performance* was never completed by Schenker. The current volume of *The Art of Performance* (*Die Kunst des Vortrags*) was posthumously published in 2000 by Heribert Esser, and translated by Irene Schreier Scott. It is a monumental testament to Esser’s effort, and it is the first major publication to come out of Heinrich Schenker's *Nachlass*. Compilation of the material from Schenker’s *Nachlass* began a few months after Schenker’s death in 1935. Jeanette Schenker, Schenker’s wife, gave permission to Oswald Jonas, Schenker’s pupil and long-time friend, to inspect Schenker’s *Nachlass*. Jonas’s work was interrupted by World War II, and it was only after the war was over that he resumed his rigorous examination of the documents in America with Esser’s assistance. Together, they produced *Schenker Vortrag, Erster Entwurf und Ergänzungen* (*First draft and supplement*) and *Schenker Vortrag, Zweiter Entwurf und Ergänzungen* (*Second draft and supplement*) between 1955 and 1958. These documents were organized in the form of a lexicon ordered alphabetically by keywords; Jonas decided on this format after considering the fragmentary nature of the material as German publishers were not interested.

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Their attempt to publish this lexicon was unsuccessful. In 1978, shortly after Jonas’ death, Universal Edition decided to publish the document, and on the advice of Jonas’s stepdaughter, Irene Schreier Scott, the publisher approached Esser for a revised manuscript of *The Art of Performance*. Esser reconsidered the format of the original documents and decided to convert it to a book. Although Esser changed Jonas’s intended format, it was an insightful choice; the book format was much closer to what Schenker had desired. On October 17, 1919, Schenker had written a reply to Eberhard von Waechter, a musical editor of and contributor to the newspapers, *Das Neue Österreich* and *Der Merker*. In the letter, Schenker passionately disputed Waechter’s suggestion that he publish *The Art of Performance* as a series of separate articles in *Der Merker*. Schenker’s vision of keeping the materials of *The Art of Performance* together as an independent volume of treatises was clearly expressed:

> As you can see, the *Art of Performance* is a large, self-contained work, the material of which simply does not lend itself to being previewed in excerpted form, so to speak, as an article. Just think: would it have been any use if hitherto in a couple of articles I had merely preached impassionedly of the necessity of deriving from the masterworks a true theory of composition that conforms to them, [or] had merely lamented over the fact that musicians cannot read musical notation, and suchlike things?... Is it not better if even with this material I strike out on, I may continue on the path that I have under unimaginable impediments trodden up till now? Let me say it straight out: I feel myself accommodated even to eternity and may, indeed must, therefore refrain from [making] an immediate impact in order not to do damage to the substance, the truth.3

The material of the *Art of Performance* largely consists of two main sources: *Vom Vortrag* and a collection of fragments and notes. In the introduction to the book, Esser labels the former *Source A* and latter *Source B*. The manuscript of *Vom Vortrag* was written in Jeanette Schenker's handwriting with additions by Heinrich Schenker. The bulk of *Vom Vortrag* was written in July, 1911. In his diary on July 1st, Schenker records,

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“Getting to grips with the work Art of Performance.”⁴ On July 13th, he adds, “Die Kunst des Vortrags got into shape for the first time (provisionally!), all but a few slips of paper,”⁵ and ten days later, Schenker made a promising announcement in his letter to Emil Hertzka, the director of Universal Edition: “It may perhaps interest you to learn that I have completed a short text, The Art of Performance, while here, which I intend to publish separately at some stage in the future.”⁶ Another diary entry on July 29th reads, “Die Kunst des Vortrags dictated right through to the end.”⁷ Source B (fragments and notes) was created presumably between 1914 and 1932. They are added to a largely text-based document of Vom Vortrag in appropriate places at the editor’s discretion.

Reviews of The Art of Performance upon publication recognize the valuable insights it could offer to performers. David Gagné and Heidi Siegel write, “While the book focuses on many practical aspects of technique, it also emphasizes Schenker’s conviction that a performance is not a mechanical playing of notes, but comes from within the performer and the work.”⁸ Matthew Riley also observes, “Art of Performance...prompts performers to pay attention to matters of harmony and voice-leading.”⁹ Leslie Kinton notes, “It may well be the most important and artistically-imaginative book on performance in general (i.e., not related to a particular style) to come out of the twentieth century.” Kinton expresses appreciation for the accessibility of the materials in The Art of Performance to performing musicians who do not have proficient knowledge of Schenker’s theory and voice-leading graphs. Given today’s

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⁵ Schenker Documents Online, OJ 1/10, p. 135[a], trans. Ian Bent (accessed April 15, 2013).
“obsession with pure instrumental athleticism,” Kinton believes this book can offer alternative perspectives on interpretation and also analytical validation of interpretive decisions. Poundie Burstein shares a similar opinion with Kinton, that the ideas which “Schenker puts forth here are profound, and even in their sketchy and incomplete state they will prove valuable to both music theorists and serious performers. . . A performer need not be familiar with Schenker's tonal theories in order to appreciate this volume.”

As observed by the reviewers, performers could use this book to make their interpretive decisions on an analytical basis. Also, they acknowledge that this book makes Schenker’s notion of analytically-informed performance much more feasible to performers who do not have the extensive technical understanding of Schenker’s analytical theories. Given the influence of Schenker’s analytical practice in current music theory and pedagogy, any performers may legitimately assume the credibility and validation of their interpretations when executed based on Schenkerian analytical practice. The Art of Performance seems to have opened the door to more practical ways to approach Schenker’s theory from the perspective of performance.

However, certain things need to be questioned regarding the text of The Art of Performance. First, how credible is the information in The Art of Performance? It is, after all, a compilation of Schenker’s unfinished manuscript, fragments of notes, and scribbles of musical examples scattered throughout decades without much organization. Second, even if the editorial work is considered successful, how effectively can performers deduce any systematic procedure on which they may construct interpretation?

The book shows a collection of interpretive examples and performance suggestions in

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relation to a rather limited exposure of Schenker’s theories. As intriguing as each case appears to be, there are no revelations of any methodologies that one can call Schenker’s theory of performance (or of interpretation). Without a concrete system, what performers can do with this book is, at best, to mimic what they can see. Merely imitating Schenker’s practice without systematic approaches is not only meaningless, but will eventually lead to the personal guesswork that Schenker himself so passionately opposed. *The Art of Performance*, as it is, has little value in practical applicability.

The reason for Schenker’s lack of completion of *The Art of Performance* is unknown. Esser writes in his introduction of *The Art of Performance*, “We do not know why Schenker did not continue work on this project begun so energetically.” However, he tries to give an explanation:

Herein, simultaneously, lies the explanation for the fact that “The Art of Performance” remained a fragment: it was the “theory of organic unity in the musical work of art”—the idea of the “*Ursatz* and its prolongations”—which Schenker considered it his mission to present and whose formulation became the uppermost aim of his life’s work. Added to this his practical activity as teacher, his battle against the obfuscation of source material (the entire current awareness of the significance of the manuscript for the preparation of the printed text, after all, essentially stems from Schenker's attempts and admonitions)—if one weighs all this it becomes understandable that the “Vortrag,” along with many other projects, had to take second place in his life-plan and to remain a fragment.  

In other words, Schenker’s work toward *Free Composition* was of foremost importance, and it was not practical for him to be distracted by other side projects. Although Esser does not believe that the problems intrinsic to the material were responsible, Nicholas Cook sees it differently. Cook calls *The Art of Performance* one of Schenker’s theoretical cul-de-sacs, in which the examples may present a coherent exercise of logic not

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transformable into a plausible pedagogical principle. He believes that in recognition of such basic flaws, Schenker never completed *The Art of Performance*.\(^{13}\) Daniel Leech Wilkins points out that Schenker harbored incompatible views toward theory and performance, and that Schenker had withdrawn interest in developing performance theory because it did not comply with his analytical theories.\(^{14}\) These speculations suggest that the incompletion of his performance theory was not accidental. Schenker likely made a conscious choice (intentionally or not) as to what was more important to him and what to pursue at that time. Regardless of the reason, Schenker ended up choosing projects connected to his interest in analytical theory rather than those relating to performance. These observations potentially damage the credibility of *The Art of Performance*. Are performers supposed to learn from a book that was never meant to exist? Can Schenker’s unfinished performance theory possibly offer any viable interpretive tools for performers?

A common undertone in these speculations is that Schenker consciously moved away from *The Art of Performance*. Charles Burkhart also observed that Schenker’s concept of relating dynamics according to the structural levels lacked substantial evidence in Schenker’s published works (especially after 1925), and also seemed contradictory in practical settings.\(^{15}\) He suggests that Schenker eventually gave up on the idea.\(^{16}\) However, some evidence shows a different perspective; Schenker’s interest in establishing theories of performance was perpetual throughout his life. After the main


\(^{16}\) Esser expresses the same thoughts in the introduction to *The Art of Performance*. See p. xv.
body of *The Art of Performance* was written in a short burst of time between July 1st and July 29th in 1911, Schenker did not mention any additional work on this project for some time. His announcement to Emil Hertzka, a director of Universal Edition, on July 23rd, indicates his confidence in completing the work soon. Schenker makes another statement anticipating the publication of *The Art of Performance* in 1912, this time more officially in the preface to his *Beethoven’s Ninth Symphony*:

> Under the above mentioned performance rubric I have endeavored, without intending to encroach on the territory of a monograph ‘Die Kunst des Vortrags’ to be published in the foreseeable future, to set forth performance instructions insofar as possible in general principles and rules.\(^{17}\)

Schenker adds to this the significance of the work, claiming that he would be “the first to consider similar principles at all applicable to a material that appears to be in a state of constant flux.”\(^{18}\) One year after the initial working of the monograph, his conviction in the completion of the project still appears strong. The writings in *Beethoven’s Ninth Symphony* seem to echo many of the similar interpretive philosophies as in *Vom Vortrag*. Schenker could have easily redirected the concepts in *Vom Vortrag* to *Ninth Symphony*, which could have been an immediate distraction from the further development of *Vortrag*. On October 7th 1918, Wilibald Gurlitt inquired about the promised treatise on performance:

> After thorough study of your wonderful book on Beethoven’s Ninth, allow me respectfully to inquire whether the writings mentioned in your programmatic Foreword, namely "Sketch of a New Theory of Form” and “The Art of Performance,” with which I am eager to become acquainted, or anything else from your pen since 1912, has become accessible via the book trade. Accordingly, it is particularly important to me to get to know the [intrinsic laws] of music because since my

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\(^{18}\) Ibid., 8.
imprisonment in France I have been occupied with attempting to present music history from a style-psychological point of view.\textsuperscript{19}

What needs to be noted here is the “intrinsic law” of music, which Schenker later develops into the theory of organic unity. The origin of his most important theoretical achievement is rooted in performance. On October 17, 1919, in his insistent letter to Wächter, Schenker refers to \textit{The Art of Performance} as “a large, self-contained work,” whereas in his announcement to Hertzka in 1911 Schenker referred to it only as “a short text.” Although it may not have been organized in writing, at least the idea of \textit{The Art of Performance} has obviously grown more substantial along with his continuously developing theory of organic unity. The quest for the “intrinsic law” of music, by now, had evolved into something that was clearly connected to his later theory. In the same letter to Wächter, Schenker writes regarding the forthcoming publication of \textit{Counterpoint II}: “for the first time I reveal free composition to be the prolongation of strict counterpoint, and relate the mighty musical cosmos back to a few primal laws. Then must follow the \textit{Sketch of a Theory of Form}, and \textit{The Art of Performance}…” It seems that the materials and initial intention for \textit{The Art of Performance} were constantly evolving, but they clearly fed into his more speculative writings, eventually heading toward his final work, \textit{Free Composition}. In 1925, Schenker makes yet another announcement anticipating \textit{The Art of Performance}. In the first volume of \textit{The Masterwork in Music}, Schenker comments, “…at least concerning dynamics: In my forthcoming treatise, ‘The Art of Performance,’ it will be systematically shown for the first time that dynamics, like voice-leading and diminution, are organized according to structural levels, genealogically

as it were.”²⁰ The notion we have seen in 1911’s *Vom Vortrag* is very much different than what he describes in 1925. Now Schenker’s performance theory shows direct correlation to structural levels; again, we see his attempt to refurbish his original ideas on performance and mold them into his theoretical framework. The expressive parameters in performance now begin to organize around his mature theory: this is a clear indication that *Free Composition*’s theory is the dominating thought by this time. The final drive toward the completion of *Free Composition* is already well on its way. Three years later, Schenker writes in a letter to Hoboken, “I will and must finish my work: *Free Composition, Theory of Form, Theory of Performance* (on the methodological foundation of *Free Composition*)…” Now replacing his old idea of “*The Art of Performance*” with a new one, “*Theory of Performance*,” Schenker still holds onto his hope of completing perhaps the longest running project. Significantly, as he admits here, *The Art of Performance* now becomes the “methodological foundation” of *Free Composition*. As of 1928, not only had he not given up on completing *The Art of Performance*, but his perspective of it showed a considerable connection to his mature theoretical thoughts. Ironically, in the end, what started so passionately becomes subsidiary to his theoretical obsession. Five years before his death, on December 6, 1930, Schenker dictates to his wife, Jeanette, the following diary entry: “Ordered ‘Vortrag’ and supplied it with a sort of Index.”²¹ This was the last known effort Schenker made to modify *The Art of Performance*. Interestingly, he only adds an index; there are no attempts made to provide supplementary examples. Perhaps the task was too daunting at this point, or perhaps this


was the decisive point when Schenker finally gave up on *The Art of Performance*.

However, the spirit of his old passion resonates soundly in *Free Composition*. Esser quotes Schenker in the introduction of *The Art of Performance*:

> What is practical in this book [i.e., *Free Composition*] lies less in the education to genius, which is anyhow impossible, than in instructing composers in need of assistance to attain the means of extending the content; most decisively, however, it may serve the art of performance: here the book may point the way to those absolute solutions that result compellingly from the unity of synthesis. Thus particularly the art of performance, which up to now everyone might practice according to his personal conception, can here solidly find its own ground; for one who can correctly read [i.e., understand] a masterwork can surely summon the reproductive means of bringing it to life. This part, then, can absolutely be taught and learned—whereas instruction in progressing from background to foreground, to diminutions in the foreground, must cease at the limits of talent.22

Even in *Free Composition*, the compilation of his life-long research for the “theory of organic unity,” Schenker still expresses that the true purpose of it is to serve performance. It is unclear whether this view was circumstantial (giving some sort of meaningful closure to his unfinished performance theory) due to the time constraint in his last years, or was his deliberate effort to merge theory and performance. This ambiguity leads to a question: if the latter, can *Free Composition* be considered as the fulfillment of *The Art of Performance*? In other words, can his mature theory shown in *Free Composition* serve as Schenker’s theory of performance? The answer may have been expressed in recent opinions on the state of music theory practice and performance.

**Current State of Music Theory and Performance**

The April, 2012 issue of *Music Theory Online* focuses on pertinent issues regarding music theory and performance. Conscious efforts are made by several music

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theorists to bring attention to this relatively unexplored area in the field. The journal shows current research trends and perspectives including the interdisciplinary approaches involving music psychology. In the introduction to this publication, Nicholas Cook remarks that the volume is “a significant event in the development of North American music theory, both reflecting and contributing to the increasing importance of performance within the music-theoretical purview.” This perspective has been generating more noticeable momentum in the past several years, with a decisive turning point marked by an outspoken article in 2005, “The Performer’s Voice,” by Daphne Leong and David Korevaar. Cook summarizes the standard practices regarding performance by music theorists that predate this standpoint:

…music theorists approached the study of performance by building on established approaches to scores: Wallace Berry’s *Musical Structure and Performance*, which appeared in 1989, is the classic example. Insights derived from the analysis of scores were treated as guidelines for articulate performance, so that, to put it crudely, the theorist’s role was to talk, the performer’s to listen. In this way knowledge was transferred from theorists to performers rather than exchanged between them, and the resulting one-way flow of information from theorist to performer, from page to stage-attracted a good deal of negative commentary, especially from commentators located to the east of the Atlantic.23

All of the articles chosen for this volume counter the traditional notions and strongly reflect on progressive perspectives of approaching performance-related issues. Several are especially noteworthy. In Daniel Barolsky and Peter Martens’s writing, structural questions are drawn from the observation of performances, and analytical possibilities are explored based on the interpretive alternatives from various performances. The authors sum up their approach in the concluding paragraph:

…how much of what we hear in Gould’s performance of this Prelude is imposed by the pianist or revealed within Bach’s score? In other words, is Gould X-raying the music in order to reveal its inner workings, or is he foisting his own whimsical and anachronistic aesthetic values onto the Prelude? The answer, it would seem, is both... Not only is Gould’s performance no less anachronistic than the analytical views of Schenker and other 20th-century theorists (even as they presume to speak for the composer’s intentions), but, as we have seen, the idiosyncrasies of his interpretation both reinforce and coincide with those qualities about which most analysts and performers appear to concur.24

Their analytical procedures do not begin from readings of notation. Instead of using analytical outcomes to generate performance interpretation, the authors view analysis as a means of explaining events in the performances as they are experienced. This approach truly puts the performers on the same plane with the composers as co-creators when it comes to performed music. The most important point here is the attention to the actual experience of music, which Cook calls “quantitative procedure.” Thus, in their scenario, music theory attempts to rationalize our musical experience rather than exposing what we are supposed to experience as already implanted in the score.

Alan Dodson builds on Rothstein’s discussion of the “Great Nineteenth-Century Rhythm Problem” that appeared in William Rothstein’s book, Phrase Rhythm in Tonal Music. According to Dodson, composers’ avoidance of monotony in the case of highly regular phrase/hypermetric structures was one of the great compositional problems of tonal music, which clearly resonates in performers’ interpretive practices. He believes performers often identify with the same problems as composers and remedy them with various applications of expressive deviations in their playing. His claim insinuates a

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shared affective engagement between composers and performers. In a way, this is not a strange phenomenon if we regard the composer as the first performer of the composition; the initial auralization of the composer’s conception of the piece is indeed an experience of materialized sound, physically played or imagined. A composer, as a performer of his own work, very likely has been aware of the same problem. Any speculative examination of compositional problems must recognize and accommodate the needs of the performance problems accordingly. Dodson believes that music theory can offer a valuable, empirically rooted contribution to the analysis and interpretation.

Mitchell Orhiner’s approach to structural hierarchy demonstrates an antithesis of the conventional practice in structural analysis. He describes his intention:

Theories of expressive timing in the performance of tonal music emphasize the role of grouping structure, whereby performers are understood to communicate the ends of groups through group-final lengthening (GFL). But this approach depends on a one-way mapping from a single grouping-structural analysis onto performed durations, denying a role for interpretive difference on the part of performers and analysts…this article reverses this mapping by presenting a method for recovering the hierarchical grouping structure of a performed phrase that is sensitive to the constraints of temporal perception.

Structural hierarchy, one of the most discussed subjects in recent music theory, is believed to expose compositional process to some degree. In performance, expression of hierarchy often manifests itself in grouping structures. The main differences between the two domains exist in the constraints of temporal perception. The reverse notion, as in Orhiner’s demonstration, encourages theorists to focus on the hierarchical analyses that

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are perceptually possible, rather than searching for the ways to convey hierarchical structures of the score in performance. What is salient in score analysis is often impossible to translate into performance, and likewise, most prominent features of a performer’s grouping structure may not agree with its theoretical/analytical counterpart.

The expression of structural hierarchy, from analysis to performance or from performance to analysis, must keep in mind the perceptibility in temporal space.

Michael Schutz and Fiona Manning investigate the role of physical gesture and its effect on the musical cognition of the listener. While their argument centers on the idea that visual communication during performance is cross-domain mapped onto aural communication, their description of musical cognition in general is especially poignant:

Our ability to perceive and understand the world around us is actually the end result of a complex and fascinating chain of events. In order to organize the many sensations processed concurrently, our perceptual system must frequently make implicit assumptions (i.e., automatically and outside our conscious awareness) about this information so as to present us with an internal perceptual experience corresponding to the external state of the world…Perception involves more than the mere detection of information from the environment. Instead, it involves a complex interaction between events (e.g., a sound) and the implicit assumptions used to process those assumptions that are crucial both to our everyday perceiving in general as well as music listening in particular.27

Performance of a composition differs from analytical study of a composition particularly in the fact that it involves listeners and their experience/comprehension of performed music. As described by Schutz and Manning, musical experience involves a host of perceptual and cognitive mechanisms, the exact process of which current research in various fields is still unable to explain. Thus, any theoretical approaches to performance

must face the issues of musical perception; to a certain extent, music theory (particularly in relation to performance) is a theory of musical perception. The need for interdisciplinary research is apparent, especially in the field of music psychology.

Daniel Leech-Wilkinson addresses an important issue in regard to the current state of music theory practices and their relationship with performance interpretation. His claim makes one question the common beliefs that theoretical analysis contributes to the formation of performance interpretation, as well as the communication of musical meaning and comprehension in listeners. He contends there are irreconcilable differences between analytical practices and other forms of musical activities such as performance, composition, and listening. Narrowing the problems, Wilkinson points to the main concern, the unrealistic assumption of structural perception in musical communication, and suggests that music theory needs to establish a new and more practical view of the relationship among composer, score, performer, and listener. He argues that the unrealistic assumption is particularly amplified in the issues of the perception of large-scale structure. He traces this ideological conflict in the writings of Heinrich Schenker:

Indeed, with Schenkerian analysis (like so much music theory) depending significantly on how one hears the notes under discussion, any mismatch of experience and analytical belief is likely to create insuperable problems when one attempts an overarching view of their proper relationship…Given that theory is so independent of performance and of the experience of performance, it is possible that these two modes of communication have not maintained a consistent relationship over time: what theory implied for performance, or performance for theory, may seem to differ over time; which might explain the incompatibility we find between Schenker’s performance tastes and his writings on music.28

Wilkinson believes that Schenker’s failure to reconcile these conflicting views is the reason behind Schenker’s unfinished treatise of performance theory. He seems to indicate

that these conflicting views are not limited to Schenker’s case, but describe the general landscape of the problems between theory and performance.

In sum, this special issue is designed to show some of the recent attempts made to divert from standard analytical practices in order to accommodate performance-centered perspectives. Throughout the volume, regardless of the technical approaches, the general consensus is to put performance at the center of musical experience and understanding. Also, acknowledgement of the performer’s creative contribution resonates strongly in all the articles. As much as the composer’s intentions, the performer’s expressions should be viewed as sources of musical communication, and as being worthy of speculative studies from theorists. With this perspective, there seems to be a divergence from prevailing analytical practices. Cook’s concluding remark emphasizes the demand for renewed approaches.

…we need to develop ways of representing and communicating the specifics of what performers do, and of correlating performative effects with the particular manipulations of particular parameters that give rise to them. In short, we need precisely the kind of approach of which this special issue offers a sample. But it is only a sample. The work is only just beginning.29

In the center of the discussion, several pertinent aspects are addressed: the prescriptive position of theory to performance (theorists to talk, and performers to listen), interpretive discussions according to theory rather than perception and experience, the contradiction of expression of musical hierarchy in theoretical and performance perspectives, and the general incompatibility between theoretical and performance interpretations. Regarding the last topic, the disapproving undertone toward standard

approaches in theory can be sensed in the articles, which largely point to the analytical practices epitomized by Schenkerian theory. It is ironic that Schenker’s theory is viewed as the representative practice that has become the cause of the discordance between theory and performance. His theory has flourished through constant development in mainstream research and has occupied much of our theoretical thinking. On the other hand, Schenker’s goals seem to be largely forgotten. The Schenkerian theory we practice and understand today has overshadowed the initial purpose imbued by its creator, the very same theory that was once supposed to be instrumental to performance and interpretive practice. Schenker’s original notion is merely a myth in current Schenkerian practice. Moreover, Schenker is often viewed as the epitomizing example that distances performers from the territory of theorists; at least, Schenker’s theory has evolved to be a contradiction to his own belief. As we have seen in the articles, it is clear that the relationship between theory and performance not only needs to be reevaluated, but also that a new notion of connecting these two domains needs to be established.

Is Schenker somewhat at fault for this problem? Had he successfully completed his theory of performance alongside his theory of organic unity, would theorists and performers be looking eye-to-eye in a more symbiotic relationship? Or, have we lost Schenker’s real intention somewhere in the course of the constant development and dissemination of his theory? Had we preserved Schenker’s intention, would theorists and performers be speaking a common musical language? These were some of the questions expected to be answered by the posthumous publication of *The Art of Performance*. Unfortunately, given the fragmented nature of the publication, *The Art of Performance* fails to show the process by which Schenker translates the theory into performance
interpretation, or the methodology that reflects it. This shortcoming of *The Art of Performance* is due to at least two fundamental reasons. First, the text reveals no visible systematic approaches that could be considered a theory of performance. Instead, there are plenty of interpretive and performance suggestions, which are mostly isolated case studies on varying subjects. Most of these examples show analytical demonstrations of the score. However, they do not disclose any consistent methodological notion that ties them together. Second, the analysis, on which Schenker derives his interpretive decisions, seldom relates to his mature theory. Take, for example, the notion of long-range structural prolongation and motivic unity transcending structural levels, which are central concepts of *Free Composition*. Since our understanding of Schenker’s theory is largely based on *Free Composition*, it is difficult to see the connection here between his analytical approaches and performance interpretation. Thus, what is the true value of this book to us now? Regardless of the welcoming receptions by reviewers, there are two logical scenarios: (1) Schenker’s performance theory is fundamentally unrelated to his mature analytical theory, and therefore, despite his intention, it was not plausible to systematically connect his theory and performance in the end; or (2) it was left as a work in progress. In other words, it could have been successfully completed as a treatise had Schenker had a chance to revisit and reconstruct it after the completion of *Free Composition*. The reason for the latter possibility is that Schenker had never shown a clear intention to let this project go. As shown previously, *The Art of Performance* was a project that started as early as the beginning of his musical life and lasted until his last days. Instead of regarding it as a “theoretical cul-de-sac”\(^30\) that fruitlessly fizzled away,\(^30\) Nicholas Cook, *The Schenker Project: Culture, Race, and Music Theory in Fin-de-siecle Vienna*
Schenker’s performance theory deserves a second chance for reexamination. After all, the performance aspect of Schenker’s work has been overshadowed by his analytical theories. With recently renewed interests in music theory and performance, the goal of this dissertation is to reconstruct Schenker’s unfinished theory of performance, through which his analytical theory, namely the theory of organic unity, is embodied into sound. It also aims to offer probable solutions to the discordance between current practices of theory and performance addressed above.

In the following chapters, these topics are examined from the perspectives of two types of material: Schenker’s own writings including The Art of Performance and other related theoretical treatises (as the primary sources), and more recent research in Schenkerian studies, performance as well as limited investigations on music psychology, cognition, and perception (as the secondary sources). The investigation of each topic is followed by the presentation of a hypothesis, which contributes to the construction of Schenker’s performance theory.

CHAPTER II

DESIRED EFFECT AND MOTIONAL PROFILE

Schenker’s Concept of Performance

In the first chapter of *The Art of Performance*, Schenker describes his understanding of a correct performance of a musical composition. For Schenker, the absolute performance of a composition is conceptualized in the composer’s mind as an audiated form. He believes that this absolute state of a composition exists independently from any need of realization into musical performance. He writes: “Just as an imagined sound appears real in the mind, the reading of a score is sufficient to prove the existence of the composition.” And he follows: “Once a performance does take place, one must realize that thereby new elements are added to a complete work of art. . . those properties must not be given priority. . . he would do better to immerse himself in the work of art, maintaining its conceptual integrity during the performance.” His remarks indicate that distortion of the composer’s true musical intent is inevitable once the music is realized in sound. Therefore, any performance of a composition would not be as pure as the one that was initially conceived in the composer’s mind. He believes that “the great masters of composition. . . must be considered the best performers,” and subsequently, the purpose for performance is to preserve and communicate this ideal abstraction, as he calls the conceptual integrity of the composition. He concludes his opening chapter with a claim: “a misconception of the significance of performance in music and uncertainty about how to guarantee a true rendition have led to that proliferation of performances which is one

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32 Ibid.
33 Ibid., 5.
of the causes of the decline of our art.”\textsuperscript{34} Here, one can assume Schenker’s intention in the writings of \textit{The Art of Performance:} to provide the means by which performers can reliably reproduce a proper rendition of the composer’s original conception of a composition.

For Schenker, a true rendition of a composition begins with proper understanding of the composer’s notation. Notation indicates everything written by the composer, including relatively fixed elements like pitch and rhythm, and more subjective parameters like dynamics, articulations, and any expressive attributes regarding performance of the piece.\textsuperscript{35} Schenker contends with the conventional practices of executing notations on the score:

What must be regarded as the most fateful error in the performance of a musical work of art is the general view on the meaning of a composer's mode of notation. That which is decreed in the notation is considered the unalterable will of the composer, to be interpreted literally.\textsuperscript{36}

He follows with a clear distinction between the notion of a literal interpretation of notation, and a direct application of notation in performance.

Already the mere fact that our notation hardly represents more than neumes should lead the performer to search for the meaning behind the symbols…one would realize that the author’s mode of notation does not indicate his directions for the performance but, in a far more profound sense, represents the effect he wishes to attain. These are two separate things.\textsuperscript{37}

In other words, what needs to be observed literally is the composer’s “desired effect,”\textsuperscript{38} while reading of the notation at its face value is actually counter-effective in realizing the

\textsuperscript{34} Ibid., 4.
\textsuperscript{35} Often Schenker’s analytical practice focuses on fixed elements of notation such as pitch. It is characteristic of \textit{The Art of Performance} that the orthography (a term which he uses to refer to all the expressive attributes on the score) is essential to the analytical examination.
\textsuperscript{36} Ibid., 5.
\textsuperscript{37} Ibid., 5.
\textsuperscript{38} This term is explained on page 24.
proper effect. The desired effect is encoded in the notation, and it somehow needs to be decoded by properly executing all participating elements in the notation. Ironically, while Schenker regards the composer’s audiation of a composition as a “complete work of art,” he seems to suggest that the composer’s score is not what the composer creates at the initial audiation, and is hardly complete compared to the “conceptual integrity.” Schenker believes that notation is a collection of symbols, a coding system, through which the composer expresses his imagined sound of his music. The need for rendering the desired effect from the notations implies that during the initial conception, the desired effect is encrypted into notation by the composer. Notation, then, is a mere vessel that carries codes of the composer’s intention. Ideally, through proper processes of decoding by a performer, the same desired effect may be reconstructed in performance and transmitted to listeners. Thus, for Schenker, it seems to indicate that the primary concern of a performer should be delivering the composer’s desired effect with as little alteration as possible.

“Dissembling”\textsuperscript{39} is a term Schenker uses to denote the process of decoding notation. He writes: “Herein lies the true secret of the art of performance: to find those peculiar ways of dissembling through which—via the detour of the effect—the mode of notation is realized.”\textsuperscript{40} Schenker points out that the act of dissembling belongs to performers. Although he continuously emphasizes the importance of dissembling, he never provides any precise explanation of the procedures involved. He also acknowledges the difficulties performers face when figuring out the composer’s intention through

\textsuperscript{39} Ibid., 6.
\textsuperscript{40} Ibid.
dissembling. He believes one of the main reasons is the performer’s inadequate knowledge of the analytical skills of composition:

To master these difficulties, a superficial acquaintance with the work of art is insufficient. What is essential is a thorough knowledge of all laws of composition. Having enabled the composer to create, these laws, in a different way, will enable the performer to recreate the composition. Inevitably one concludes that a performer who truly re-creates is indeed close to the creator.\(^{41}\)

Two things must be noted from his claims above. First, there seems to be a close relation between the desired effect in music and these laws of composition. Proper relationship between composition and performance lies in encoding and decoding of the composer’s desired effect. As he indicates these laws of composition enable the composer to create and performers to recreate, one can speculate there are certain generative properties in what Schenker calls “all laws of composition.” Second, his statement regarding the laws of composition seems paradoxical. The Art of Performance, particularly the earlier portion of the book, was drafted in the 1910s. Schenker’s concept of compositional laws, as we generally understand it, was not fully developed until well into the 1930s, in his final treatise, Free Composition. As Esser points out in his introduction to The Art of Performance, Schenker expresses his aspiration for Free Composition is “most decisively to serve the art of performance.”\(^{42}\) The life-long interest in the performance theory, seen in The Art of Performance, remains unfinished, yet he seems to redirect the focus of his mature theory back to the old subject that he initiated two decades ago. The incomplete state of The Art of Performance seems to suggest that Schenker’s original intention behind his mature theory did not meet his expectation. My speculation is that the compositional laws he is referring to, in the context of performance, are not the same

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\(^{41}\) Ibid., 3. 
\(^{42}\) Ibid., xv.
laws of his mature years, or at least he is not talking about the same application of his theory. As pointed out earlier, his theoretical references in *The Art of Performance* do not resemble the analytical notions of his later years; most significantly, they lack the same complexity and structural depths. Consequently, it seems sensible to investigate his theoretical practices written around the time *The Art of Performance* was drafted.

**Schenker’s Concept of “Desired Effect”**

There are numerous references to “desired effect” (Schenker uses the term interchangeably with “intended effect”) in *The Art of Performance*. However, Schenker never explains what it is, nor does he provide clear evidence from which one can create a concrete definition. All of the relevant examples he relates to this term are isolated case-studies that show what the passages may sound like in performance, while the information in the cases does not substantiate any uniform process. One clear fact deduced from them is that the desired effect can be successfully reconstructed to its original state through a proper dissembling at the moment of execution into sound. The results of dissembling often show stark contradiction to the expectation drawn from a reading of a score. These contradictions can be observed in the cases where Schenker makes direct comparisons between the act of dissembling and the desired effect. In Chapter Five, *Legato*, Schenker devotes an entire section to ways of dissembling. He lists several examples where *legato* playing is physically impossible to execute, but can be approximated by employing dissembling means that would mimic overall *legato* effect:

At times certain ways of dissembling can help to give an impression of legato even where, strictly speaking, legato is impossible. Thus a legato effect is attained in Chopin’s Etude op. 25, no. 8, by means of gliding elbows. Here, in quickest tempo, the gesture stands for the effect. . . Where it is impossible to use such a one-sided
fingering, a mere gesture of the hand can substitute for a true legato. . . For the same reason I recommend playing a section from Mendelssohn's "Spring Song" as in Example 5.12, where holding the notes is that medium for the illusion which leads to a legato effect even though the fingering appears to produce the opposite effect. . . From all this the conclusion should be drawn that the impression of legato can be created even without actual legato playing inasmuch as the possibility of appropriate ways of dissembling exists. [13]

![Figure 1. Chopin, Etude, op. 25, no. 8, mm 1-5.](image1.png)

![Figure 2. (Schenker's example). Mendelssohn, Songs without Words, op. 62, no.6, mm 19-23.](image2.png)

Here, the purpose of dissembling is to overcome physical challenges imposed by the notation. Commonly, performers would rely on a damper pedal to connect the notes that are otherwise impossible to connect with fingers alone. Schenker’s suggestion, on the

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[13] Ibid., 27.

[44] Ibid.
other hand, offers a different solution. It seems that legatos carry different meanings for Schenker. If a legato is fulfilled by mere connection of the notes, as with pedaling, the result will be considerably different from that of employing a physical gesture. Creating legato effect by inducing musical gestures would result in the emphasis of certain musical divisions that are otherwise subdued. The illusion of legato, here, creates certain grouping structures. These groupings delineated by physical gestures from the elbows and wrists naturally create subtle temporal and dynamic deviations. These expressive deviations are not indicated in the notation, but result from dissembling. The effect Schenker recognizes here is not a series of connected notes, but is instead the gesture and grouping induced by the performer’s physical motion. What needs to be noted is that the process of dissembling produces cross-domain perception; the element from the sound domain (legato playing) is transformed into an element in a spatial (or visual, in this case) domain (gesture). A similar manner of dissembling can be observed in Chapter Eight, Dynamics. Schenker’s perspective of dynamic shadings seems to imply a metaphorical comprehension as well as cross-domain perception. He explains the cases of crescendo:

Only if the preceding characterizations of piano and forte have been fully assimilated can one understand the often ingenious, yes, inspired indications of nuances by our masters, who similarly want mf or mp, like the basic dynamic levels themselves, understood now in the spiritual, now in the physical, sense, as appropriate. To determine whether quantity of sound or quality of emotion is to be emphasized, $p$ cresc. $f$ must be examined. Far more interesting is the nuance $p$ cresc. $p$ . . . More than any other nuance it seems to attest to its origin in the emotions: a more or less passing intense agitation within a spiritually expressed $p$ . . . And while to a degree performers have concerned themselves with shadings within piano, they interpret forte merely as a show of physical strength. Once they were guilty of this, it was inevitable that they should misunderstand even clearly marked nuances, just where these were at their most inspired. One need only see the many, ever-recurring shadings $f$ cresc. $f$ in the Rhapsody op. 79, no. 1, by Brahms—virtually a hallmark of this composer!—which, similar to $p$ cresc. $p$ again mean agitation within a general forte.45

45 Ibid., 41.
For Schenker, dynamic markings mean much more than quantitative measures of volume. Often, performers relate their musical expressions to some sort of emotional qualities. The uniqueness of Schenker’s notion is that he connects the emotions implied in the notation to references to the physical experiences (such as “agitation”). Thus, similar to the previous cases of legato, dissembling of dynamics results in a desired effect perceptible in a physical sense; here, the desired effect seems to indicate the induction of motion forward. Such musical motion is outside the realm of the notation; it is a result of a conscious decision to express certain dynamic shadings metaphorically. Here, we witness another case of cross-domain mapping: a quantitative measure of sound manifests into the spatio-temporal domain. Schenker demonstrates a similar notion of

Figure 3. Brahms, *Rhapsody*, Op. 79. No. 1, mm 57-71.
dissembling in Chapter Nine, *Tempo and Tempo Modification*. Dissembling through tempo deviation produces a desired effect that is more obviously associated with manipulation of musical motion:

A particularly appropriate example of tempo modification through speeding up occurs in bars 4–6 in Beethoven’s Piano Trio op. 70, no. 1, I. If these bars were played strictly in the chosen tempo, the effect of an entirely unintended *ritardando* would occur. Following the fury of the staccato eighths in the preceding bars, the sparse tones would simulate a slowing down, particularly since the rests between them suggest that they should be radically separated one from another. To counter this effect it is necessary to speed up until the VI appears in m. 6; not until here is balance achieved through a corresponding holding back.\(^{46}\)

![Figure 4. Beethoven, Piano Trio, Op. 70, No. 1, mm 1-7.](image)

The temporal deviation demonstrated in the opening phrase of Beethoven’s piano trio shows Schenker’s attempt to restructure a grouping boundary by generating an overt directive motion. The common ways of performing this opening contradict Schenker’s notion. Performers tend to emphasize the rests by deliberately exaggerating them. Often, F-natural receives special emphasis due to its chromatic inflection. Also, the B-flat in the bass is often brought to attention by a placement with a slight delay; it stresses the effect

\(^{46}\) Ibid., 54.
of *subito piano*. These conventional approaches produce multiple segmentations before the music even introduces the main thematic material. Schenker’s suggestion brings forth a different structural emphasis as well as directional motion. According to the resulting segmentation, the main focus is drawn to F-sharp on the downbeat of measure 7. This analysis may indicate that Schenker finds an expressive meaning, not based on chromatic inflections of the pitch, but based on structural significance; F-sharp marks the point of initial ascent to the third scale degree. The halting of motion at measure 6, after the momentous writing of the first five measures, demarcates the onset of the *Urlinie*. A similar case of segmentation can be seen in following example:

Or imagine a performer who played the cadence in mm. 3–4 in Example 9.1 entirely regularly, according to the beat. He would have to admit in all honesty that the effect of the cadence is weaker than if he had increased the tempo. Should he point out that the following measures require the regular tempo, one must reply that given their enhanced content, mm. 5–6 are convincing in the normal tempo without hurrying. In the two preceding measures, however, the quarter notes, given their lack of rhythmic variation, would appear rather empty and therefore weak. Thus we conclude that the desired effect requires hurrying—a requirement that notation is unable to indicate….This is to avoid a totally different effect from that intended by him and by the composer on the listener, who at all times is the object and measure of the effect. It is precisely such dissembling that can fulfill the intended effect.47

![Figure 5. (Schenker’s example), Chopin, *Polonaise* Op. 26, No. 1, mm 3-6.](image)

The arrow Schenker added to the score indicates speeding up of the tempo. Again in this example, Schenker’s suggestion goes against the norm. Commonly in performance, the

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47 Ibid., 54.
second beat in measure 4 is slightly delayed; pianists usually end up emphasizing the C-sharp minor chord due to the shift of the registers (between the beats 3 and 4) and the larger intervals in the left hand. Schenker’s performance suggestion (the arrow forward) creates a different grouping structure. This grouping pulls the chords in measures 3 and 4 tightly together as a unit, creating a significant anacrusic gesture to the introduction to the main thematic material. As in other cases, Schenker demonstrates manipulation of musical motion to achieve this desired effect.

Deducing from the cases shown so far, it can be seen that Schenker’s concept of desired effect is closely associated with musical motions. These musical motions signify dissembling processes in realizing the composer’s desired effect. These motions seem to be identified through two types of motion: nuances and gestural motions, and directive motions. What Schenker seems to imply is that a performer’s understanding of producing music must go beyond the quantitative and qualitative measures of the sound. For Schenker, it is imperative to understand the implications of musical motions imbedded in the notation. Moreover, when making expressive decisions, a performer must base his reasons on musical gestures and nuances, as well as directive motions, transferring their expressive intentions across the domain of sound. Reading from Schenker’s examples, spatio-temporal projection of musical expressions seems to be intimately associated with proper understanding of what Schenker refers to as desired effect. In other words, comprehending musical expression as internalized (imagined) physical experience seems to be the essence of what he means by desired effect. As he writes, “by the composer on the listener, who at all times is the object and measure of the effect,”48 this notion of

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48 Ibid., 54.
effect is a shared experience by the composer, performer and listener. This quote suggests that creating, reproducing, and experiencing music are all inspired by the same notion of desired effect. This observation is not enunciated by Schenker himself, but the inclination is consistent in these cases. With a clearer understanding of what Schenker means by desired effect, the reconstruction of his unfinished theory of performance may have a persuasive foundation.

As presented in *The Art of Performance*, Schenker’s notion of dissembling and exposition of the associated desired effect are ambiguous procedures that do not follow any apparent logic or system. Yet he obsessively implements it throughout his writing. This repetition prompts two important questions: what is Schenker’s primary objective behind this process, and why is this process so integral to performance interpretation? The immediate assumption would be that dissembling is associated with musical structure and analytical observation of the musical structure. By the time the bulk of *The Art of Performance* was drafted, Schenker had already completed several theoretical treatises and critical articles including *Der Geist der Musikalischen Technik* (1895), *Harmonielehre* (1906), *Kontrapunkt I* (1910), and J. S. Bach, *Chromatische Phantasie und Fugue* (1910). A rational presumption would first be to draw a parallel between *The Art of Performance* and its contemporary theoretical literature, and then to speculate that the analytical foundations for dissembling are derived from these writings. Since the process of dissembling is a particular way of analyzing the notation, the analytical practices that constitute these writings must have influenced his thoughts of dissembling. From this point of view, one can see that dissembling may have epitomized the expressive manifestation of his speculative views of music at that time; performance
expression is rooted in musical structure and analytical assessment of the structure. Consequently, these thoughts lead to two questions; is Schenker’s intention to communicate musical structure to the listener? Is musical structure the source of his musical expression? First, Schenker’s primary concern in musical communication needs to be recognized. He considers the listener, “who at all times is the object and measure of the effect.” The targeted recipient of the desired effect is the listener. Here, he seems to indicate that the performer can also take the position of a perceiver; dissembling can successfully produce the desired effect when it is assessed from the listener’s perspective, which means a performer should be concerned with not only the production, but also the perception of it. He shows this in the example of dissembling through tempo modification. He proclaims that it “derives from the effect on the listener,” and it “is thus the listener who requires” the dissembling notion. He follows this statement with reiterated emphasis on the performer’s role: “If this is not provided for him (listener) by the performer, his ear cannot simply adjust.” From Schenker’s remarks, it is apparent that the listener’s perception is the aim as well as the means of desired effect. Thus, whatever fortifies and brings significance to the listener’s perception is the main foundation of generative sources of musical expression. To put it another way, when a performer takes information from the notation to reveal the composer’s desired effect, he needs to evaluate his decisions through the perspective of the listener first, not through analytical practices of the score (which come afterward). After all, what inspired the composer also enlightens the performer and is felt by the listener as an emotional

49 Ibid., 54.
50 Ibid., 59.
51 Ibid.
52 Ibid.
experience. The common thread that connects all three parties (a communicational interface among the composer, perform-  

er and listener) is the network of musical motions, which in this study will be referred to as motional profile. Since Schenker’s expressive aim is to deliver the desired effect, not the musical structure and analytical observation, the source of musical expression is intimately related to motions in music.

It is a common assumption that emotion is communicated through performance to the listener. However, what constitutes emotion in musical experience is very ambiguous. For Schenker, emotional communication in music is assessed based on the listener’s affective response. Schenker mentions this point in several places. The nuances created through dissembling “[seem] to attest to its origin in the emotion” and often are “evaluated and executed by means of the emotions for underlying reasons integral to the composition.” The intended emotion of the composer also demands “its equivalent on the part of the player” for proper dissembling. For example, in his discussion of dynamic gradation and dissembling via tempo modulation, an ordinary crescendo is viewed in emotional context first before applying technical means; he writes, “the intensity of emotion must attempt to replace the earlier forte while not exceeding piano.”  

Schenker also uses a term, “psychological quality,” that identifies with emotion, especially when the concept is discussed as opposition to physical quantity of sound. He claims psychological quality possesses “great elasticity and relativity,” which seem to be the general characteristics of motional profiles. Although he uses this term (psychological quality) interchangeably with emotion, it is more directly associated with

53 Ibid., 41.  
54 Ibid., 44.  
55 Ibid., 44.  
56 Ibid., 40.  
57 Ibid., 39.
the listener’s auditory comprehension; the felt emotion denotes the listener’s affective responses.\textsuperscript{58} In his discussion of the \textit{Rhapsody} op. 79, no. 1, he writes:

\begin{quote}
(this Rhapsody) can serve as an example of \textit{forte} in the psychological sense. Observe that here \textit{ff} only bursts out in two places (in mm. 60 and 64 and, similarly, mm. 188 and 192) and that most of the work takes place within \textit{f}. From its mere length, then, it can be deduced that what is meant is less a \textit{forte} in the physical sense (this would be unplayable or, if played, would lead to a monotonous, mindless show of strength) than a state of intense excitement that, as the construction of the work shows, generates the rhapsodic momentum.\textsuperscript{59}
\end{quote}

The composer’s dynamics are reconsidered according to psychological perception in this particular musical context. Again, similarly to most of the other examples of dissembling, the resulting desired effect has a strong implication of exposing musical motions. A perception of monotony would be unavoidable. Moreover, the immediate outcome of this monotony is a quantitative awareness of sound, “mindless strength;” in other words, it lacks the desired effect and consequently leads to a lack of affective responses. Thus, the listener’s experience (emotion communicated) is generated through constant acts of dissembling, through constant generation of motional profile; the opposite state would be monotony, a neutral state of musical motion.

Hypothesis I

The discussion above summarizes the examples in \textit{The Art of Performance} in which Schenker’s views of the desired effect are explained. Deducing from the evidence, I propose, based on my interpretation of these passages, that a desired effect is a motional profile, an amalgamation of musical nuances, gestures, and directive motions. The process of dissembling is the performer’s interpretive attempt to comprehend the

\textsuperscript{58} Ibid., 59.\textsuperscript{59} Ibid., 40.
motional profile implemented in notation, and to translate it into musical performance. Motional profile consists of internally-represented musical motions, which generally consists of two levels, directive and gestural motions.

Time, Musical Time and Motion in Music

Music is a temporal art. To experience music, especially to perform or listen, in almost any given style, genre, social setting, or cultural scenario, we need two fundamental elements: sound and time. Studies in music theory generally tend to be more focused on the components of musical sound, particularly pitch-related subjects in compositions, such as generation of pitch, the harmonic and hierarchical structures, etc. However, there are many different ways of understanding, discussing and comprehending time in music. Discussions regarding elements of musical time are focused on subjects as narrow as rhythmic, metric and grouping structures in a composition, and as broad as the formal organization of the music. Conceptualizing our experience of the time in music is far too complex to be explained in any depth by categorization. However, two basic musical time structures, linearity (i.e. the functionality of tonal music) and nonlinearity (i.e. the concept of moment form) are suggested for describing it as a preliminary measure.

The notion of thinking of time, one of the two fundamental components of musical experience, encompasses all the properties of musical time. This is because any musical experience takes place in the progression of time; in other words, time is the self-evident and ubiquitous property of experienced music at the top of all temporal hierarchic concepts. This perspective is reflected in Langer’s comment, “Music unfolds in time.

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Time unfolds in music.\textsuperscript{61} Although the general definitions of music may emphasize the different salient traits of music, music can be described as “The art or science of combining vocal or instrumental sounds to produce beauty of form, harmony, melody, rhythm, expressive content, etc.”\textsuperscript{62} The definition itself implicates three elements: the sound, the organization of sounds (i.e. elements of organization such as form, melody, harmony etc.), and the communication of expression (i.e. affect and emotion). Among the three, only the sound shows that it does not necessitate any particular human cognitive actions to exist; unlike the other two, all it requires is a temporal space in which to progress. With this ontological purview, it can be said that sound and time form the nucleus of music, particularly in our aural experience.

Just as it is implausible to experience music without time, it is nearly impossible for musicians, performers, and theorists to talk about music without making frequent references to motion. In performance-related discussions, theoretical discourse, and even in concert program notes, descriptions of musical events are often communicated through references to motion, either in relation to human physical experiences or to metaphorical discourses of implied motion in music. We feel that our use of metaphors is a naturally agreed upon form of communication. Therefore, we do not think about the mechanics of use. But, just because we can feel it, does motion really exist in music? In the twentieth century, a number of theorists have regarded motion and movement as the essential substrate of musical rhythm and form. These theorists sought to account for rhythm in

\textsuperscript{61} Susanne Langer, \textit{Feeling and Form} (New York: Scribner’s, 1953), 10.
terms of dynamic or energetic processes, rather than in the architectural arrangement of musical elements.\(^{63}\)

Theorists have examined musical motion in relation to the understanding of the properties of time and musical time. Jonathan Kramer draws a parallel between ordinary time and musical time: “Just as time does not exist apart from experience, so musical time does not exist apart from music.”\(^{64}\) He distinguishes two types of time: “absolute time” (the sequence of actual happenings)\(^{65}\) and “virtual time” (based on experience, a relationship between people and the events they perceive).\(^{66}\) He also recognizes that the same concept of the duality of time operates in music. Likewise, David Epstein acknowledges this duality as “mechanical time and experiential time (also integral time).” He thinks the duality is one of three properties of time along with hierarchy and motion.\(^{67}\)

Epstein’s discussion continues with the perception of time. He recognizes that time is not perceived by the five usual senses, and in this absence of conventional sensory perception, time lacks an intrinsic chronometry (means of measurement). Thus, our depiction of time and demarcation of time are contradictory because time is inherently non-temporal due to the lack of sensory perception. In order to demarcate time, we need to borrow means from other sensory domains, mainly visual or aural.\(^{68}\) The dual modes of time indicate two different types of demarcations through which we experience the progression of time. Mechanical time is demarcated by a measurement system that


\(^{65}\) Ibid.

\(^{66}\) Ibid., 5.


\(^{68}\) Ibid., 6.
mechanically delineates time into equal periods. It is usually measured by devices like a
clock or metronome, which Epstein considers reliable, predictable, and dull. Experiential
time, by contrast, is demarcated by our daily experiences filled with the episodes of
living; it is unpredictable and unique. Hierarchical structure exists in both modes of time.
Clock time builds from seconds to minutes to hours, days, months, and years.
Experiential time likewise builds upon different levels of experiences.

Epstein explains motion as an integral part of the experimental demarcation of
time. He writes, “If integral time is the stuff of life experience, motion is the very stuff of
time itself. To speak of time is virtually to speak of motion.”

Like time, the experience of motion demands a duality of modes, a quantitative and qualitative sense. Motion is the primary correlate of time. Motion, to be controlled, involves periodicity. Periods must be
demarcated, which raises the inherent anachronism that time, since it is unavailable to the
senses, relies upon physical phenomena from the spatial world as the means (largely aural
and/or visual) for its demarcation.

Epstein draws a parallel between the properties of time and properties of time in
music. He believes that the characteristics of time (duality, demarcation, hierarchy,
motion, its non-sensory aspect, the contradiction between chronometry and spatial
terminology) are also applicable to musical time. The duality of musical time is
described as meter and rhythm, meter (chronometric time) exerting essentially clocklike,
equally-spaced measurement, whereas rhythm is integral to an individual work. Temporal
conflicts may rise from integration of these two modes. Temporal conflicts create tension,
and tension means unresolved energy that ultimately is perceived as motion forward.\textsuperscript{72}

The hierarchical structure of musical time shows different levels of demarcation: beats and pulses, measures and motives, hypermeasures and phrases, and larger segments. Motion in musical time, he suggests, is a combined effect of structures that regulates motion (meter and rhythm) and the process that is responsible for the pacing of motion (tempo and related variables). However, Epstein makes very clear that his research is focused on temporal elements of music, meter, and rhythm. Also, he contrasts his approach with that of Schenker and other Schenkerians, whose notion of motion is largely viewed in terms of line, polyphony, harmonic direction, prolongation, and closure.\textsuperscript{73}

Properties of ordinary time and musical time show intimate proximities. This observation clearly shows that motion is an essential component in music, at least regarding temporal aspects of music. Perception of time and perception of musical time coincide, and what is intrinsic in time is undoubtedly intrinsic in musical time. The sensation of motion in both spaces is inevitable and true. However, these features do not completely prove the proximity between the experience of time and the experience of music: music as a whole. We cannot be completely convinced that motion is the primary correlate of music as motion is to time. Although musical experience can be considered as an expressive demarcation of time, time is essentially non-musical when it is removed from musical context. Epstein’s claims on musical time are also somewhat removed from the holistic sense of music, since he separates these temporal elements from other musical components, such as melodic lines, harmonic functions, articulation, and timbre. He

\textsuperscript{72} Ibid., 198.
\textsuperscript{73} Ibid., 13.
admits in his concluding chapter that (after observing some cases of more inclusive measures, where other aspects of music seem to attribute to motion generation) “The elements of the music – melodies, rhythms, harmonies – are not seen as elements (or functions) in themselves: as such they are of limited interest. It is the relation of these elements to musical motion that imbues them with new interest.” 74

Motion in Music: Tonal Motion

In music theory, our understanding of musical motion is framed according to two broad categories: time-related subjects and tonal subjects. Most speculative studies, especially regarding tonal compositions, center on pitch-related issues. Motion, regarded as a genuine perceptual experience of movement, is believed to be rooted in the tonal structure of scale systems, their harmonic functions, and hierarchy. Tonal motion is usually subdivided into two categories: melodic and harmonic motions. Studies of musical motion tend to concentrate on one of the following topics: the source of motion, the organization of motion, the character or quality of motion, or the listener’s perception and response to motion.75 Victor Zuckerkandl, a student of Schenker, refers to the tension-resolution relationship found in the resolution of unstable tones toward more stable tones. Likewise, harmonic motions can be understood via energy generated between dissonant (unstable) intervals and consonant intervals (stable). For Zuckerkandl, rhythm is not a uniquely musical phenomenon and cannot be the source of musical

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74 Ibid., 457.
motion. Thus, only the tendencies of inherent kinetic energy between unstable and stable tones can induce motion, which he refers to as “dynamic qualities,” and the scale system, which he calls the “dynamic field.” This notion immediately assumes hierarchical arrangements of the tonal system, an idea that identifies with some of the core concepts of Schenkerian prolongational theory. Perspectives such as Zuckerkandl’s are severely limiting; he is basically saying that outside the bounds of the tonal hierarchical system, musical motions do not exist, and thus cannot generate perceptible motion in the listener’s experience. What his claims offer has its limits. However, within the tonal system, his approach provides a concrete explanation of how the generative mechanism of motion in music may operate. The fundamentals of his arguments have served as a basis for future research, and still stand firm without much significant dispute.

Motion in Music: Perspective from the Conceptual Metaphor

Newer ways of understanding musical motion have been explored in recent decades. These studies are based mostly on the grounds of contemporary research in cognitive psychology, cognitive linguistics, and neuroscience, setting off growing interests in interdisciplinary approaches through which traditional music theoretical issues may be viewed. Much of this research discusses empirical matters in music, such as our perceptive behaviors and cognitive processes, and even emotions related to our aural experience of music. The emphasis on empirical aspects of music naturally directs the attention toward performance-related issues. It offers a better means of bridging the gap between theory and performance, by providing added dimensions to theorists’

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76 Ibid., 56.
investigative goals, and also by redirecting their attention to more scientifically-organized views of performance issues. At the same time, it offers performers means through which they can relate interpretive issues to more specifically-targeted theoretical inputs.

Metaphorical understanding seems to explain our perception of musical motion convincingly. Steve Larson uses the concept of conceptual metaphor to theorize his views on musical forces. Larson makes a significant contribution to recent research by theorizing musical forces based on this interdisciplinary approach. He develops a framework for the metaphor of musical forces and claims that experienced listeners hear tonal music as purposeful action within a dynamic field of musical forces. Physical action and physical force (source domain) map onto various types of musical forces (target domain). He recognizes that musical forces operate in tonal music, particularly in the formulation of melodies. He categorizes the musical forces into three parts: gravity (the tendency of a note to descend), magnetism (the tendency of an unstable note to move to the closest stable pitch), and inertia (the tendency of a pattern of motion to continue in the same direction). Together these forces shape musical motions. Larson recognizes certain melodic tendencies based on his theory of musical forces, and he finds that these tendencies promote melodic tendencies found in many tonal compositions. He also tries to explain Schenker’s background structures according to these tendencies. To support his hypothesis, he presents experiments based on computer-generated algorithms. In these studies, he argues that the Schenkerian hierarchy of embellishments complies with the

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78 Ibid., 67.
inherent nature of melodic expectation supported by musical forces. Larson’s arguments on musical forces and melodic expectation in tonal music are grounded on claims of conceptual metaphor.

As we have seen abundantly in Epstein’s claims, the sensation of motion in everyday life relies primarily on visual demarcation and is expressed through mostly visual metaphor. Similarly, we often understand, and talk about, musical motion with visual metaphors. Just as our verbal description of time relies significantly on visual metaphor (since we cannot sense it), our descriptions of and understanding of music are primarily through metaphorical processes. The metaphor upon which Larson develops his claims of musical forces, however, shows a slightly different perspective, namely conceptual metaphor. The core concept of conceptual metaphor is that we cannot divorce our mind from our body, that the separation between the two becomes meaningless, and that this interrelationship is necessary to any adequate theory of mind (contrasting with the general notion of mind as the controller and body as the controlled). Some pioneering thoughts of musical understanding via conceptual metaphor are speculated on by Mark Johnson:

My hypothesis is that the very same patterns of our bodily perception, activity, and feeling that structure our musical experience also structure our conceptualization of it. The structure of our felt musical experience underlies our conceptual system and thus shape the language we use to describe and theorize about music. . . I argue that musical meaning is embodied via “image schema” and various patterns of emotional experience. . . both the thinking we do about music and the language we use to describe it are tied intimately to our bodily experience. In particular, metaphors that are grounded in our sensory-motor and affective capacities are the key to our ability to theorize meaningfully about music.

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Johnson claims conceptual metaphor is the principal cognitive mechanism for connecting such embodied structures of meaning to abstract musical comprehension and reasoning.\(^{82}\) The primary difference between conceptual metaphor and linguistic metaphor (the common understanding of metaphor) is that conceptual metaphor involves a cognitive mapping between two different domains (such as physical domain and musical domain), while linguistic metaphor is an expression of such mapping of two different concepts within the linguistic domain. Thus, in the notion of conceptual metaphor, there is no need for linguistic discourse to experience musical meaning; of course, if we are to talk about that experience, we need to use words to describe it (but then, “talking about it” itself is done through means of linguistic metaphor). The mapping between two different domains in conceptual metaphor is achieved through what Johnson calls “image schema.” Our daily experiences and physical motions generate experiential patterns that are capable of generating significant meanings, including emotions and feelings. He characterizes image schema:

…they are not fixed templates that we impose on experiences, but are instead highly flexible cross-modal patterns that make it possible for us to have ordered experiences that we can make some sense of. . . our very capacity to think and to reason abstractly is built upon embodied meaning and inference patterns. In other words, our concepts and patterns of reasoning piggyback upon our sensory-motor and affect structures. . . We do not merely project these image schemas on music, any more than we project them on our ordinary bodily experience. Instead, image schemas are part of the structure, and define the quality of, our musical experience as such. They are in the music as experienced; they are the structure of that music. And they have meaning because they are partly constitutive of our bodily experience and the meaning it gives rise to.\(^{83}\)

Several years later, Johnson and Larson collaborated on an article expanding on their claims about conceptual metaphor. There are reiterated emphases on how our

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\(^{82}\) Ibid., 98.
\(^{83}\) Ibid., 97.
understanding of musical motion is entirely metaphoric, and the key metaphors are grounded in three of our basic bodily experiences of physical motion,\textsuperscript{84} but this time, the focus of their claim is narrowed to musical motions from musical experiences in general. They write that “To analyze our metaphorical concept of tonal motion, we must first understand our concepts of time.”\textsuperscript{85} They point out that the concept of time, like the concept of tonal motion, is profoundly metaphoric; we understand the progression of time as a motion through space. They identify two basic spatial metaphors for time, which are analogous to musical counterparts: the “moving time” metaphor and the “moving observer” metaphor. In the moving-time metaphor, temporal change is a particular kind of motion through space where the observer’s position is fixed in the present, and times are conceptualized as objects that travel from the past through the present and to the future. In the moving-observer metaphor, the observer moves across a landscape, and times are points of regions on that landscape. Larson and Johnson begin this article by a statement: “Music moves. And something in the way it moves moves us.” The main subject of their paper is to explain musical motion through conceptual metaphor. But the obvious implication of their belief is that musical motion “moves us.” In other words, musical motion is associated with eliciting emotional responses. Their previous research centered on the mechanism of conceptual metaphor, the notion of dual domains, properties of image schema, and connections to musical forces. This time around, the authors are more interested in the aspects of the affective responses to music, especially ones that are related to musical motion. In doing so, they involve properties of time, which they explain with conceptual metaphors. However, what they claim in this study is

\textsuperscript{84} Mark Johnson and Steve Larson, “‘Something in the Way She Moves’ – Metaphors of Musical motion,” \textit{Metaphor and Symbol} 18 (2003): 63.

\textsuperscript{85} Ibid., 66.
not that much different than Epstein’s explanation. These two perspectives on motion in music, Epstein’s and Larson and Johnson’s, are not competing, but essentially complement each other, as shown in this list of observations from their work. First, musical motion in music is a genuine perceptual experience. Second, the evidence of felt motion in musical experience can be substantiated via two perspectives: (1) in terms of music’s temporal properties, music shares its fundamental properties with time, and (2) in terms of music’s tonal properties and functions, directional forces can generate sensation of motions in music. Third, in both perspectives, the only conclusion that explains our perception of musical motion is through metaphor, namely perceptual metaphor. The core concept in perceptual metaphor (physical experience is the fundamental basis for embodied meanings of time and motion, and embodied meanings generated through cross-domain mapping) supports both perspectives above. Moreover, to understand, to discuss and to communicate musical motions, we rely on the process of conceptual metaphor. Fourth, in a conceptual metaphor, the mapping takes place between the domain of space (physical experience) and the domain of musical sound (aural experience). The embodied meanings produced in this process are projected without any assistance from linguistic expressions. In other words, musical motion as expression through conceptual metaphor is fundamentally non-verbal. So, when we actually talk about musical motion in words, we add an extra layer of metaphorical process to the purest embodied meaning of motion. Thus, musical motion is in the music as experienced. Moreover, the genuine perception of musical motion, in the purest sense, is preconceptual, precognitive and not designated by any linguistic terms.
Musical Motion from the Perspective of The Art of Performance

These observations are representative of more recent theories and debates not available at the time Schenker drafted The Art of Performance in the early 1910s. It is enlightening to compare some of these ideas to Schenker’s ideas on musical motion. The arguments so far primarily deal with the properties of musical motions as we perceive them in performance (or at least the actual aural experience of it). Many writings in music theory discuss and make reference to musical motions, but many of them use the term figuratively without the purpose discussing musical motion as in aural perception. This suggests that thinking in terms of motion is deeply rooted in our ways of comprehending music, even at the most abstract level. Internally-represented motion is one of the most natural ways in which we explain the events in music, from the very casual depiction of the sound to the abstract speculation of implied motion hidden in the deepest level of musical structure. The musical motion Schenker obsessively refers to in The Art of Performance must be understood as a perceptual one, not a figurative one. A century after Schenker began constructing performance theory, researchers are studying complementary ideas. Construction of Schenker’s unfinished theory, then, needs to begin with repaving the foundation by solidifying his ideas of musical motion; the art of performance begins with the art of perceptual motion in music.

Schenker’s notion of musical motion can be profitably compared to the observations found in the studies listed above. Epstein shows convincing arguments for drawing parallels between properties of time and musical time. Similarly, characteristics of Schenker’s desired effect concur with three properties of time: duality, hierarchy and motion.
The demarcation of time is experienced in two different modes: mechanical and intrinsic (experiential). These dual modes may be experienced separately or simultaneously, providing chronometric means to our ability to sense the progression of time. Schenker’s desired effect satisfies this duality in several different aspects. The most obvious one is its meter and rhythm. Epstein makes his claims clear by isolating these temporal elements from the overall context of music. In Schenker’s case, these temporal elements are not recognized separately from the whole, but as imbedded in the musical texture. The metric and rhythmic elements are contributing factors for demarcating desired effect, and consequently are never projected as an independent expression. However, this fact does not diminish their validity as primary means of demarcation at the most fundamental level. Any aural experience of music naturally includes an implication of meter and rhythm. Even if the composition is written without a meter, and even if the composition does not bear conventional rhythmic expressions, our natural perceptual behavior tends to impose the framework of meter and rhythm on any heard music in order to comprehend it. Another perspective of the duality evident in Schenker’s desired effect is more unique and exclusive. There are qualitative differences between mechanical and experiential modes; one is predictable while the other is unpredictable, one is dull while the other gives meaning, one is an imposition from a non-human source while the other is sourced in human action. These conceptual differences can describe the characteristic differences of two stages in the process of achieving a desired effect. Schenker’s dissembling process begins with the notation and ends with the realization of a motional profile that is implemented in the notation. Therefore, notation itself remains in a neutral state in terms of the expression. It is only the performer’s dissembling act that
activates the expressively neutral state by inducing the proper motional profile. Here, we can see similar contrasting features, as we have between the two means of demarcation in Epstein’s argument. From Schenker’s perspective, notation shows predictable qualities similar to the mechanical demarcation of time. On the other hand, desired effect, embodied via motional profile, is unpredictable, expressive and capable of affective communication.

The hierarchical organization shown in Epstein’s demarcation is also evident in Schenker’s idea. Performer’s dissembling, as a part of performance, requires a manifestation through progression of time. Thus, it naturally includes hierarchical features of musical time. However, within the motional profile, an additional layer of hierarchical organization may be observed. Two contributing categories of motions, gestural and directional, belong to this hierarchy. Gestural motions are often referred to as nuances in the musical surface, while directional motions indicate motions toward goals and relate to more structural levels.

The evidence of the motional experience in desired effect is multi-faceted. First, Epstein’s idea that motion is the primary correlate of time is also implied in Schenker. Since desired effect is only experienced in temporal space (through performance), motion consequently becomes a primary correlate of the presentation of desired effect. Second, as shown in the previous chapter, realization of desired effect is often used to induce musical motion through imposing grouping structures. Third, Schenker’s desired effect, perceived through the process of conceptual metaphor, involves three different domains and two separate stages of cross-domain mapping. In the first stage, the source domain is notation, and the target domain is motional profile. From the source domain, fixed
elements such as pitch and rhythm, flexible elements like dynamics and articulations, more abstract elements like expression, and functional elements like harmonic implications and structural hierarchy are mapped onto a dense network of internally-represented physical motions. The observer of this stage of metaphorical process is the performer. The second stage involves the presentation of desired effect in performance. The source domain now is the embodied motion in the performer’s interpretation, and the target domain is sound space (where the listener’s perception of the desired effect is the eventual goal). The embodied motions in the performer’s interpretation are mapped onto the expressive deviations in the performance, inducing the profile of motions of the source domain in the listener’s perception. This perception in the listener results in affective responses that are usually depicted as the listener’s being emotionally “moved” (which indicates another state of conceptual metaphor within the listener’s comprehension). Thus, desired effect hosts multiple stages of conceptual metaphor linked together as one continuous process.

Musical Motion as a Generative Source of Emotion

Functionalist Perspective

Listeners generally describe their musical experience in connection with certain emotional states they seem to associate with the music such as happiness, sadness, joy, melancholy and excitement. To speak of musical meaning is to speak of the emotion aroused by the music. These emotional responses in listeners are shared, discussed and analyzed, all of which listeners typically do as part of their appreciation. While doing so, no one doubts the reality of their affective responses to music, or music’s ability to
generate emotion. And under such an assumption, music being “the language of emotion,” they seldom question how these emotions are generated by music. Some researchers have begun to see close associations between motion in music and emotional experience. After claiming that musical motion is a primary correlate of musical time, Epstein also suggests that motion is a prime component of musical feeling. However, he believes that little has been examined in terms of its mechanisms, how they may relate to musical affect, or indeed, control it. Gabrielsson recognizes that there is a close psychological connection between emotion and motion. He gathers this conclusion based on examination of various empirical studies using the sentograph, a non-verbal method of quantifying affective response in music by registering varying degrees of finger pressure while listening to musical compositions. Clarke’s view, preceding conceptual metaphor theory by several years, is that movements in musical events share general characteristics with bodily movements. These bodily movements are symptomatic of human emotions, moods and feeling, suggesting that musical motion is a plausible source of emotional experience. Building upon Clark’s argument, Shove and Repp acknowledge that perception of motion is attributed not only to musical structures but also to musical expressions; the listeners could hear it as emotionally-charged gestures. They find that

87 David Epstein, Shaping Time: Music, the Brain and Performance. (New York: Schirmer Books, 1995), 457. He also writes; “It is perhaps no accident that motion should be so intimately tied to musical affect, and thereby tied to musical symbols that carry affective sensibilities. The etymology of the word emotion is related to the experience of motion. Emovere, emotus are the Latin root (e, out of, motus, motion; stemming from motion; moving “moved” by emotional experience).”
these movements are “sound-structuring movements” initiated by performers and reported by listeners as sonic objects in motion. For listeners, this perception of motion has an impact on two levels: structural knowledge and emotional meaning. Despite all these plausible speculations, the idea that musical motion generates affective response and communicates emotion is not yet solidified as theory. The only available theory that claims a generative source of musical affect and has not been countered is called the “functionalist perspective.”

The foundation of the functionalist perspective theory of emotional expression and communication of music was introduced by Juslin in 1997. Prior to this study, in the 1980s, there was a resurgence of interest in music performance and emotional communication. However, these empirical studies targeted isolated parameters of music such as dynamics and structural interpretation; on the other hand, virtually no studies examined how performers communicate emotional contents to listeners. By contrast, Juslin focused on the very mechanism of communicative means between performers and listeners by constructing a framework based on functionalism. The functionalist perspective of emotional communication in music claims that emotional expression in music performance is primarily based on a general, innate code for the vocal expression

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93 Ibid., 385-388.
of emotions that has served crucial functions throughout evolution. The innate
programming of vocal expression represents basic human emotions. The origins of this
expressive code are involuntary and emotion-specific physiological changes associated
with emotional reactions, which strongly influence different aspects of voice production.
Many features of expression in performance are similar to vocal expression of emotion.
Juslin argues that what makes a specific music performance on, say, the violin, so
moving, is the fact that it sounds a lot like the human voice. He also suggests that musical
instruments are sometimes processed by an independent brain module as a kind of super-
expressive voice. According to Juslin, the codes of musical expression in this
functionalist perspective reflect several conditional factors. (1) Emotion and its
expression are intrinsically connected. Each basic emotion has a specific expressive form
regardless of the output modality. Likewise, the production and recognition of emotion
have a common biological basis. Thus, encoding and decoding, performance and
perception, should be considered as reciprocal processes. (2) The basic emotions, due to
their phylogenetic history and intrinsic relationship to expression, would be easier to
communicate than more complex emotions. (3) There should be similarities of expression
across different modalities: for instance, similarities between emotional expression in
music performance and the non-verbal aspects of speech and vocal expression of
emotion. (4) Emotional communication in music performance involves probabilistic and
redundant cues in the performance. Juslin identifies this concept with the general views
on non-verbal communication, in which the signals are coded probabilistically to a large

94 Patrick Juslin and Renee Timmers, “Expression and Communication of Emotion in Music Performance,”
95 Ibid., 477.
extent. (5) Musical communication is a form of non-verbal communication, and its emotional meanings are understood via a socially-shared signal system. Although it is a given that the non-verbal form is far less accurate than the verbal form, the success of this non-verbal communication is measured by the quality of its reproduction. This reproduction also can be understood simply as the listener perceiving the performer’s expressive intention. The perceiver is by nature inherently uncertain (this is so even in verbal communication to a certain extent). Perception is seen as an indirect process that involves the achievement of distal variables by means of a set of proximal cues. Thus, musical communication is considered successful as long as the intention is known to both the sender and the receiver. (6) Decoding accuracy, however, should be independent of musical training because according to the functionalist view, emotional communication in music performance uses the spatio-temporal code as a form of communication.96

Motional Profile: An Alternative View to the Functionalist Perspective

The theoretical orientation of Schenker’s desired effect concurs largely with these conditioning factors of the functionalist perspective theory. Although Schenker and Juslin are seemingly distant from each other (functionalist perspective theory claims vocal expression as the source of musical expression while desired effect points to musical motion as the source), the two views show agreement in their basic conditional frameworks. Regarding (1) from above, Juslin’s two stages in musical communication, performance (encoding) and perception (decoding), use human vocal expressions as a common coding system. For example, a performer’s expressive bowing that mimics

sighing would arouse intuitive connection to the sighing in the listener. Thus, the encoding and decoding mechanism, rooted in non-verbal vocal expression, would elicit the same emotional experience associated with sighing in both performer and listener. Similarly in Schenker, a common communicative interface is in operation between performer and listener. Desired effect realized via dissembling becomes motional profile, with which the performer encodes his musical intention (that is, for Schenker, the composer’s intention). Upon the listener’s hearing of the performer’s playing, motional profile is perceived, and the desired effect (musical intent of the composer/performer) is communicated. The communicative interface is the motional profile, and the communicated meaning is the desired effect. For (2) above, the basic emotions Juslin refers to are happiness, sadness, anger, and fear, among others. He believes that performance studies should examine these before gradually including more complex emotions. Juslin established a model of musical expression and communicating on the grounds of non-verbal communication from the functionalist view. His theory convincingly explains the emotion being expressed and perceived by performers and listeners non-verbally. However, his non-verbal explanation ends when he assigns a verbally descriptive destination to the process. His aspiration is to prove that these basic human emotions can be communicated through music (no linguistic expression involved). These emotions are simple enough to put in a single word, and this simplicity makes it possible to encode and decode with prototypical vocal expressions that are hard-wired into our cognitive behavior. For instance, if a performer wishes to portray a combination of simple emotions like sadness with a sense of relief, the success of the

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97 Ibid., 389.
communication would diminish significantly. One can only imagine how difficult it would be to communicate the richness of emotions we experience in music, which are usually much more complex than we can describe with one simple word. When listeners are assigned a small number of contrasting emotions, from which they are expected to pick one as more indicative of their emotional state than the others, the outcome is very predictable. But, these simple designative terms of emotion (directing the listeners to the correct answer) make the experience overly simplified and diluted. Thus, it is the verbal designation that makes these emotions easy, not the degree of simplicity or complexity of the emotion; no genuine emotion felt in musical experience is simple enough to be portrayed in a single term. Regarding (3) above, the expressive similarities between the two modalities can be observed in Schenker’s motional profile as well. In Juslin’s model, the mode of vocal expression entails our innate mechanisms of comprehending emotion. We identify emotional qualities in the mode of musical expression as we draw parallels between the expressive similarities of the two modes. Schenker’s model also recognizes dual modalities: the sensation of physical motions (physical or imagined) and the sensation of musical motions. The innate mechanism of emotional comprehension, which includes generation and communication of musical emotion, is the property of the former, while the embodiment of the innate mechanism belongs to the latter. Moreover, Juslin and Schenker both account for biological origin in recognizing the innate mechanism of our emotional comprehension. Regarding (4) above, the notion that non-verbal communication is coded mostly as probabilistic and redundant applies amply to Schenker’s motional profile. This trait can be explained by saying that if we cannot put a word to it, it is probabilistic. Any non-verbal setting automatically exposes itself to this
condition. Schenker’s model of emotional communication is achieved through the internal representation of motions. His model is clearly a form of non-verbal communication with the potential of generating emotion and inducing affective responses. Here, as in Juslin’s model, in the absence of linguistic expression, redundant and probabilistic cues are necessary to achieve successful emotional communication between performer and listener. As seen in (5) above, emotional communication is considered successful if the communicative intention becomes known to the sender and receiver. This is true in both verbal and non-verbal forms; only the communicative intention in non-verbal form is coded probabilistically, and thus, more inclusive or pluralistic messages may result. Juslin overcomes this difficulty by essentially crossing the domain boundary. The main objective of his investigations is to see whether a simple emotion can be communicated between performer and listener through the perspective of functionalism. In his investigation, the performer’s intention is verbally defined (like happiness and sadness), and the success of the communication depends upon the listener’s perception and identification of the source intention. The identification, therefore, needs to be expressed in verbal form, by the listener pointing to a designative word (like happiness and sadness), so the entire process is not truly non-verbal. The probabilistic nature of non-verbal communication is overridden by its association with verbal comprehension. Juslin’s process is probabilistic, but the result is specific. Juslin emphasizes that his theory focuses on the communication of simple emotions. In contrast, Schenker’s model does not cross over the domain boundary. His notion of musical communication through desired effect and motional profile stays truly within the non-verbal realm. Unlike Juslin’s verbal description marking the beginning and the end of the
communicative process, Schenker’s begins and ends with comprehension of the desired effect through internal representation of musical motions. Thus, the desired effect of the composer’s expressive intention is preserved non-verbally from its generation, through delivery, and then to perception and comprehension. The measurement of the successful communication would be, then, far less specific than suggested by Juslin’s model. In fact, the means of measurement needs to remain non-verbal in order for it to be true to its emotional quality, indicating that another expressive form beyond verbal description on the part of the listener must be considered. 98 Regardless of the means of measurement, the result would be probabilistic and pluralistic. This forecast may explain why Schenker’s dissembling often concerns ways of delineating expressive deviations in performance. Redundancy is very characteristic in his dissembling process; for instance, expressive parameters are distorted against most of the composer’s expressive markings to create a cohesive and representative motional profile of a given excerpt, indicative of Schenker’s awareness of some of the most pertinent properties of non-verbal communication of musical emotion. Lastly for (6) above, Juslin claims that decoding accuracy should be independent of musical training due to its spatio-temporal coding. While Schenker’s model is more non-verbal and produces less accurate results, the communication process itself is more intuitive and less intellectual; in other words, sophisticated musical training may not play a critical role for the listener’s decoding. Schenker avoids simplifying musical emotion to a single descriptive entity. However, clarification of intended emotion is undeniable, and this clarification is the main purpose of desired effect via motional profile. For Schenker, musical expressions do not

98 This will be discussed in my concluding chapter as I explore a possibility of utilizing more physical form of communication.
communicate any particular musical structures or projection of analytical outcomes directly into the performance. This is the most salient characteristic of the interpretive notion found in *The Art of Performance*, but it does not mean Schenker's analysis of the score does not apply to performance interpretation. Such analytical outcomes, including linear voice leadings and prolongations of different structural levels, are all amalgamated into a representative expression. This approach differs significantly from some of the common assumptions made by Schenkerian practitioners. Often, they delineate analytical details into the performance and prescribe interpretive solutions based on the projection of these analytical outcomes. I do not dispute that Schenkerian analytical procedures are highly relevant in his performance interpretation; instead, I emphasize that, for Schenker, analytical details likely do not represent the musical meaning or emotion, and that they are not to be emphasized in performance. If Schenkerian performance expression does not express structural or analytical information, the perceiving ears do not require any advanced form of Schenkerian analysis. Moreover, much like the functionalist perspective, the communicative mechanism of Schenker’s model is based on biological origins, which suggests that the communication is independent of rigorous musical training. In comparison to the functionalist perspective, Schenker’s explanation is capable of communicating more complex emotions. Musical training may not be necessary in the listener, but as the density of the motional profile and the demands of comprehension increase, trained ears may be more sensitive to details such as surface-level gestures and nuances.

When comparing the properties of Juslin’s functionalist perspective and Schenker’s desired effect and motional profile, it becomes clear that Schenker’s model
concurs with most of the conditions of Juslin’s model, and clearly meets the criteria of non-verbal communication. In the center of Schenker’s model are these fundamental features: 1) motion in music is real, and the perception of musical motion is genuine; and 2) musical motion generates emotional meaning (non-verbal), and it elicits emotion in the listener. This suggests that Schenker intuitively foresaw some of the prevailing trends in later research, and attempted to construct his performance theories based on his intuitive assumptions, especially regarding emotional communication and affective responses in music. Therefore, Schenker’s notion of desired effect may offer an alternative view to the idea of the functionalist perspective as the generative source of musical expression and emotion.

Musical Motion: from Neurological Views

Schenker’s motional profiles show two different levels of musical motions: directive motion and nuances and gestures. These two types of motion can be observed in Neil Todd’s studies of musical motion from a neurological perspective. Todd recognizes two possible mechanisms associated with musical motion, a vestibulomotor mechanism and an audio-visuo-motor mechanism, which may mediate two distinct kinds of musical motion: gesture and locomotion. Todd believes bodily motions manifest themselves in music as internalized forms of motion. Gestural movement is associated with highly expressive motion contours, while locomotive motion is associated with tempo or other metrically-related motions. He explains the workings of these mechanisms:

Given that it can be evoked by continuous sounds, then an acoustic event sequence in which the energy density varies continuously, either by rate modulation, amplitude modulation, or pulse length (articulation) modulation, will give rise to a

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100 Ibid., 116.
correspondingly modulated vestibular signal, and hence, potentially to a correspondingly modulated sense of motion. In the case of highly repetitive stimuli, such as in dance music, it could imitate locomotive signals. It is not yet clear though what perceptual significance this may have.\textsuperscript{101}

As I compared Schenker’s model to the functionalist perspective, I speculated that musical motion may be a source of musical emotion. Research supporting my speculation can be found in a study from 2006 by Istvan Molnar-Szakacs and Katie Overy. They believe that the perception of action, language, and music requires shared neural resources, which appear to be located in brain regions comprising the human mirror neuron system.\textsuperscript{102} A number of recent neuroimaging studies have shown that specific musical experience or expertise can modulate the activity within the fronto-parietal mirror neuron system.\textsuperscript{103} They believe that:

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\ldots \text{humans may comprehend all communicative signals, whether visual or auditory, linguistic or musical, in terms of their understanding of the motor action behind that signal, and furthermore, in terms of the intention behind that motor action. The expressive nature of any human action or vocalization sends a signal of the intentional and emotional state of the executor.} \ldots \text{Thus, as a sentence or a musical phrase can be used to express an individual’s semantic intention or emotional state, a listener can understand the intended expression of the sentence or melody, via the perceived ‘motion’ of the signal. Since the acoustic nature of music can convey pure, non-referential ‘motion’ in pitch-space and time, it can thereby convey complex and subtle qualities of human ‘e’motion, using varying complexities of structural hierarchy.} \textsuperscript{104}
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The mechanism of the mirror neuron system is further investigated in a more recent study in 2010 by Heather Chapin, et al.

A mechanism for this action could involve engagement of the mirror neuron system and its interaction with the limbic system via the insula. Tempo and sound intensity, parameters that are manipulated through emotionally charged movement, are two properties of music that may convey emotion from performer to listener through a

\textsuperscript{101} Ibid., 118.
\textsuperscript{103} Ibid., 236.
\textsuperscript{104} Ibid., 238.
process of motor resonance. Thus, perception of motion in music may occur through activation of mirror neuron and motor systems and lead to emotional responses through interactions of the mirror neuron network and limbic system taking place via the insula.\textsuperscript{105}

The authors’ speculation is that the listener’s perceived sensation of musical motion in expressive fluctuations of dynamics and tempo intensity not only activates the mirror neuron system, but also is associated with emotional experience. They propose that these fluctuations would lead to violation of temporal expectancies, and that temporal expectancy violations would be associated with emotional responses.\textsuperscript{106}

Musical Motion, Tendencies and Inhibitions

The above observation is consistent with an expectancy theory of emotional response to music proposed by Leonard Meyer.\textsuperscript{107} Meyer explains his theory of emotions related to musical experience in terms of the \textit{law of affect}. The law of affect states that emotion is evoked when a tendency to respond is inhabited.\textsuperscript{108} Meyer writes:

\begin{quote}
A pattern reaction consists of a set or series of regularly coincident mental or motor responses which, once brought into play as part of the response to a given stimulus, follow a previously ordered course, unless inhibited or blocked in some way. . . The term “tendency”, as used in this study, comprises all automatic response patterns, whether natural or learned. . . If the pattern reaction runs its normal course to completion, then the whole process may be completely unconscious. . . The tendency to respond becomes conscious where inhibition of some sort is present, when the normal is inhibited. Such conscious and self-conscious tendencies are often thought of and referred to as “expectation.”\textsuperscript{109}
\end{quote}

\textsuperscript{106} Ibid., 2.
\textsuperscript{107} Ibid., 8.
\textsuperscript{108} Ibd., 2.
\textsuperscript{109} Ibid., 24.
Schenker’s desired effect and motional profile also operate under the principles of
Meyer’s law of affect. The observation made by Chapin can be seen in Schenker’s notion
of dissembling, which consists of constant and collaborating deviations of expressive
parameters. Without these deviations, the musical surface would remain in an
emotionally neutral state. Of course, a rendition of music performed precisely as
indicated by the score would generate some inhibition to the tendency to respond. But the
emotion provoked from this literal performance would result in a collection of disjointed
effects. Expression of a cohesive whole is not possible unless these expressive deviations
are intentionally organized to do so. For Schenker, this kind of literal interpretation does
not generate sufficient emotional friction to constitute a proper desired effect. Thus, the
act of dissembling is an intentional effort to prompt inhibitions. With the right kind of
inhibitions, the right kind of emotions can be induced, and consequently the proper
desired effect can be realized.

Hypothesis II

Given that motion in music is real and the perception of musical motion is
genuine, and that musical motion is capable of generating non-verbal emotional meaning,
I offer an alternative theory to the functionalist perspective, without countering its claims:
emotional expression in music performance is based on the non-verbal communicative
capabilities of musical motions, in which a cohesive set of motions called motional
profile is responsible for generating, delivering, communicating and comprehending
emotions.
CHAPTER III
SYNTHESIS, AUFENZATS AND THE LAWS OF COMPOSITION

Synthesis from the perspective of *The Art of Performance*

The realization and communication of the desired effect is the performer’s task. In order to achieve this task, Schenker believes that a superficial acquaintance with the work of art is insufficient, and that it is essential for the performer to acquire a thorough knowledge of all the laws of composition. These laws enable composers to create, and therefore, the same laws enable the performer to recreate the composition.\(^{110}\)

Unfortunately, Schenker does not provide any description of these laws of composition in *The Art of Performance*. However, he does describe a procedure called “synthesis”\(^ {111}\) that seems to be closely associated with the idea. The function of the knowledge of the laws, according to Schenker, is to facilitate the performer’s ability to express “the composer’s true content.”\(^ {112}\) The content of a composition is “always created according to the needs of synthesis,”\(^ {113}\) and with the “free-flowing synthesis the content lends itself to greater freedom of expression.”\(^ {114}\) Throughout the text, Schenker reiterates the importance of synthesis in a performer’s interpretation of a composition: “The synthesis of a masterwork presents extraordinary difficulties to the performer. Its demands cannot be avoided.”\(^ {115}\) However, Schenker never explicitly discloses the process of synthesis. The term is used repeatedly in connection with individual cases of technical application without any clear definition. Writers have often attempted to impose Schenker’s mature

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111 Ibid., 19.
112 Ibid., 7.
113 Ibid., 3.
114 Ibid., 70.
115 Ibid., 77.
theories on musical performances. Schenker’s view of the content is discussed by Charles Burkhart in his “Schenker’s Theory of Levels and Musical Performance:”

Schenker saw his theory as revealing the music’s “content” (Inhalt) – its voice-leading, motivic correspondences, harmonic structure – and he believed that the benefit of his exposition of the content was that it provided the performer with valuable objective information applicable to performance, thereby decreasing the performer’s need to rely on guesswork and personal fancy.116

Burkhart’s observation of performance implications is made from the perspective of Schenker’s theory of structural levels, which became a more prominent idea in his mature theory. Although Burkhart does not refer to the term “synthesis,” he concludes that Schenker’s theory of levels can provide the performers with awareness such as conveying “the long line,”117 projecting the impression of the background structure of the composition. He believes that the performer’s intuition may already be inclined to express the background structures, and that Schenker’s theory does not substitute such intuition but confirms it. He adds that Schenker’s theory gives helpful insights, but “no magic formulas” to achieve such tasks.118 As his term “no magic formulas” insinuates, even with in-depth knowledge of Schenker’s theories it is difficult to arrive at a systematic approach applicable to performance. Thus, the challenges are evident in reconstructing Schenker’s performance theory. I believe this problem is largely rooted in Schenker’s indefinite and ambiguous descriptions of core terms and procedures. In the previous chapters, I have attempted to clarify the properties of the “desired effect” associated with Schenker’s idea of performance interpretation and musical communication. Here, I offer clarification of the core concepts that constitute Schenker’s

117 Ibid., 105.
118 Ibid., 112.
procedure of performance interpretation: (1) the term, “content,” referred to in *The Art of Performance*—specifically the musical content that is pertinent to the performer’s interpretation; (2) “the laws of compositions” operating in the musical content; (3) the process of “synthesis” and how it can be realized in a performer’s interpretation. These concepts obviously carry significant theoretical implications, and it is necessary to understand Schenker’s theoretical foundation for them. But, in the current context, these concepts need to be investigated in the interest of revealing Schenker’s performance theory, and they need to be explained in respect to their actual applicability in performance. For that reason, I steer away from the viewpoint exemplified in Burkhart’s writing, in which the analytical focus is on divulging the structural background and the procedures involved. Concepts such as the theory of levels were not yet formulated at the time the main body of *The Art of Performance* was drafted. Instead, the investigation needs to begin with Schenker’s theoretical sources contemporary to the draft. Like Schenker’s theory of organic unity, his views of the laws of composition and the notion of synthesis, at the time of *The Art of Performance*, are still in the beginning stages of their development. In general, Schenkerians tend to account for Schenker’s early theory as a developmental stage that laid the foundation for the mature structural theory in his later life. However, Schenker’s beliefs in his earlier writings are as firm and persuasive as the ones in his later work. It is unlikely that he regarded his earlier concepts as a mere preliminary draft of a final outcome occurring some twenty years later. In other words, Schenker’s concepts of compositional laws, content of music, and synthesis hold their own significance independent from their later counterparts. I believe that *The Art of*
Performance was born out of Schenker’s earlier convictions on these theoretical concepts, and needs to be examined in that context.

Similar to Burkhart’s approach, John William Turner articulates his view of synthesis in relation to performance interpretation in his article, “Essential Concepts for Schenkerian Performance.” His view also makes a connection with Schenker’s later theory. He sees the synthetic process as being made possible by establishing the relative significance of discrete musical events according to the concept of hierarchical organization.\textsuperscript{119} Schenker’s main concern in his mature theory is the revelation of the basic content, the Ursatz, through a process of elimination. In each level of the synthetic process, significant structural events are delineated, and the closer it gets to the content of the background, the more discretely these events are situated. Turner believes this large-scale structural significance contributes to a performer’s conception of the piece, and helps the performer to shape a directive motion encompassing the entire composition:

The synthetic process involves reintegrating all the component parts into a coherent whole. Musical units are evaluated not for their individual properties, but rather for their contribution to the directed motion of the entire structure… The very existence of a coherent large-scale structure implies a given musical work follows a single process; that is, despite its length and complexity, it exists as a unified whole….From this perspective, Schenkerian analysis is an invaluable performance tool. It reveals a work’s large-scale structure in a concise and easily memorized graph… Thus, Schenkerian graphs function as mental "shorthand"; they trace the overall shape of the work and assist in the memorization of subsidiary relationships not explicitly represented.\textsuperscript{120}

This approach contradicts Schenker’s viewpoint as illuminated in The Art of Performance. First, the idea of a large-scale background structure (the concept of a “unified whole”) was not developed until well into 1920s. The terms and concepts of


\textsuperscript{120} Ibid., 130-131.
Urlinie and Ursatz did not exist at the time of The Art of Performance, and Schenker’s concept of the background at that time was limited to the structural level no deeper than the middleground. Often, the synthetic process that operates between this earlier type of background and the musical surface reveals immediate and audible connections.

Performance application in terms of background structure and its directive motion was present in The Art of Performance, but with a fundamentally different idea of the background, the execution was different as well. Schenker writes regarding the purpose of background in performance:

Light and spirited renditions are made possible only by an overall view, by thinking ahead, thereby giving wings to the hand. The ear, too, like the eye, must offer us perspective. This ability comes from understanding the background.121

Although we see a conceptual similarity between the earlier and later notions of the background in Schenker’s statement above, there are noticeable differences. What distinguishes the background in The Art of Performance from the one described in Turner is the limitation imposed by the performer’s ear. In the earlier version, the background is traceable by the performer’s aural perception during the performance as a guiding force, and therefore directly impacts the performance execution. This empirically perceptible background is a result of the synthesis of the surface, which does not approach the structural depth of the synthesis of the Ursatz. Schenker’s example of C. P. E. Bach’s Sonata given below shows this kind of surface-level synthesis and awareness of the background.

The great masters were great instrumentalists who could indulge their delight in playing all the more easily by having the ability to bring together a wealth of

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figurations through synthesis...Figurations literally sprang out of their imagination the more they were aware of the background, that is, of diminution.\textsuperscript{122}

![Figure 6. (Schenker’s example) C. P. E. Bach, \textit{Sonata for Connoisseurs and Amateurs}, \textit{Third Collection}, No. 2, I, mm., 19-22.](image)

Here, the synthetic connection between the background and the surface is achieved in two perceptible ways:\textsuperscript{123} the unfolding (\textit{Ausfaltung}) of the G-minor harmony via a diminution in measure 21, and the composing-out (\textit{Auskomponierung}) via a series of arpeggiation (\textit{Brechung}) in the other measures. The implied background (shown below) may be realized as a simple two-voice contrapuntal structure, through which a performer can aurally trace the synthetic process between the two levels.

![Figure 7. The implied two-voice background structure in C. P. E. Bach’s Sonata.](image)

\textsuperscript{122} Ibid., 72.

\textsuperscript{123} These conventional Schenkerian terms used in this particular description are not part of the vocabularies found in \textit{The Art of Performance}. However, their usage here illuminates Schenker’s synthetic concepts, and makes an efficient explanation.
A similar approach in realizing the perceptible background can be seen in Schenker’s example shown below. Schenker suggests a slight prolonging of the on-set notes in the right hand of each measure to frame the linear progression.

![Figure 8. (Schenker’s example) J. S. Bach, English Suite no. 2, Prelude, mm., 23–25.](image)

Second, in regard to the purpose of synthesis, Turner’s perspective and Schenker’s perspective in *The Art of Performance* differ from each other. In Turner’s view, the synthetic process provides the performer with a tool to comprehend a composition as a “unified whole,” and a “mental shorthand” through which the performer can retain the comprehension (such as memorization) of the composition. So, the value is placed on grasping “the whole.” Similar to Burkhart’s argument, this comprehension of the whole work as a single process would give a sense of “the directed motion of the entire structure.” The ultimate purpose of musical communication here is to express the whole composition as a unified structure. On the contrary, Schenker’s conception of musical communication in *The Art of Performance*, as shown in previous chapters, targets more specific and immediate effects on the perception of the listener (and the performer as well). The synthetic process directly results in the adjustment of musical parameters or of a performer’s physical technique. For instance, he writes, “pressure and legato must be willed; lack of pressure and non-legato are largely appropriate where the demands

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124 Ibid., 23.
of synthesis and diminution do not require pressure and legato;"¹²⁵ “in particular synthesis and those of the hand fuse so perfectly that synthesis never was sacrificed to the hand;”¹²⁶ “larger reaches—the spreading out of the fingers—must be based on the synthesis;”¹²⁷ “from these examples it can be seen that each unit requires light and shade but once: should two points of emphasis appear to occur in the same motive, this would only be understandable from the synthesis;”¹²⁸ “resolutions of suspensions find their special justification in the synthesis;”¹²⁹ “A so-called Atempause (breathing space) generally occurs to clarify mental organization; it is a device of the synthesis;”¹³⁰ “Technical difficulties in a work of art can be equated with the difficulties fate brings in life—but they must be generated by the synthesis.”¹³¹ These statements clearly show the purpose of synthesis in performance, which suggests fundamentally different views from Burkhart and Turner. All the examples of the synthetic process contribute to performance execution, and therefore a pragmatic connection is achieved between a performer’s awareness of the background and his interpretation of the musical surface.

Außensatz

Robert Lubben identifies two types of Schenker’s syntheses in his Analytic Practice and Ideology in Heinrich Schenker’s Der Tonwille and Cantata Harmonia.

Schenker’s Tonwille, written between 1921 and 1924, sits between the publications of the two volumes of his second installment of Neue musikalische Theorien und Phantasien,

¹²⁵ Ibid., 21.
¹²⁶ Ibid., 33.
¹²⁷ Ibid., 34.
¹²⁸ Ibid., 43.
¹²⁹ Ibid., 49.
¹³⁰ Ibid., 68.
¹³¹ Ibid., 70.
Kontrapunkt I and Kontrapunkt II. Tonwille thus marks the junction between Schenker’s two theoretical phases. In the first phase, predating World War I, Schenker’s writings include Der Geist der musikalischen Technik (1895), Harmonielehre (1906), the first volume of Kontrapunkt (1910), Über den Niedergang der Kompositionskunst (1905-6, unpublished), Die Kunst des Vortrags (1911, draft) and Beethovens neunte Sinfonie (1912). During this phase, the concepts of desired effect and synthesis resonate strongly through all of his writings.\textsuperscript{132} The second phase of his career, represented by writings after World War I, including Kontrapunkt II (1922), Das Meisterwerk in der Music (1925-30), Fünf Urlinie-Tafeln (1932), and the last installment of Neue musikalische Theorien und Phantasien, Der freie Satz (1935). During this latter phase, Schenker’s theory took a different direction, culminating in his mature theories. One of the most emphatic differences epitomizing these two phases is Schenker’s changing view of the cantus firmus, especially in the two volumes of Kontrapunkt, which are separated by ten years. In Kontrapunkt I, the cantus firmus is extracted from the perceptually exposed layers in the music, while Kontrapunkt II shows the developing idea of an imaginary cantus firmus. With the changing views of cantus firmus, Kontrapunkt II marks the beginning of a new phase of development toward the theory of organic unity finalized in Der freie Satz. Some of the materials of Kontrapunkt II are relegated into the writing of Der freie Satz.\textsuperscript{133} The imaginary cantus firmus becomes the essence of the Urlinie, along with the changing concept of prolongation, eventually encompassing the entirety of the

\textsuperscript{132} Nicholas Cook, The Schenker Project: Culture, Race, and Music Theory in Fin-de-siècle Vienna (New York: Oxford University Press, 2007), 93.
\textsuperscript{133} Ibid., 28. Cook quoting Sessions depicts this particular time in Schenker’s later phase: “It is precisely when Schenker’s teachings leave the domain of exact description and enter that of dogmatic and speculative analysis that they become essentially sterile.”
composition under the dominant control of the *Urli{ne}*.\textsuperscript{134} Along with these changes in his theoretical views, what we think of today as the Schenkerian graph appeared in the 1920s. The graphing technics were initially developed through work on a series of short keyboard pieces in *Tonwille*, and gradually extended to increasingly long compositions.\textsuperscript{135} Lubben’s identification of the two different syntheses depicts some of the representative analytical practices of the two phases. He writes on the synthesis as seen in Schenker’s later theory:

> It is important to distinguish two distinct shades of meaning which adhered to the term *Synthese* in Schenker’s *Tonwille* period. The first occurred primarily in discussions that were not part of an analysis of a specific piece. In these contexts, Schenker usually discussed *Synthese* as a consequence of the ubiquitous guiding light of the *Urli{ne}*…This meaning of *Synthese* is essentially the same one that he uses throughout his later works (though there the emphasis is more consistently placed on the controlling hand of the *Ursatz*, with less attention paid to the mechanics of the interaction between individual forces).\textsuperscript{136}

He describes Schenker’s earlier synthesis:

> The second meaning of *Synthese* is less bound to the guiding hand of the *Urli{ne}* or *Ursatz*. In the context of specific analyses, Schenker often used the term even when his discussion made it perfectly clear that he did not consider the *Ursatz* or *Urli{ne}* to be exerting direct control over multiple parameters. . . Because of the importance placed upon the second type of *Synthese* in *Tonwille*, these analyses exhibit less of the restrictive tendency of subordinate parameters to the composing-out of the *Ursatz* that marked Schenker’s later works. As a result, the *Tonwille* essays and graphs pointedly illustrate the fact that the full significance of any surface event lies beyond the explanatory scope of an attempt to reduce it to, or derive it from, a single *Ursatz*. Further, in some of the early *Tonwille* analyses the domain of *Synthese* was increased by the fact that harmony and counterpoint – though already graphically represented with some sophistication – were not conceptually fused in a background *Ursatz*.\textsuperscript{137}

\textsuperscript{134} *Urli{ne}*-a term first appears in 1921 in the Op. 101 *Erläuterungsausgabe*.

\textsuperscript{135} Nicholas Cook, *The Schenker Project: Culture, Race, and Music Theory in Fin-de-siècle Vienna* (New York: Oxford University Press, 2007), 27.


\textsuperscript{137} Ibid., 22.
With these two contrasting concepts of synthesis, this transitional period (the years of *Tonwille*) also shows two different ideas of the background structure; one concurs with the developing concept of the *Ursatz*, and the other relates to *Außensatz* (the movement of the outer sides).\(^{138}\) Lubben identifies *Außensatz* as “a setting of the outer voices.” In *Tonwille*, Schenker’s idea of *Außensatz* is often used in conjunction with the subjects of his later theories. He points to Schenker description of *Außensatz* in *Tonwille II* as “a piece’s most prominent outer-voice linear-intervallic patterns,” and also “a structure of two upper voices above the *Stufen*, and also as a two-voiced structure whose quality determines the value of the composition.”\(^{139}\) The function of *Außensatz*, according to Schenker, is to provide a contrapuntal setting of the musical surface within which the selection of the *Urlinie* is made. Thus, from the perspective of Schenker’s later theory, *Außensatz* is instrumental to the realization of the *Urlinie* and *Ursatz*; it is viewed as a pertinent step for the revelation of the background structure. Lubben demonstrates:

\[\text{Außensatz [sic]} \quad \text{Urlinie selection of intervals} \quad \text{Ursatz}\]

![Figure 9. Lubben p. 31.](image)

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\(^{138}\) My thanks to Dr. Caroline Oltmanns for providing this definition.


\(^{140}\) Ibid., 31.
However, Lubben’s study of *Tonwille* also observes some cases of *Außensatz* that are purely contrapuntal and independent of the control of the *Urlinie* and *Ursatz*. In this sense, the *Außensatz* itself is viewed as the background structure of a surface-level synthesis, detached from the *Stufen*, displaying its non-harmonic nature. But, as seen in the previous quotes, Schenker’s explanation of the *Außensatz* in *Tonwille* does not necessarily acknowledge it as an independent analytical objective. Here, Schenker’s notion of the *Außensatz* is expressed retrospectively from the perspective of his later theory. With the organic unity of the *Ursatz* beginning to dominate Schenker’s analytical thoughts, *Außensatz* is considered as a subordinate procedure to the *Ursatz*. Interestingly, the independent characteristics of *Außensatz*, which Lubben identifies with Schenker’s earlier synthesis, can be found in one of Schenker’s publications more than a decade prior to the *Tonwille* series. The first volume of *Kontrapunkt*, published in 1910, shows some of the characteristics of the *Außensatz*. More importantly, *Kontrapunkt I* was written a year before the draft of *The Art of Performance*, and many of its analytical and philosophical issues are identifiable with the ones in *The Art of Performance*. Although in *Kontrapunkt I* Schenker did not refer to any particular feature of the strict counterpoint

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141 Ibid., 31.
with the term, *Außensatz*, he offers much clearer descriptions of it as well as the earlier concept of synthesis.

The laws of Composition

The content of *Kontrapunkt I* consists of two parts; the first is on the structure of cantus firmus, and the second is on two-voice counterpoint, covering first through fifth species in each chapter. However, this is no ordinary text teaching the rules of strict counterpoint and providing instructions for creating compositions in that style. Schenker’s explicit explanation of the purpose of the book can be read in the introduction:

To this end, it will be my first task (a) at the outset to draw the boundaries between the **pure theory of voice leading** and **free composition**. Yet precisely such a clear-cut discrimination between the "exercise" and the free work of art makes all the more imperative a second task, namely (b) to reveal the **connection between counterpoint** (which may be considered the first musico-grammatical exercises) and the **actual work of art** - to show the nature and foundation of this connection.142

The points Schenker addresses in the quote above indicate two of the core concepts of his early synthesis theory. Regarding the first, he repeatedly emphasizes the importance of the separation of counterpoint and composition. According to Schenker’s view, strict counterpoint is the conceptual framework of tonal compositions; the two-voice setting of the cantus firmus and its counterpoint are naturally imbedded in tonal compositions. Thus, the main goal of this book is not to teach counterpoint as an art form, but to guide readers to discover the framework of counterpoint in free compositions, as well as to provide them with proper knowledge of contrapuntal writing. This intention is vividly

shown throughout the book. Schenker rarely discusses examples of contrapuntal compositions, but rather, in the majority of cases, renders counterpoint as implied in examples of free compositions from classical and romantic periods. This approach demonstrates the fundamental difference of his pedagogical aim, to show the logic of counterpoint in free composition as the guiding principle of tonal composition. For this reason, he regards counterpoint and its exercises purely as voice-leading lessons, and restricts his counterpoint exercises to the topography of a modest and naturally simple exercise. The purpose of counterpoint exercises is also in the training of the ear:

The purpose of counterpoint...is to lead the ear of the serious student of music for the first time into the infinite world of fundamental musical problems. Constantly, at every opportunity, the student's ear must be alerted to the psychological effects associated with intervals in music.

The emphasis is placed on shaping a student’s perceptual behavior, developing the aural sensibility to tune in to contrapuntal voice-leading implications in tonal compositions. Here, he associates psychological effect with aural perception, which is a similar view resonating with The Art of Performance. He continues:

The musical instinct must be enlightened about the effect associated with each of the three types of motion of the voices. The following, therefore, may be considered the principal goal of contrapuntal study: investigation of the possible configurations of the voices and the treatment of each, wherein at the same time the most painstaking effort must be exerted always to make manifest to the ear (in respect to both configuration and treatment) the gradation from the most natural and simple to the more advanced and less simple.

Schenker believes that this training of the ear serves two purposes: creative-artistic and re-creative-artistic. He thus considers counterpoint as both the basis for the composition and for the interpretation and performance of the composition. Similar statements are

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143 Ibid.
144 Ibid.
145 Ibid.
seen in *The Art of Performance*; he shows the effect that inspires a composer to create and performers to re-create. Regarding the second purpose (revealing the connection between counterpoint and the actual work of art), Schenker discloses concepts of background and synthesis that are different than the ones associated with the *Ursatz*. Schenker believes that contrapuntal theory is nothing but a theory of voice-leading, and it demonstrates “tonal laws” and “tonal effect.”\(^{146}\) He traces these tonal laws back to the earliest period of vocal polyphony, during which counterpoint and the theory of composition were undifferentiated. The contrapuntal laws of that time became the fundamental laws of all tonal compositions thereafter. Schenker argues that counterpoint subsumed “no unfolded harmonies, no true length, no scale degrees or modulations and the multifaceted techniques of a later period, too, involving articulation and synthesis.”\(^{147}\) In this primitive state of the pure logic of tones, no synthetic process was possible; it was the most condensed form of a composition and its musical expression. Conversely, it can be assumed that the elements absent in counterpoint are the properties of free compositions—synthesis, harmonies, scale degrees, and form. Synthesis, then, is a phenomenon unique to free compositions, and explains the process by which the laws of compositions (counterpoint) manifest themselves in free composition. Schenker writes, “fundamental contrapuntal principles profoundly and mystically [are] at work in the background” and “the phenomena of free composition are to be understood only as the prolongations of those principles.”\(^{148}\) The analytical approaches in *Kontrapunkt I* clearly demonstrate Schenker’s beliefs in this synthetic process. He introduces a contrapuntal rule along with an explanation of its properties. Often, he follows it with several short

\(^{146}\) Ibid., 14.
\(^{147}\) Ibid., 2.
\(^{148}\) Ibid., 14.
excerpts of free compositions discussing the implication of cantus firmus and counterpoint, justifications of the rules and the voice leading, and compositional exceptions that are typical to free composition. All his observations of free composition are measured and assessed according to the properties of counterpoint. Thus, the background structure he refers to in this context is the two-voice counterpoint (which significantly resembles Außensatz in Tonwille), particularly the first species, with the main mechanism in the synthetic process as the surface-level prolongation, bridging the two-voice background structure and the free composition. The following example typifies the process:

It goes without saying that ideas in free composition are expressed mostly in a texture of more than two voices; nevertheless, it may be noted that any such texture ultimately contains aspects of two-voice counterpoint as well. The two-voice counterpoint between highest and lowest voice alone already justifies the citation of examples of free composition within a section on two-voice counterpoint . . . For example, the following content:  

![Figure 11. (Schenker’s) Example 283](image)

Brahms, Variations on a Theme by Handel Op. 24, Var. XXIII.

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149 Ibid., 200.
150 Ibid.
[the above example] can be reduced to a clear two-voice counterpoint:\textsuperscript{151}

\begin{figure}[h]
    \centering
    \includegraphics[width=0.5\textwidth]{example.png}
    \caption{Schenker’s Example 284\textsuperscript{152}}
\end{figure}

The real connection between strict counterpoint and free composition can in general be discovered only in reductions similar to the one just quoted.\textsuperscript{153}

Schenker points out a similar case in \textit{The Art of Performance}, citing the opening measure of Chopin’s \textit{Etude, Op. 25 No.1}.

When one studies the original notation of this piece one notices that Chopin writes both large and small sized notes, reserving the large not only for the melody but for individual bass notes as well. Looking more closely at the notation of the bass, one sees that among several identical bass notes, only one is emphasized by the large size while the rest are small. This particular mode of notation—how inspired, and what a pity that other composers did not use it as well!—shows clearly that even the fundamental tones of the bass should be played with varied nuances.\textsuperscript{154}

\textsuperscript{151} Ibid.
\textsuperscript{152} Ibid
\textsuperscript{153} Ibid.
The prominent notes exposed in the outer layers, E-flat and A-flat, are notated with larger noteheads by the composer. This unusual notation implies the importance of these two layers without a suggestion of adding overt accents. Schenker does not provide a two-voice reduction of the excerpt as in the previous example to explain the contrapuntal background, but offers a comment on the execution. This notation can be interpreted in various ways to convey this particular effect; as Schenker suggests, this task is up to the performer’s choice of dissembling. However, Schenker’s suggestion is to apply nuances to the fundamental bass tones. He does not specify what kind of nuances are suitable, but given the dynamic marking and implication in the notation, the nuances are most likely to be temporal deviations with a subtle projection of these tones. Moreover, although Schenker does not show this opening in a larger context, the following contrapuntal connection will most likely demand a further manipulation of directive motion.

The following example shows the implied two-voice background structure in the opening phrase of the etude. Not all the larger notes are represented in this reduction or the rhythmic placement of them given much importance, but it provides a framework of the upper melodic line with the bass as a cantus firmus. Not all the intervallic motions comply faithfully with second species rules; for instance, the repeated notes in the upbeat
of the first measure and the downbeat of the second measure go against contrapuntal rules. Schenker himself acknowledged that, in free compositions, there are many deviations from strict contrapuntal rules. However, these deviations contribute to the aesthetic quality of free compositions. One can see how the realization of this purely contrapuntal background can affect the performer’s interpretive decisions such as directive motion, pacing, grouping structure, dynamic shape, and surface nuances (especially on the dissonant passing tones). These artistic deviations are obviously not indicated in the score, but only can be realized through the performer’s dissembling.

Figure 14. Two-voice contrapuntal background structure implied in the opening phrase of Chopin’s Etude.

I have previously pointed out numerous references from The Art of Performance, where an intended effect indicated a certain profile of musical motions. Recognizing the connection between the two concepts, I argue that the musical motions seen in The Art of Performance are actually guided by the “hidden” counterpoint. The exact systematic procedures are impossible to discern due to the fragmentary nature of the text, but readings from Kontrapunkt I give a better understanding of the elusive musical motions in The Art of Performance. In Kontrapunkt I, Schenker makes claims regarding the
desired effect that are analogous to those found in The Art of Performance. He states that understanding of the tonal effect would “liberate the student of art from the delusion that tones must signify something external and objective in addition to their absolute effect.”\footnote{155} He follows:

In this study, the beginning artist learns that tones, organized in such and such a way, produce one particular effect and none other, whether he wishes it or not. One can predict this effect: it \textit{must} follow! Thus tones cannot produce any desired effect just because of the wish of the individual who sets them, for nobody has power over tones in the sense that he is able to demand from them something contrary to their nature. Even tones must do what they must do! This knowledge is to be gained only in contrapuntal theory, and it is the most precious treasure an artist can gain.\footnote{156}

This statement indicates the absolute nature of the effect. The effect is not created by the composer, but rather “predicted” by him. Composers do not embed their personal meanings into their compositions, since they do not have a choice in altering the predetermined properties of tones. They arrange the tones in certain configurations so that the music itself will generate the desired effect; in other words, good composing is good prediction of the effect. One can see Schenker’s stance on communication of what music signifies (musical meaning). The meanings communicated from the composer to the performer and to the listener are subject to the tonal effect generated by the composer’s configuration of tones. Once it is realized by the performer as the desired effect, it becomes the musical meaning, free from all other external references to emotions or linguistic designations of expression. Schenker’s claim that tones signify their absolute effect concurs with the hypothesis from the previous chapter; it is not the designative meanings that are communicated to listener, but the motions elicited by the sound.

\footnote{155}{Ibid.}
\footnote{156}{Ibid.}
*Kontrapunkt I* clarifies several concepts that are not explained in *The Art of Performance*. The performer’s responsibility (to realize the desired effect through dissembling the composer’s notation and to express it in his performance) now can be understood more specifically: to decode and follow the effect of the implied counterpoint. The laws Schenker asks performers to follow are the laws of counterpoint. The background structure that he speaks of is the two-voice contrapuntal structure perceptually prominent in the texture. In addition, the notion of *Außensatz* can be elucidated through the perspective of *Kontrapunkt I*. Lubben writes, “a precise technical description of the *Außensatz* that is consistent with all Schenker’s uses of the term is simply not possible.”¹⁵⁷ The lack of technical description in *Tonwille* may be supplemented by descriptions from *Kontrapunkt I*. As Lubben observed that the *Außensatz* is independent of the *Urlinie* and *Stufe*, Schenker makes a parallel distinction between the voice-leading of the counterpoint and the scale-degree progression in *Counterpoint I*. Schenker writes:

How much light this sheds on that age-old insight of the first contrapuntal epoch, which – even in the realm of polyphony generated without scale degree . . . Moreover, scale-degree progression, as a purely abstract expression of motion, is a matter so completely different from the concrete progression of the bass voice . . . If the student has first of all learned the art of voice leading, he may turn to the world of scale-degree progression in order to see what they are; how they yield musical content . . . ; how they relate to the overall structure; how much scale-degree progression is used up by one musical idea, how much by another; and how one can use scale degree in an economical way and still construct a wide-ranging musical thought, and the like.¹⁵⁸

The difference between voice leading and scale-degree progression, like *Außensatz* and *Urlinie* and *Stufe*, is noted by the difference in their expression of motion: concrete and

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abstract. This contradiction portrays well the two different processes of synthesis. *Stufe* and the unfolding of the imaginary cantus firmus, the *Urlinie*, are the heart of Schenker’s later synthesis. Through this synthetic process, the background, or *Ursatz*, is revealed, representing the organic unity of the entire composition. Thus, the organic unity of the *Ursatz* is, by nature, an abstract comprehension. On the contrary, in Schenker’s earlier synthesis, a pair of voices, a cantus firmus and its counterpoint, are rendered from the most perceptual layers (most often the outer layers) of the composition.¹⁵⁹ This two-voice setting closely follows the voice-leading properties of the strict counterpoint, representing the background structure of the composition. The music unfolds as the guiding motions of the counterpoint progress continuously, one strand after another. Consequently, the whole synthetic process is based on empirical assessment of the composition. The result is a dynamic interaction of all musical parameters (notation, orthography, compositional laws, hierarchy and prolongation) into an organically cohesive musical expression. Thus, the counterpoint and its synthesis, by nature, are concrete and perceptual. This distinction makes Schenker’s earlier synthesis much more compelling for performance applications.

Given the proximity between the writing of *Kontrapunkt I* and *The Art of Performance*, the earlier notion of synthesis may have profoundly inspired Schenker to embark on a theory of performance. The synthesis that Schenker talks about in *The Art of Performance* is unmistakably in accordance with the synthesis featured in *Kontrapunkt I*. Moreover, due to the intimate connection between *Kontrapunkt I* and *The Art of Performance*, one can clearly see the incompatibility between Schenker’s perspectives on performance and his later synthesis, and consequently with his later theory. As his theory

¹⁵⁹ This has a typical pedagogical implication, as in harmonic four-part dictation for instance. We hear the outer lines and “properly guess” the inner voices using our ear as well as voice-leading principles.
evolved toward a static abstraction of the *Ursatz*, his performative theory did not conform to the changes in his analytical practice. Schenker’s theory of organic unity underwent a constant evolution throughout his life until the completion of *Free Composition*. Due to the decade of separation between *Kontrapunkt I* and *Kontrapunkt II*, these texts reveal significant differences in the core concepts of his theory, mainly concerning his conception of the synthesis and the structural background. With a clearer understanding between two types of synthesis, representing two phases of his theoretical development, we may come to a better understanding of Schenker’s performance theory; it may also give us a better idea as to why Schenker was unable to complete his performance theory despite his unwavering life-long passion to do so. The following chart summarizes the properties of Schenker’s two concepts of “synthesis:”

<table>
<thead>
<tr>
<th>Earlier Synthesis</th>
<th>Later Synthesis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Representing analytical practice of his first period.</td>
<td>Representing analytical practice of his second period.</td>
</tr>
<tr>
<td>The synthetic process depicted in <em>Kontrapunkt I</em> (1910).</td>
<td>The synthetic process depicted in <em>Kontrapunkt II</em> (1922).</td>
</tr>
<tr>
<td>Governed by a set of two voices (cantus firmus and counterpoint) prominent in the outer layers of music.</td>
<td>Governed by the <em>Urlinie</em> (imaginary cantus firmus) and <em>Stufe</em> (implied harmonic bass motion).</td>
</tr>
<tr>
<td>Actual cantus firmus extracted based on perceptual significance in the musical surface.</td>
<td>Imaginary cantus firmus selected based on conceptual significance in the structural hierarchy.</td>
</tr>
<tr>
<td>Synthetic process involving surface-level (foreground) prolongation.</td>
<td>Synthetic process involving deeper-level (background) prolongation.</td>
</tr>
<tr>
<td>Perceptual process.</td>
<td>Abstract process.</td>
</tr>
</tbody>
</table>
Musical content: A chain of free-flowing counterpoint embedded in the musical surface.

Pluralistic musical content.\(^\text{160}\)

Organic unity through dynamic interaction of all musical parameters.

Musical motions at the musical surface.

Musical motion fused to the experience of desired effect.

Musical content: *Ursatz.*

Monistic musical content.\(^\text{161}\)

Organic unity tending toward static uniformity.

Musical motion of the whole.

Musical motion fused to the abstraction of tonal motion in the *Ursatz.*

<table>
<thead>
<tr>
<th>Figure 15. The comparison of two syntheses.</th>
</tr>
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</table>

Hypothesis III

Schenker’s concept of “background” in *The Art of Performance* refers to a two-voice contrapuntal structure, in which the synthetic process of the surface-level prolongation operates as the principal dissembling mechanism. This background is the guiding force of the motional profile of the desired effect.


\(^{\text{161}}\) Ibid.
CHAPTER IV
PERCEPTUAL BOUNDARIES AND MUSICAL GROUPINGS

The communication among the composer, performer and the listener is meant to be realized by the sounding music. From this perspective, the synthetic process must be able to offer interpretive impact to the sound of the music and not just in the analytic comprehension of the composition. As discussed in the previous chapter, the pivotal difference between Schenker’s earlier and later synthesis from the perspective of the performance application, is the structural depth involved. The earlier concept of synthesis manifests itself near the surface while the latter operates through all the structural levels, from the surface to the Ursatz. Accordingly, corresponding background structures exhibit contradictory qualities; the most pertinent to performance is aural perceptibility. This chapter will evaluate the two concepts in terms of the performer’s and listener’s ability to perceive them during performance. This ability is directly correlated to musical communication. Essentially, a concept that is more communicable is consequently better suited for an explication of Schenker’s performance theory.

The theoretical comprehension of the Ursatz at the deepest structural level expresses the unified tonality of a composition. To question its applicability in performance is to ask if listeners can actually hear such tonal unity. The ability to hear tonal unity means the ability to remember and associate the prolongational information in various structural levels during a performance. Also, one needs to ask whether this kind of ability to comprehend discrete musical events in a meaningful way is natural perceptual behavior for listeners. David Temperley writes that “the perceptual view of ST [Schenkerian theory] does not necessarily imply that Schenkerian structures are available
to consciousness; they may well be present at an unconscious level.” He adds, “[We] cannot conclude from this that listeners spontaneously generate reductions as they listen. The potential for the theory to tell us much about musical motion also seems doubtful, or at least unproven.” If the reductive process is not spontaneously (immediately upon hearing the music as a natural response) available, the implication is that the comprehension of large-scale structure is also unavailable. In an experiment by Nicholas Cook, listeners were asked to evaluate examples of tonal compositions played in two versions. One was an original version ending in the same key as it began, and the other version was a modified version ending in a different key from the opening key (the final section of the music was transposed to a new key). The examples’ lengths varied; some pieces were a full movement long while others were as short as ten measures. The results for longer compositions showed that listeners did not have a particular preference for tonal closure. Some preferred the original version while others either showed no preference or even favored the transposed versions. Cook comments on the result:

At first sight, the results of these experiments may seem to be very damaging to the theories of tonal structure. . . If the principle of tonal closure has little or no perceptual validity at the larger time scales found in most tonal compositions, is there not something radically wrong with a theory that ascribes fundamental aesthetic importance to it?

The results for the short excerpts showed a contrasting outcome. The listeners significantly preferred the tonally-closed versions over the altered ones. The findings of both authors suggest that the ability to comprehend seems limited to the time span of the

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163 Ibid., 164.
165 Ibid., 203.
events in which they can actively engage their attention and their short-term memory.

Cook concludes:

Hence if large-scale tonal relations are not in themselves audible, that does not necessarily mean that they are of no musical significance: it may just be that their influence on what is heard is an indirect one... Imperceptible aspects of musical structure may, then, be important to the musician: consequently what would be untenable as a psychological theory of perception may yet be useful as music theory.166

Extrapolating from these experiments, it appears that Schenker’s earlier synthesis has stronger perceptual validity than his later one. The background of the earlier synthesis, two-voice contrapuntal structure, is realized perceptually by the performer, and it can easily be perceived by the listener. Thus, the boundary of the background structure is postulated by the temporal limitation of listener’s aural comprehension. Within this limit, aesthetic deviations created by the performer in achieving the effect of the motion also are clearly audible to the listener, and the perception of the synthetic process between the musical surface and the background is also possible. Consequently, the musical intention of the performer (or the musical intention of the composer realized by the performer) can be delivered to the listener without much distortion within this perceptual boundary.

This notion of perceptual boundary supports the speculation that Schenker’s earlier synthesis is perceptual in nature, while the later one is conceptual. Therefore, the musical communication of the composer’s desired effect is achievable within the structural level of earlier synthesis.

Eric Clarke’s explanation of structural unity concurs with the observation made above. Clarke believes the ideas that a performer has a complete knowledge of the generative structure of the piece and the unity of the entire piece, and that a composer is

166 Ibid., p.205
able to hear or imagine a composition in a single glance, are idealizations. He argues that total comprehension of unity is implausible because only a partial representation of the entire structure is available in a performer’s comprehension at any time during the performance. Clarke explains:

At any particular moment the generative structure is incomplete or only partially activated, the active region shifting as the performer progresses through the music, revealing different areas and levels of the structure. . . only a region of low-level generative connections might be active, since there is little need for a performer to have access to high-level structural information. . . At a phrase boundary, however, it may be important for the performer to know how the previous and subsequent phrases are related to one another and to the overall structure of the piece. . . a player’s structural awareness constantly shifts between regions of activated structure that vary in durational extent and generative depth.

Clarke uses a schematic diagram to support his argument:

Figure 16. Clarke’s schematic representation of an idealized knowledge structure.

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168 Ibid., p.4.
169 Ibid., p.3
Clarke’s representation of the partial availability of the generative structure during performance coincides with the listener’s limitation of aural perception during the performance as seen in Cook’s experiments. It seems that the performer’s and listener’s perception and comprehension operate within a similar durational extent largely delineated by the span of musical phrases. Clarke’s illustration separates the regions where the performer is perceptually engaged (solid lines) from the ones of which the performer is conceptually aware (dotted lines). Thus, even if the performer understands the entire generative structure of the composition (this knowledge is probably obtained

\[170\text{ Ibid., p. 4}\]
\[171\text{ Ibid., p. 4}\]
during an examination of the score prior to the actual performance), it will not be transmitted during the performance; in other words, the total generative structure is less likely to be communicated in performance, and therefore, it becomes unavailable to the listener’s affective response. Subsequently, it is improbable that the structural hierarchy at the deepest level would be communicated because the corresponding structural events are not perceptually accessible during the performance. This conclusion suggests that aural comprehension of the Ursatz is not plausible. If this is the case, Schenker’s mature theory has limited practical use in performance application in Schenker’s performance theory. It is possible that, for this very reason, Schenker was unable to reconcile the difference between his views of performance and his final theoretical beliefs, and this is precisely why The Art of Performance never materialized. Schenker was apparently very well aware of this perceptual boundary. It is indicated in all of the musical examples discussed in The Art of Performance. Every example is limited to a few phrases, and most of his comments are directly related to the effect that enforces the surface-level events.

As pointed out in the second chapter, the desired effect of these surface events is to promote a profile of musical motions. The most immediate result of the motional profile is segmentation and delineation of these perceptual boundaries. The different hypotheses of hierarchical organization can be distinguished into two main models: grouping and reduction processes. Grouping theories are based on the principles of

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172 A related discussion can be read in Steve Larson’s The Problem of Prolongation in Tonal Music: Terminology, Perception, and Expressive. Larson distinguishes two different views of prolongation in relation to diachronic hierarchy (event hierarchy) and synchronic hierarchy (tonal hierarchy). Although he does not make the explicit connection to performance application, he depicts the former as a prolongation that one can “auralize,” and relates this to his arguments of three musical forces: gravity, magnetism and inertia.
segmentation of music into parts of different sizes, the larger ones containing the smaller ones. Reduction theories are based on mainly tonal relationships between discrete events and their organization at different levels. As seen in Cook’s and Clarke’s arguments, the limited events available to short-term memory account for a hierarchical organization of the groups. In this case, the hierarchy is an economical coding of perception and memory. The expression of hierarchy during performance is naturally conveyed through musical groupings; it is not only economical, but also the most effective way of making the surface-level hierarchy audible in the listener’s musical experience. Since the long-range hierarchy is difficult to express and experience in performance, a performer’s concerns with hierarchical expression can be solved by proper grouping structures at the level of perceptual boundaries and the sub-level of groupings inside the boundaries. In the description of motional profile, two main levels of motion were identified in the cases of Schenker’s desired effect: directive motions, and surface gestures and nuances. The motional profile is not only the performer’s realization of the desired effect in musical sound, but its projection also indicates the expression of surface-level prolongation and hierarchical organization. Thus, the performer’s decisions in expressive deviations (toward achieving the desired effect) can be guided by the awareness of the surface-level background structure and its synthetic process: in this case, the two-voice contrapuntal setting and the relationship to the surface.

Performers consciously and subconsciously emphasize grouping structures (especially at the onset and offset of phrases) by using expressive deviations, which are

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174 Ibid., 327.
prominent manipulations of tempo and dynamic intensities. During the execution of these manipulations, awareness of surface hierarchical structure may or may not be present. Most of the time, these deviations are not systematically organized but formed intuitively. It is a well-documented fact, based on numerous experiments, that such expressive deviations are the most significant interpretive efforts in the practice of performance.\textsuperscript{175}

Dodson believes that performers and Schenkerian analysts share an interest in groupings. Like a performance, a Schenkerian analysis suggests beginnings, middles, and ends at several hierarchical levels.\textsuperscript{176} Dodson also observes that the boundaries of a linear progression often coincide with the boundaries of a phrase.\textsuperscript{177} He refers to the studies of Rothstein, Burkhart, and Turner as “the most comprehensive account of the diverse ways in which a Schenkerian analysis can be projected in performance,”\textsuperscript{178} indicating that the general concept of “Schenkerian performance” remains associated with Schenker’s mature theory. The idea of separating Schenker’s theories into two distinct practices regarding their performance application is not yet an integral part of current research. However, Dodson argues that we need a newer approach for Schenkerian-informed performance practice, where the performer plays a role as an equal contributor. He writes:


\textsuperscript{177} Ibid., 109.


A broader and more fundamental ideological concern is Schenker’s view that the quality of a performance depends on the extent to which it conveys the musical content as he himself conceived it. However, I would like to distance my interpretative model from this contentious principle. . . This view is evident in most of Schenker’s writings on performance, for example, in *The Art of Performance* (2000). . . I suspect that matters of voice leading and prolongation have little to do with the conscious interpretative decisions of most skilled performers, so I do not consider it appropriate to compare performances by casting them as better or worse attempts at communicating some privileged Schenkerian interpretation. I would like to find a way to make use of performers’ and Schenkerian analysts’ shared concern for grouping in a way which does not subordinate the performer’s judgment or authority to the analyst’s. I am interested in using Schenkerian analyses to help focus on the interpretation of grouping in performance, not to attack performances with Schenkerian ammunition.179

Dodson’s pan-Schenkerian approach seems to disengage from the forceful application of Schenker’s mature theories to performance practice, and leans instead toward more empirical and perceptual matters such as grouping structures. The fundamental difference in his view is that Schenker’s theories are no longer a basis for the formation of interpretation, but rather are considered as alternative opinions to the performer’s intuitive decisions. He compares different recordings of the same piece and correlates them with different Schenkerian interpretations through the medium of grouping structures. Dodson’s detailed studies compare four different recorded performances by respected performers. Many correlated studies show agreements and disagreements between Schenker’s graphs and the performances, and between alternative readings and performances. His pluralistic notion accepts multiple analytical results, although he believes that this approach is contrary to Schenker’s intention. I agree with Dodson in regard to the possibility of multiple analytical outcomes. My claims regarding grouping principles are rooted in Schenker’s generative principles of performance interpretation; consequently, I do not acknowledge random interpretive intuitions from the performer as

being as valid as an analytically-informed interpretation. I also do not believe that the depth and rigor involved in Schenker’s mature analytical practice are necessary for performers. The generative process I am proposing aims instead at establishing the very groundwork of interpretation, upon which any further analytical efforts could be built and elaborated. Conscious and analytically-informed induction of musical motions results in deliberate and purposeful groupings and segmentation, which is also one of the most intuitive means of musical communication for performers. As a performer, I am aware that this intuition cannot be ignored. At the same time, it is necessary to shape the musical intuition with systematic guidance that is logical and practical.

Groupings and segmentation are the most salient characteristics of the performer’s intuitive act, and of Schenker’s idea of the desired effect and its synthesis. Performers manipulate all available expressive parameters to achieve their preferred groupings. The same approach is suggested by Schenker in the dissembling of the desired effect. While there is an apparent overlap between the two, several aspects differentiate them. In general, the delineation of grouping structure becomes a more conscious act when a performer is aware of the intention of formal expression, which is usually a separate interpretive issue from other concerns imposed by the score. For instance, the performer would respect the performance suggestions of the composer before making additional expressive deviations regarding features that are implied but not written on the score. The groupings are peripheral to the visible score. What the performer may not be aware of is that any decisions (visible on the score or not) made regarding the performance will eventually end up producing some kind of grouping structures, whether intended or not. The results often include ambiguous musical motions that segment music into disjunct
and aberrational chunks. The management of motions (musical flow or phrasing are more common words used by performers) is one of the most controversial interpretive issues among performers. Schenker offers a convincing solution. As seen in Chapter Two, Schenker often advocates overt and deliberate deviation from the composer’s orthography at the expense of delivering the desired effect. The desired effect realized in the motional profile immediately results in musical groupings, indicating that Schenker places foremost importance on grouping structures ahead of any of the composer’s expressive markings. Given that the motional profile is guided by the background, Schenker’s grouping principles subsume collaboration of every available feature in the music (the notation, orthography, analytical understanding and aural perception) under a single dominating interpretative issue: the grouping structure in the music. There is a lucid sense of unity in this approach, although it is different from the unity, some two decades later, organized around the *Ursatz*. This stance is observed by Clarke:

> . . . the primary role of expression is to limit the extent of this ambiguity by emphasizing certain structural interpretations at the expense of others. . . At a detailed level, however, each expressive act operates so as to project a particular functional meaning for a given musical structure, This is achieved in a variety of ways, the most general underlying principle being the intensification of gestalt properties of the musical structure that are already evident, or the establishment of gestalt features when the music is structurally neutral. Examples of this are the establishment of boundaries in the grouping structure of the music by means of changes in dynamic, articulation, or timing; the imposition or emphasis of a sense of direction towards a structural focal point by means of dynamic, articulation, or timing gradients.\(^{180}\)

Thus, musical expression is actually the expression of musical structure. In Schenker’s case, the “certain structural interpretations” also show groupings and boundaries, but again, it is not the structure Schenker wishes to express but rather the musical affect.

The workings of aesthetic deviations in establishing grouping structure and boundaries can be read in Clarke’s comments:

The three expressive parameters (timing, dynamic, and articulation) interact with one another in at least two ways: first, they may substitute for one another. . . and second, they may combine to form expressive complexes that possess a compound function that is not simply the sum of the individual expressive components.\(^{181}\)

His statement means that \(A + B\) does not become \(AB\), but becomes \(X\) (\(C\) is too predictable). The combinatory byproduct from mixing and substituting these expressive parameters is the essence of the performer’s dissembling process; the “expressive component” (indicated with \(X\)) in Schenker’s scenario would be the materialization of the desired effect. There are several cases in *The Art of Performance* where Schenker purposefully capitalizes on these properties. The substitution and combinatory outcomes are particularly evident with dynamic and tempo modification, where for example, he replaces dynamic implication with tempo modification. It is a common performance practice, especially in the music of Beethoven, to execute a series of consecutive *sforzandi* with a growth in dynamics. Schenker replaces this technique with an increase of speed:

Especially noteworthy are cases in which two or more *sfs* immediately follow one another: Beethoven, Symphony no. 9, op. 125, I, mm. 31 - 34:

\[\text{IV, mm. 598 - 600 (i.e., mm 4–6 of the Andante maestoso):}\]

Compare also Variations op. 34, var. 1, mm. 10 - 11: it is as if each *sforzando* prepared the following one psychologically, as it were. To

\(^{181}\) Ibid., 14.
attain the desired expression in this case, it is necessary to hurry to the second sf.\textsuperscript{182}

He supplements dynamic expression with added tempo deviation in order to emphasize it. For instance, dynamic indications such those below are amplified by “passing intense agitation”\textsuperscript{183}

\begin{quote}
\textit{f} \textit{p cresc.} \textit{f} \textit{p cresc.} \textit{p cresc.} \textit{f} \textit{p cresc.} \textit{p} \textit{f}
\end{quote}

\begin{quote}
\textit{f} - cresc. - \textit{f}
\end{quote}

\begin{quote}
\textbf{fff} - \textit{p cresc.} - \textbf{fff}
\end{quote}

Figure 19. Schenker’s example of tempo modification.

More recent studies indicate that the networking of expressive deviations of dynamic and tempo, such as those seen in Clarke’s writing, has a profound effect on affective responses in listeners. Systematic relationships between emotionality ratings and performance data concerning dynamics and timing are demonstrated in empirical studies by Sloboda. The dynamic interactions between these parameters are particularly heightened near the phrase boundaries; he calls this “phrase-boundary effect.”\textsuperscript{184} Related neurological studies were conducted a few years ago investigating brain activations in response to tempo and dynamic modifications as emotional stimuli.\textsuperscript{185} The exchangeability of dynamic and tempo properties in performance was also convincingly

\textsuperscript{183} Ibid., 41.
presented in Palmer’s empirical study, *Mapping Musical Thought to Musical Performance*.¹⁸⁶

Performance-related analyses are inherently different from speculative ones. The primary concern is in the projection of the interpretation, which is, from the purview of this paper, analytically derived. Knowing that the projection of any structural information has a potential consequence of eliciting affective experience in the listener, the performer needs to prioritize his interpretive agenda. John Rink warns performers about the prescriptive approach to theoretical analysis, and advises that performers exercise discretion when employing analytical information in their interpretations:

For example, analytical demonstrations of motivic unity can be fascinating on paper but are usually better seen than heard; doggedly bringing out each instance of a seminal motif in performance could lead to ludicrous results, even if an awareness of the motivic workings within a given piece might prove useful to the performer . . . Similarly, although a Schenkerian analysis can elegantly depict a tonal structure in its hierarchical complexity, to make the performance deliberately conform to and try to recreate the analysis in sound would be dubious, however valuable a knowledge of the processes and relationship implicit in that analysis might be in building the interpretation. ¹⁸⁷

To overcome this challenge, Rink suggests a different perspective, a perspective from the performer’s stance. He recognizes five principles that entail the “performer’s analysis:” (1) temporality is fundamental to the performer’s analysis; (2) discovering musical shape (as opposed to the structure) is the primary goal; (3) the score is not “the music,” and “the music” is not confined to the score; (4) any analytical element will be incorporated within a large synthesis; and (5) “informed intuition” guides the process of “performer’s analysis.”

The grouping structures illuminated in Schenker’s earlier synthesis (in *The Art of Performance*) are the most immediate results of the proper realization of the desired effect. They are directly applicable in performance, meeting all five criteria suggested by Rink, and can be summarized as follows: (1) the temporality controls our perceptual boundaries, and the motion of the background structure and its related prolongation operate within this boundary; (2) the groupings and segmentations determine the shape of the music, expressing the surface-level diachronic hierarchy (event hierarchy); (3) the principal concept in Schenker’s performance theory is that the score is considered as a mere coding of the desired effect; (4) the grouping structure is the result of motional profile of the background structure, which results from the foreground synthesis; and (5) the guiding force of the background structure is derived from aural perception of the music, which also controls our musical intuition.

**Hypothesis IV**

Due to the limited perceptive availability of the generative structure during performance, the musical communication of the composer’s desired effect is achievable within the perceptual boundary posited by the background. Groupings and segmentation, as the most salient characteristics of the performer’s expression of musical hierarchy, manifest themselves via motional profiles under the control of the background.
CONCLUSION

Summary and Presentation of the Theory

The purpose of my current research is to identify the generative principles of Schenkerian performance expression implied in Heinrich Schenker’s unfinished performance treatise, *The Art of Performance*. In order to do so, it is necessary to reconstruct Schenker’s theory of performance. I have proposed four hypotheses to explain Schenker’s performance theory, and also to substantiate the supporting arguments. The results are summarized in the figure below:

![Schenker's Generative Principles and Process of Performance Expression](image)

Figure 20. Schenker’s Generative Principles and Process of Performance Expression
The main arrow from the left to the right indicates the direction of the generative process from the source to its destination: from the composer to the listener, and from the notation to the experience of emotion. Schenker’s performance expression and interpretation are largely concerned with musical communication. For Schenker, the pivotal importance of musical communication is to transmit the composer’s musical intention to listener. The performer’s mission in this communicative process is to present the composer’s intention as genuinely as possible. Thus, Schenker’s process of communication involves three parties: a composer as the encoder of the musical intention, a performer as the decoder, and a listener as the receiver. This process is made possible via the perception of a common aesthetic interface called motional profile, which is defined in the hypothesis I. Hypothesis I also proposes that the elusive meaning of the desired effect may be realized as a motional profile, largely constituted by two broad categories of motions—directive and gestural motions, which are an amalgamation of all attributing musical components including tonal and temporal elements. The perception of motion is one of the most primordial and fundamental aspects in any musical experience as well as in our means of comprehending and articulating the experience of music. With this non-verbal interface, the composer’s aesthetic expression may be communicated as truly as possible to the performer and the listener.

The downward arrows above the main arrow indicate the events within the process of musical communication; the three events, dissembling, performance and emotional communication are the events continuously emphasized by Schenker throughout *The Art of Performance*. Schenker believed that the notation alone seldom discloses the true expression of the composer’s musical intention, and that proper
communication depends upon the performer’s ability to understand and interpret the implied musical effect in the notation. Schenker refers to this interpretive practice as “dissembling.” During the dissembling process, the performer must divulge the composer’s desired effect by which the means of executing expressive parameters of performance may be determined. The performer’s dissembling results in the manifestation of the composer’s desired effect in the form of motional profiles, which are subsequently experienced by the listeners.

The series of textboxes below the main arrow indicates the stages of generative transformation: from notational codes on the score to realization of the desired effect and the generation of the motional profile, and finally to the perception of musical motions and the affective response. The arrows below the main arrow indicate interpretive efforts made by the performer during dissembling. The performer must approach this process with proper knowledge of the compositional laws, as well as the awareness of the capability of the listener’s perception, and understanding of generative synthesis, which operates between the notation and the perceptive background structure. Hypothesis II suggests that the properties of the motional profile are capable of generating emotional experience in the listeners. This argument suggests an alternate theory to the functionalist perspective, which speculates about how a non-verbal emotional meaning may be generated and communicated among the composer, the performer and the listener. Therefore, the motional profile may fulfill Schenker’s ultimate goal of musical communication: the transmission of the composer’s true intention to the listener. Moreover, the non-verbal property of the motional profile acts as the thread that connects all three parties in the musical communication. Via the transmission of motional profile,
the genuine expression of the desired effect can be experienced without much distortion by linguistic expression.

Hypotheses III and IV propose pertinent properties of the motional profile that validate the pragmatic applicability in the perception. Hypothesis III defines the background structure as a two-voice contrapuntal structure, in which the synthetic process of the surface-level prolongation operates as the principal mechanism of motion generation in dissembling. This definition is deduced mainly from the context of Schenker’s earlier theories, and distinguished from the background structure in his mature counterpart, the theory of organic unity. Hypothesis IV speculates that the two-voice contrapuntal background operates under the limitation of the listener’s perceptual boundaries. The boundaries suggested by the background also coincide with the grouping structures and segmentations that performers often practice intuitively to express structural hierarchy.

The speculations made in the hypotheses suggest a single perspective of many possible theoretical frameworks; they only attempt to explain one possible outcome if Schenker had successfully completed his performance theory, *The Art of Performance*. Moreover, these results do not claim to express the exact way Schenker’s performance theory would have developed if it had had been finished after completing *Der freie Satz*. Schenker’s theory has been viewed primarily in terms of a theory of perception and a theory of tonal composition; my research fulfills its purpose if it offers a valid view of connecting performance and theory, an alternate perspective of Schenker’s theory of performance. Acknowledging Schenker’s passion for performance, I believe this research rightfully speculates on Schenker’s incomplete theory of performance.
Implications for Further Study

Schenker’s theory is widely understood as a theory of organic unity in tonal music. Assuming that the perception of musical motions is capable of inducing affective responses in musical experience, the concepts explored in this research are not limited to tonal music. The motion-generating property of the background, as we have seen in Chapter Three, is relatively less restricted by the large-structure harmonic syntax. If the surface-level synthesis is indeed responsible for the perception of musical motion and emotional experience, this study may be equally applicable to non-tonal music. It may be possible to assess affective communication in other styles of music based on the principles set forth here.

With a more specific understanding of how musical expression is generated in performance and the mechanism of emotional communication, musical interpretation may be taught more systematically. Performers may shape their interpretation and the execution of interpretive results more objectively, based on pertinent theoretical analysis of the compositions instead of relying solely on intuition, subjective feelings or tradition. Interpretation is not a conventional choice of subject in performance pedagogy, mostly because there is no systematic pedagogical approach that can address the general relationship between musical perception and interpretation. The concepts explored here may be used as a guideline to formulate such a pedagogical prospectus.

These concepts may also be combined with the discipline of eurhythmics. Eurhythmics focuses on practicing various aspects of music through the connection to physical movements; emphasizing the mind-body connection, it is the belief among
eurhythmics practitioners that music is *heard* and *experienced* with the listener’s (and performer’s) body. Consequently, eurhythmics training has been steadily branching out into the field of music therapy as well as being incorporated into conventional music theory curricula. The properties of musical motions discussed in this dissertation mostly concern the internal representation in cognitive mechanisms. If a proper connection is made between our mechanisms of internal representation of motion and the physical motions related to musical experience, it may be possible to develop a more comprehensive approach to performance pedagogy that aims at effectively developing performers’ musicality.
BIBLIOGRAPHY


