INFORMATION TO USERS

This manuscript has been reproduced from the microfilm master. UMI films the text directly from the original or copy submitted. Thus, some thesis and dissertation copies are in typewriter face, while others may be from any type of computer printer.

The quality of this reproduction is dependent upon the quality of the copy submitted. Broken or indistinct print, colored or poor quality illustrations and photographs, print bleedthrough, substandard margins, and improper alignment can adversely affect reproduction.

In the unlikely event that the author did not send UMI a complete manuscript and there are missing pages, these will be noted. Also, if unauthorized copyright material had to be removed, a note will indicate the deletion.

Oversize materials (e.g., maps, drawings, charts) are reproduced by sectioning the original, beginning at the upper left-hand corner and continuing from left to right in equal sections with small overlaps.

Photographs included in the original manuscript have been reproduced xerographically in this copy. Higher quality 6" x 9" black and white photographic prints are available for any photographs or illustrations appearing in this copy for an additional charge. Contact UMI directly to order.

Bell & Howell Information and Learning
300 North Zeeb Road, Ann Arbor, MI 48106-1346 USA
800-521-0600

University of Alberta

Claude Debussy's Influence on Olivier Messiaen: an Analysis and Comparison of Two Preludes

by

Barbara Joan Derfler 

A thesis submitted to the Faculty of Graduate Studies and Research in partial fulfillment of the requirements for the degree of Master of Music

in

Music Theory

Department of Music

Edmonton, Alberta

Fall 1999

University of Alberta

Library Release Form

Name of Author: Barbara Joan Derfler

Title of Thesis: Claude Debussy's Influence on Olivier Messiaen: an Analysis and Comparison of Two Preludes

Degree: Master of Music

Year this Degree Granted: 1999

8117 N.E. Beech Street
Portland, Oregon
97213
USA

Wesley Berg
for
Barbara Derfler

22 September 1999

University of Alberta

Faculty of Graduate Studies and Research

The undersigned certify that they have read, and recommended to the Faculty of Graduate Studies and Research for acceptance, a thesis entitled "Claude Debussy's Influence on Olivier Messian: an Analysis and Comparison of Two Preludes" submitted by Barbara Joan Derfler in partial fulfillment of the requirements for the degree of Master of Music in Music Theory.

Dr. W. Berg

Dr. H. Klumpenhouwer

Dr. L. McKill

ABSTRACT

By comparing two preludes, "*La Cathédrale engloutie*" by Claude Debussy and "*Cloches d'angoisse et larmes d'adieu*" by Olivier Messiaen, this thesis explores Debussy's influence on Messiaen. This thesis outlines some recent theories of influence, focusing on the theory of Anxiety as Influence, developed for poetic contexts by Harold Bloom and adapted to musical contexts by theorists Kevin Korsyn and Joseph Straus. Anxiety of Influence establishes a framework to compare two compositions and to identify the influence of one composer on another. As defined by Bloom, Influence as Anxiety is not one of emulation or of acceptance and gratitude; instead, a composer's purpose is to overcome his predecessor and, by "misreading", or revising the predecessor's poem, to achieve superiority. Through analysis of compositional elements in the two preludes (form, bass prolongations, meter and rhythm, harmonic progressions, and motivic content) and application of Straus's tropes, Debussy's influence on Messiaen is demonstrated.

CONTENTS

FIGURES

INTRODUCTION

This thesis provides an analytical comparison between the preludes "*La Cathédrale engloutie*" by Claude Debussy and "*Cloches d'angoisse et larmes d'adieu*" by Olivier Messiaen, two compositions that exhibit numerous comparable characteristics. In spite of obvious differences in character, at first observation these two compositions seemed to have many similarities that prompted me to investigate the possibility of Claude Debussy's influence on Olivier Messiaen.

The first and most obvious connection between Debussy and Messiaen is their nationality. Both composers were proudly French. Messiaen was born in 1908 in Avignon and Debussy died in 1918 in Paris. However, the master, Debussy, who detested his impressionist label, and the child protege, Messiaen, did not meet in person. The lives of these two composers overlapped suggesting that Messiaen would have followed some of Debussy's compositional techniques.

Debussy's preludes were published in two volumes, the first in 1910, the second in 1914. The preludes represent the second last collection of piano works that he composed, the last being the two sets of etudes published in 1915. On the other hand, Messiaen's preludes were published in 1919 at the beginning of his career. Inexperienced at the time of composition of his preludes, Messiaen began his compositional career by publishing a collection of pieces with elements of style and structure associated and identified with Debussy: preludes with descriptive titles. Debussy's *Préludes* constitute a compendium of his mature musical style; Messiaen chooses this form for his first publishable works. For him, they represent a starting point.

Both composers gave their preludes evocative titles, but there is a prominent

difference between Debussy's and Messiaen's use of them. Debussy indicated his titles at the end of each prelude as an implication, a mere suggestion of the meaning, an afterthought. On the other hand, Messiaen placed his titles in the traditional position at the beginning of each of his preludes. Moreover, his titles are anything but subtle. For example, "Bells of anguish and tears of goodbye" suggests the character of the piece from the outset.

Both Debussy and Messiaen denied the use of rigid forms in composition. Instead they created forms to suit their subjects. In fact, Messiaen defined form as the "result of musical materials not the mold into which elements are poured" (Messiaen, *Technique* 40).

Both composers aimed for fluidity through shifting meter. Debussy achieved this effect of irregular meter using more or less traditional metric structures. Through the use of hemiola, repeated patterns, and other devices he was able to achieve the effect of a metric shift without necessarily changing the meter signature. Messiaen, on the other hand, freely exploited frequent changes of meter signatures, often using unconventional meter signatures.

Both composers used modes other than the traditional major and minor in order to diffuse the sense of tonality. This diffusion of tonal center creates a sense of tonal ambiguity rather than a pull towards a central tonic as in the traditional tonal system.

Both used vertical sonorities to create effects using sound patterns; however, the composition of the vertical sonorities in Debussy is quite different from in Messiaen. For example, Debussy effectively used parallel chords composed largely of superimposed perfect fourths and fifths to evoke an archaic atmosphere in "*La Cathédrale engloutie*," whereas Messiaen used chords built with more diverse intervals

and clusters to create bell sonorities in "*Cloches d'angoisse et larmes d'adieu*."

Debussy's music was oriented towards the French past: his suites and sonatas grew out of the French Renaissance and French Classicism. His delight in evocative sound is evidence of his remark, "French music aims first of all to give pleasure. Couperin and Rameau -- these are true Frenchmen." Like the French clavecinists before him, Debussy aimed to please the senses. Messiaen, however, followed the tradition of later French composers such as Paul Dukas and Hector Berlioz. His music is also evocative, but his aim is not always to please the senses. Most composers of the early twentieth century followed some of Debussy's innovations but Messiaen, most clearly and pointedly, states that the music of Debussy had a profound effect on his own music (Samuel 69).

In the contents of *La Technique de mon langage musical*, Debussy is the only composer mentioned (in the title of Chapter 7) among the listings of Messiaen's compositional techniques. In the chapter on Messiaen's modes of limited transposition, Messiaen pays tribute to Debussy: "Claude Debussy . . . [has] made such remarkable use of [mode 1] that there is nothing more to add (59). He also writes:

> With the advent of Claude Debussy, one spoke of appoggiaturas without resolution, of passing tones with no issue, etc. . . . In *Pélleas et Mélisande*, *les Préludes*, *les Images* for the piano it is a question of foreign notes with neither preparation nor resolution, without particular expressive accent, which tranquilly make a part of the chord, changing its color, giving it spice, a new perfume. These notes keep a character of intrusion, of supplement: the bee in the flower (47)!

Messiaen considered Debussy's opera *Pélleas et Mélisande* "the most decisive influence [he has] been subject to" (Samuel 69). In interviews and in his own writing Messiaen acknowledges his compositional debt to Debussy and Debussy's influence

on his composition. Surface evidence indicates that there are grounds to investigate the possibility of Debussy's influence on Messiaen but the most prominent indication lies in Messiaen's own acknowledgements.

Although Messiaen appears to accept Debussy as a positive influence, other composers have expressed their anxiety over the presence and power of previous composers. Igor Stravinsky encapsulates the dilemma of the composer: "The artist feels his 'heritage' as the grip of a very strong pincers" (Stravinsky and Craft 127). Brahms complains, "You have no idea how the likes of us feel to hear the tramp of a giant like [that] Beethoven behind us" and "In everything . . . I try my hand at, I tread on the heels of my predecessors, whom I feel in my way" (Korsyn 15). The hold of the past is tenacious indeed.

Many music theorists have researched the subject of influence and have produced a variety of theories and approaches to consider the effect that a previous composer has on a later one. In this thesis, I will outline some of these theories, particularly the recent theory of The Anxiety of Influence, developed by the literary critic Harold Bloom for poetic contexts and adapted by Kevin Korsyn and Joseph Straus to musical contexts. The purpose of this summary of theories of influence is to provide an understanding of Straus's theory of influence that will be used throughout this thesis.

Following the exposition of theories of influence, I will present a formalist discussion of "*La Cathédrale engloutie*" and "*Cloches d'angoisse et larmes d'adieu,*" the two preludes that initiated this investigation of Debussy's influence on Messiaen. This formal analysis will examine the forms, bass prolongations, meter and rhythm, harmonic progressions, and motivic content, drawing comparisons between the two

preludes. Throughout this analysis, concepts of Straus's theory of influence will be applied to comparable compositional elements in "*La Cathédrale engloutie*" and "*Cloches d'angoisse et larmes d'adieu*." Straus offers a technical analytical approach entirely concerned with formal devices, a method of comparing elements of two compositions in purely technical terms. In addition, it provides a framework for a discussion of the influence of an earlier composer on a later one.

CHAPTER 1

Theories of influence

Joseph Straus writes in *Remaking the Past, Musical Modernism and the Influence of the Tonal Tradition*, ". . . no easy accommodation is possible across the stylistic and structural gulf that separates the tonal music of the eighteenth and nineteenth centuries from the new post-tonal music of the twentieth" (1). Certainly we can say that the composers of the eighteenth and nineteenth centuries, the composers of the common practice period, "wrote music that was stylistically and structurally similar in important aspects" (Straus, *Remaking the Past* 1). We can also safely say that "the twentieth century . . . has been a period of great and increasing diversity of both style and structure" (Straus, *Remaking the Past* 1).

We traditionally divide music written before the twentieth century into five stylistic periods: medieval, renaissance, baroque, classical, and romantic. Furthermore, we associate certain general characteristics with music of these periods. We can identify at least the period of a composition because we understand the textures. Moreover, we feel we understand how music evolved through the periods, tracing a line from the unmeasured, modal, monophonic chant of the medieval period to the harmonically rich, homophony of the late romantic period. The development of music up to the turn of the twentieth century seems progressive.

In his article "Museum Pieces: the Historicist Mainstream in Music of the Last 100 Years," Peter Burkholder proposes that the works dominating the concert hall in the nineteenth century had "lasting value which proclaimed a distinctive musical personality, which rewarded study, and which became loved as they became familiar" (155-16). He states that, in order to gain recognition, a composer's work had to prove

itself worthy not only of contemporary, but also of future listeners. Common-practice composers maintained certain traditions of the past in their efforts to please the audience of their day and, having satisfied their contemporary listeners, their music lived on to please future audiences.

However, the purpose of twentieth-century composers was to attain a permanent position in musical history. Instead of adhering to a particular style of writing (Straus, *Remaking the Past* 9), modern composers have used an unprecedented variety of musical techniques and vocabularies. Each composer has strived to create his own individual expression, different from that of the composer's contemporaries and forerunners. The composer of our time is faced with the conflict of maintaining a link to the past, while creating a personal expression, a unique vehicle for this expression. In Burkholder's words,

> Younger composers . . . sought to create music in the tradition of art music which would say something new, while incorporating what was best and most useful from the music of the past. . . . Communication with an audience became secondary as the ideal of creating music of lasting value became paramount (120).

That is, securing a permanent position in the musical museum by not only creating something new and unique but also maintaining a link with previous composers became the challenge. The twentieth-century composer struggled to secure his own creative independence with the influence of previous musical generations pressing down upon him. Therefore, composers of both the common practice and the twentieth century had a common challenge: to "come to terms with the music that came before it" (Straus 3); "the evolution of musical style involves, in the most obvious sense, a series of reactions and responses to musical predecessors" (Straus 3). These predecessors

exerted an inescapable influence on future generations of composers. Composers have dealt with this influence in a variety of ways.

In *Remaking the Past: Musical Modernism and the Influence of the Tonal Tradition*, Joseph Straus identifies and summarizes three current theories of musical influence (9):

1. Influence as Immaturity
2. Influence as Generosity
3. Influence as Anxiety

"Influence as Immaturity" suggests the influence of a teacher or established figure on a composer. It may be acceptable for an immature composer to emulate stylistic elements of previous works (Straus 9). This imitation constitutes part of the learning process, the training ground of the aspiring composer. The composer bases his efforts on the successful accomplishments of a predecessor; consequently, the composer maintains a link with the past, one of the criteria of acceptance. This mimicry, however, does not demonstrate the other important requirement for permanence, the achievement of individual expression. In this category of influence, the composer elects to incorporate elements from an admired predecessor.

Straus's second theory of influence, "Influence as Generosity", is associated with T.S. Eliot and other critics (Straus 10). "Influence as Generosity" maintains that influence by previous artists enhances new endeavours, regardless of the level of experience of the inheriting artist. The advocates of this theory emphasize the importance of continuing the thread of tradition through mutual generosity: earlier artists openly present their work; successors gratefully incorporate elements from this offering into their own work. According to "Influence as Generosity", the best work

of an artist is generated from the influence of the past; true artistry involves self-denial, and the most individual efforts are actually those founded upon the work of ancestors. In their writings on music, Charles Rosen and Leonard Meyer share this opinion that influence reflects generosity; they propose that composers actively select the influences that they wish to direct their work, not only from artistic but also from cultural and environmental sources. According to their analyses, while influence is an inevitable and necessary force, it is controlled by the composer, who consciously chooses the elements he wishes to incorporate into his composition (Straus 11). Proponents of the theory of "Influence as Generosity" acknowledge the positive acceptance of elements of previous compositions into later works, considering that the influence of the past is received with gratitude, as a generous gift.

The theory of "Influence as Immaturity" views influence as stylistic emulation by a grateful student of a revered teacher, the relationship being that of a student who employs strategies acquired from a respected teacher. This emulation they consider a proper introductory step in the development of a composer, acceptable in the work of an inexperienced artist, but not in the work of an experienced one. The theory of "Influence as Generosity," on the other hand, proposes that the conscious incorporation of elements from previous works into a new composition constitutes the valuable continuation of artistic tradition, that such incorporation is not only acceptable but desirable in the work of established composers.

Richard Taruskin makes a distinction between a composition that is modeled after a previous composition and one that is influenced by a previous composition. A model is something freely chosen, or at least wittingly embraced, and (though there are well-known exceptions) usually something admired. The emulation is deliberate if not

actually grateful. The relationship, while often competitive, is not primarily adversarial. Influence . . . arises out of just the opposite conditions. An influence is unwanted and inescapable. What influences an artist is not what he loves but what he fears; his engagement with his ancestors is a compulsion born of an envious antagonism so strong that it is unconscious or masked as the love it may once have been. Its result is as often an absence as a presence. Artists are thus in no position, even to know, much less to acknowledge, who or what has influenced them (Taruskin 117).

According to Taruskin, a model is something a composer consciously chooses; an influence is something a composer unconsciously chooses. Therefore, according to Taruskin's definitions of model versus influence, "Influence as Immaturity" and "Influence as Generosity" are really not theories of influence, but of modeling. Both "Influence as Immaturity" and "Influence as Generosity" consider the influence of the past as a positive force that generates a new version based on the old. While "Influence as Immaturity" restricts the value of this source of influence to inexperienced composers, "Influence as Generosity" considers and recognizes the value of modeling after precursors at all levels of creative experience. The theory of "Influence as Generosity" also acknowledges the appropriation of elements from previous compositions as a continuation of the heritage of the past, as building upon former foundations. Furthermore, this application reflects an awareness of the value of the past and a conscious effort to incorporate it into the later composition.

The most recent studies in influence, however, consider the ambivalent nature of the effect of past composers: on one hand, the later composer accepts and

appreciates the accomplishments of those who preceded him; on the other hand, the composer experiences those previous achievements as hurdles. The past lays a hold on the present. In this sense, the composer regards the influence of ancestors not with gratitude but with tension. The composer strives not to be consumed by the past, but to break free of it.

These theories of compositional influence, notably by Kevin Korsyn and Joseph Straus, are derived from Harold Bloom's "Influence as Anxiety", a literary theory developed for poetic contexts. From Bloom's basis, Korsyn and Straus develop their own concepts, radically different from each other, for adaptation to musical contexts. In order to understand Korsyn's and Straus's applications, a brief explanation of Bloom's theory is necessary.

Bloom proposes that the influence of the past imposes itself on more modern poetry to the extent that the poem cannot be considered a self-contained work; rather, it encompasses impulses from a variety of sources (Bloom, *Map* 19). Therefore, according to Taruskin's definition, "Influence as Anxiety" demonstrates true influence: influence of the past is imposed upon, not chosen by the artist.

In Bloom's theory, human beings are obstacles to other human beings. Human nature is founded upon jealousy, territoriality, and resentment. Bloom's theory is founded upon the premise that strength in an artist is revealed only in fighting (Taruskin 114). He relates the struggle between the new and the old as an Oedipal event: in order to free himself from the past, the poet (the son) must effectively murder his ancestor (the father). He writes: "To live, the poet must *misinterpret* the father by the crucial act of misprision, which is the rewriting of the father" (*A Map of Misreading* 19). That is, the poet actively alters the original, or the function of the

original, claiming it for his own while simultaneously destroying its connection with the earlier version. Bloom applies the term "misreading" to the altered version. It is important to note that misreading does not refer to a faulty interpretation but to revision with the intent to supersede. "A misreading is distinguished from a simple reading by its power to revise" (Straus, *Remaking the Past* 14).

For Bloom, artistic strength is achieved only through struggle; major innovations emerge out of conflict. Style, compositional technique and structure have no significance in Bloom's theory; rather, the conflict that actuates innovation is important. "Poetic history . . . is to be held indistinguishable from poetic influence, so strong poets make that history by misreading one another, so as to clear imaginative space for themselves" (Straus, *Remaking the Past* 14). The poet is caught in the historical current and can make a personal mark only by proving to be stronger than a predecessor through the process of laying claim to something from the earlier poet: revising it, reinterpreting it, "misreading" it.

Bloom asserts that a new poem struggles to achieve its own place in the literary world. Like his poet counterparts, the twentieth-century composer faces obstacles in his quest to attain a permanent position in musical history. Joseph Straus and Kevin Korsyn have applied Bloom's premises to musical analysis and have provided their own criteria to interpret the effect of the past, particularly on composers of the current century. Using one of these models, the music theorist can comment on intertextual relationships between two compositions by identifying and analyzing "misreadings"--those reflections from previous compositions not interpolated out of respect but deliberately altered to assert independence. The theory of "Influence as Anxiety" maintains that all modern efforts derive directly from those of the past, it insists that

the revisions subjugate the originals. The purpose of acquisition is not to emulate with appreciation but rather to defeat with antagonism.

The following is a brief explanation of Bloom's process presented in order to clarify how parallel compositional influence theories evolved. Bloom applies the structure of six figures of speech (tropes) to constructs in poetry to interpret misreadings by later poets. He identifies these tropes as "revisionary ratios" or "relational events" (Korsyn 10). His first ratio is *clinamen*, an extension of the literary device of *irony*, saying one thing while meaning another; for example, "You're a big help" meaning "You're no help" (Winner 25). "At the heart of irony is the relation of *opposition*" (Winner 9). In *clinamen*, the underlying meaning contrasts with the surface meaning.

His second ratio, *tessera*, corresponds to *synecdoche*, the figure of speech in which a part is named, but the whole is understood, such as "all hands on deck" for "all men on deck." The Concise Oxford Dictionary gives this example of synecdoche: "50 sail" for "50 ships (1084)".

The third ratio, *kenosis*, is associated with *metonymy*, in which the name of some aspect or adjunct is substituted for the thing itself. Examples of metonymy are "crown" for "king" and "the turf" for "horse racing" (Concise Oxford Dictionary 637).

The fourth ratio, *daemonization*, relates to *hyperbole*, that figure of speech that intensifies by exaggeration: for example, "I've told you a million times." In Bloom's theory, *daemonization* expresses the poet's strongest repression of the precursor's work.

The fifth ratio, *askesis*, corresponds to *metaphor*, applying an imaginative name or description that does not have literal meaning: for example, "a glaring error,"

"food for thought" (Oxford 636). *Askesis* sublimates the original work by substitution of something similar.

The last ratio, *apophrades*, corresponds to the rhetorical trope of *metalepsis*, moving from one trope to another (Korsyn 34). *Metalepsis* represents the "space" between tropes, the device of imposing tropes upon other tropes (Korsyn 54). (A connection can be made between the trope, *metalepsis*, and the punctuation mark *ellipsis*. An ellipsis indicates that part of the text has been left out, or that the reader is being asked to make a connection not stated between the text before the ellipsis and the text after it. In *metalepsis*, the reader or listener is being asked to transfer from one trope to another.)

Bloom pairs his ratios: *clinamen* and *tessera*, *kenosis* and *daemonization*, *askesis* and *apophrades*. In addition, Bloom applies images in poetry, and a Freudian psychic defense to each trope. Finally, he shows in a summary, a "map of misprision", how one ratio is substituted for another.

Bloom's ratios are intended for application to literature, specifically to poetry. Kevin Korsyn redefines the properties of Bloom's revisionary ratios as applications to music: c*linamen* means the "initial swerve from the precursor"; *tessera*, "antithetical completion"; *kenosis*, "movement of discontinuity with the precursor"; *daemonization*, "movement towards a personalized Counter-Sublime, in reaction to the precursor's Sublime"; *askesis*, "self-curtailment, separation from the precursor"; and *apophrades*, "the return of the dead," the acknowledgement of the timeless presence of the precursor's composition which in turn strengthens the newness of the successor's achievement (Korsyn 58-59).

Korsyn adopts Bloom's terminology, then attempts to analyze the anxious

influence of a previous composer on a later one by applying revisionary ratios and identifying how they correspond to rhetorical tropes, by proposing a Freudian psychic defense, and by summarizing his findings in a map of the misreading in the manner of Bloom. Unlike Bloom's, Korsyn's ratios do not operate in pairs; rather, they operate as a series of connected events. In his map of misreading, his chart of relational events and corresponding ratios, he shows how one ratio leads to the next.

Although Korsyn intimates that he is in effect misreading Bloom, there is certainly no anxiety or repression in his application. He fully accepts Bloom's model and consciously molds it to suit his purposes. In effect, Korsyn is a weak misreader of Bloom. He rewrites Bloom in musical terms:

> The meaning of a composition can only be another composition, a composition not itself, and *not* the meaning of the other piece, but the *otherness* of the other piece, manifested not only through the presence of the precursor-piece, but also through the precise figurations of its absence (14).

Korsyn consciously accepts Bloom's theory and adapts Bloom's ratios to suit a musical context. Straus, on the other hand, purports to accept Bloom's principles, but expands Bloom's six revisionary tropes to eight of his own that are specifically geared toward a musical audience. Contrary to Bloom, for whom misprision is an unconscious effort, Straus deliberately sets out to revise Bloom. In fact, Straus creates his own series of tropes In *Remaking the Past*, Straus subjects various twentieth-century compositions to his own criteria, illustrating how these works have misread earlier works; in addition, he outlines his series of self-appropriated tropes:

Motivication: The motivic content of the earlier work is radically intensified.

Generalization: A motive from the earlier work is generalized into the unordered pitch-class set of which it is a member.

Marginalization: Musical elements that are central to the structure of the earlier work (such as dominant-tonic cadences and linear progressions that span triadic intervals) are relegated to the periphery of the new one.

Centralization: Musical elements that are peripheral to the structure of the earlier work (such as remote key areas and unusual combinations of notes resulting from linear embellishment) move to the structural center of the new one.

Compression: Elements that occur diachronically in the earlier work (such as two triads in a functional relationship to each other) are compressed into something synchronous in the new one.

Fragmentation: Elements that occur together in the earlier work (such as the root, third, and fifth of a triad) are separated in the new one.

Neutralization: Traditional musical elements (such as dominant-seventh chords) are stripped of their customary function, particularly of their progressional impulse. Forward motion is blocked.

Symmetricization: Traditionally goal-oriented harmonic progressions and musical forms (sonata form, for example) are made inversionally or retrograde-symmetrical, and are thus immobilized (17).

Straus's ratios can be considered in pairs: *motivication* and *generalization*, *marginalization* and *centralization*, *compression* and *fragmentation*, *neutralization* and *symmetricization*. Unlike Bloom's pairs, however, one member of a Straus pair does not substitute for the other. Instead, Straus's pairs show related compositional manipulations: *motivication* and *generalization* refer to manipulations of motives; *marginalization* and *centralization* refer to manipulations of structural elements; *compression* and *fragmentation* refer to manipulations of melodic elements into simultaneities and vice versa; *neutralization* and *symmetrication* refer to manipulations of functions of musical components. These related techniques do not map from one to

the other; they are opposing approaches to revising elements of a previous composition. In analysis, these devices provide a point of reference for identifying influences on composers of the present century. They compare analytical characteristics of pieces. By extracting motives, chords, or other musical elements from an earlier composer's work, then analyzing the methods by which a later composer restructures (misreads) them, a comparison of the two works evolves.

Straus's tropes adhere little to Bloom's original. He constructs his criteria with the definite purpose of applying them to twentieth-century music. In fact, he misses the essence of Bloom's theory of the anxiety of misreading. Bloom defines a strong misreader as one who unconsciously represses his precursor through misprision; misreading is involuntary. Straus, on the other hand, suggests that the later composer deliberately revises elements of a previous composition; misreading is intentional. He writes: "Later poets willfully misinterpret their predecessors in a process analogous to repression in Freudian psychoanalytic theory" (*Remaking the Past* 12). He does not understand "repression" which is not willful but unconscious. From Bloom, he borrows the concept of revision of a precursor, but he abandons the involuntariness of the revision so central to the theory of Influence as Anxiety as he constructs his own revisionary tropes to suit his purposes. His tropes do not express the anxiety in Bloom's theory of influence; in fact, they have little to do with Bloom's theory, either in principle or in application. Nevertheless, his tropes can satisfy the needs of the music analysist by providing a reasonable framework for comparison of specific elements in compositions.

Korsyn writes, "It should be obvious, however, even to the casual reader, that Straus and I appropriate Bloom's thought for vastly different purposes" (3). Indeed,

although both Korsyn and Straus take Bloom's theory of "The Anxiety of Influence" as their starting point, their terminology and their applications of Bloom's principles to music are notably different.

For the purposes of this thesis, Straus's method is preferable to Korsyn's. The following analyses and comparisons of various constructual elements in "*La Cathédrale engloutie*" and "*Cloches d'angoisse et larmes d'adieu*" involve a formalistic approach; therefore, Straus's methodology, which provides concrete formulas for analyzing elements in comparative compositions, is more appropriate than Korsyn's, which involves abstraction of musical concepts. Although Straus's criteria essentially ignore Bloom's fundamental philosophy, Korsyn's accept Bloom's theory with only those adaptations necessary to suit a musical context. Straus's afford a practical means of presenting musical revisions.

CHAPTER 2

A comparison of the forms of "*La Cathédrale engloutie*" and "*Cloches d'angoisse et larmes d'adieu*"

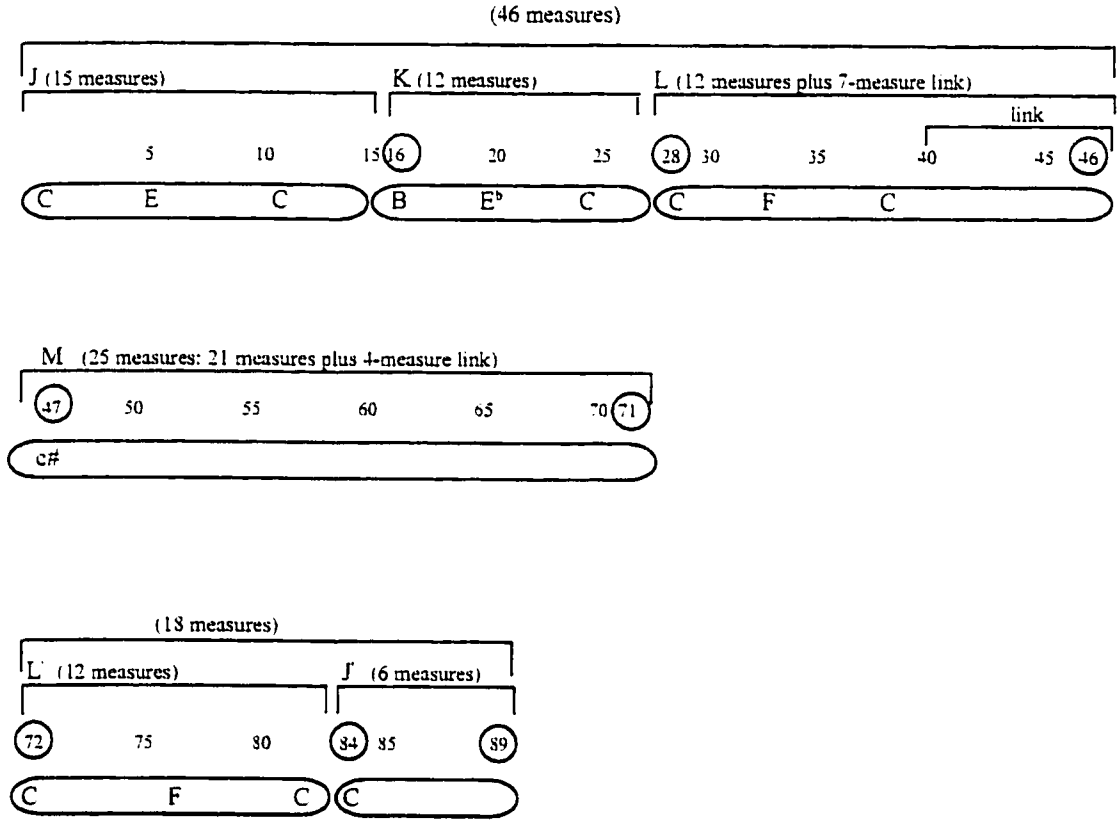
The purpose of this chapter is to show that Debussy influenced Messiaen, as evidenced by the forms of "*La Cathédrale engloutie*" and "*Cloches d'angoisse et larmes d'adieu*." In order to expose similarities and differences between the forms, first the form of Debussy's prelude, then the form of Messiaen's prelude will be discussed. Once comparable elements of the forms are established, Debussy's influence on Messiaen will be demonstrated through application of Straus's tropes.

Debussy deliberately avoided using the forms exploited by the classical composers. He felt that the rigidity of these forms placed artificial restraints upon the music. However, while Debussy did not use sonata-allegro form, nor the principle of theme and variations so popular with classical and romantic composers, he did unify his compositions with restatements, usually altered, of previously exposed materials, as instantiated in "*La Cathédrale engloutie*." In this prelude, Debussy is trying to evoke the image of the cathedral that rises out of the sea and then resubmerges. The following analysis will show that the form enhances this image, and that the final section mirrors, at least partially, the opening section. Although the final section cannot be termed a restatement as such, it certainly reflects opening ideas.

The form of this prelude can be summarized as JKL M L′J′[1], a form that can be described as quasi-palindromic. Figure 1 outlines the form and key relations in this prelude.

Figure 1

Form and key areas in "*La Cathédrale engloutie*"



[1] In an analysis of form, letters are typically used to identify the sections of the form; the accumulation of letters provides a summary of the relations among the sections of the composition. In order to avoid confusion with letters identifying key areas, in this analysis, letters not associated with keys are used to identify formal sections of the piece. In traditional analytical practice, the form of this prelude would be identified as ABC D C′A′.

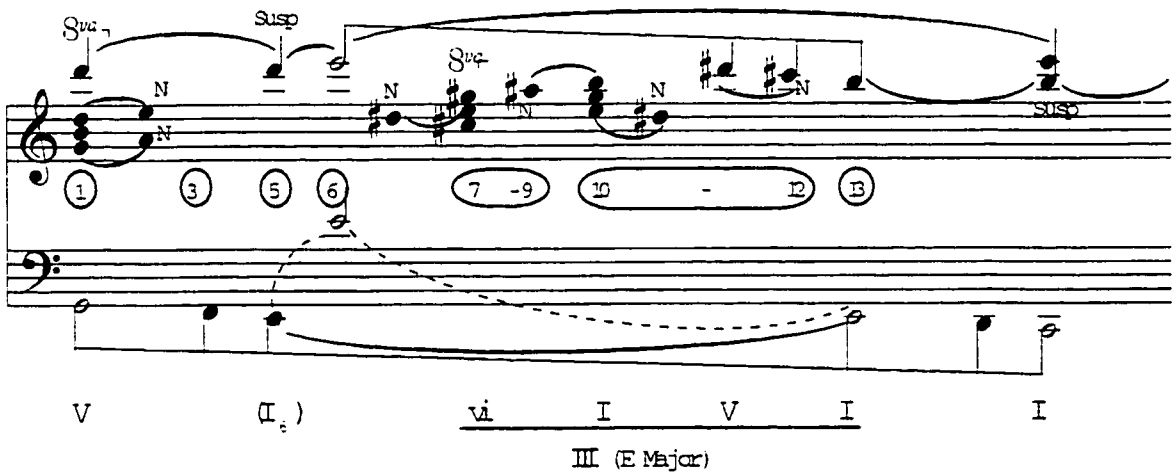
It is also possible to consider the form of this piece as a traditional minuet and trio form with a condensed A′ (c is omitted and a and b are reversed):

A	B	A′
a b c	d	b′a′

Figure 2 shows the overall tonal movement of section J, the first fifteen measures of the prelude. In this section, slow-moving parallel vertical sonorities similar to the parallelisms in ancient organum evoke an atmosphere reminiscent of a medieval cathedral.

Figure 2

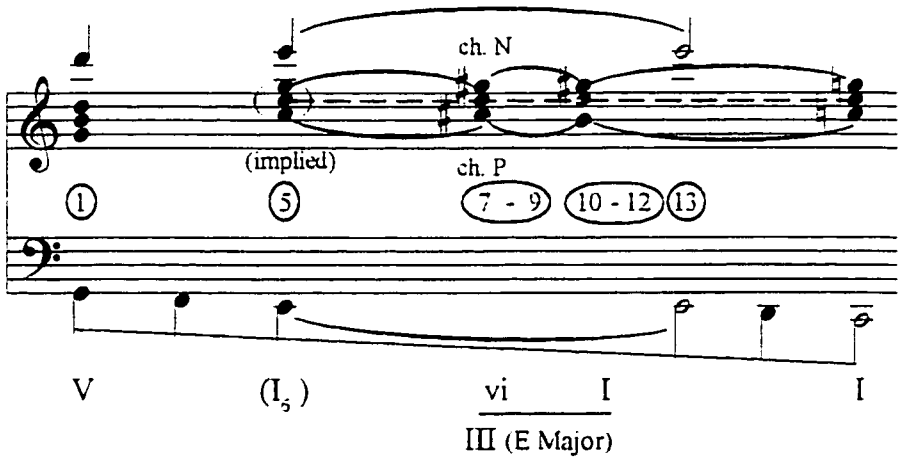
Graph of tonal movement in J of "*La Cathédrale engloutie*"



This section is in the key of C major with a suggestion of E major in measures 7 to 12. The movement to E major (through $c^{\#}$ minor) does not represent a modulation in the traditional sense. Certainly, this new key area is not introduced with a statement of its own dominant; rather, it arrives as the result of chromatic shifts over the prolonged E, indicated with a dotted line, as shown in Figure 3.

Figure 3

Reduced graph of J: key areas introduced by chromatic shifts



In general, harmonies are merely implied in this section. The opening sonority suggests V of C major, although the third of the chord is omitted. In measure 5, I_6 might be implied with the bass sounding E; however, this E could be interpreted as the third of c# minor (the subsequent chord), or as the root of E major (the tonal area of measures 7 to 12). Debussy maintains an ambiguity of key throughout this passage and, indeed, throughout the movement. This prolonged E, prominent in section J of the prelude, is the dividing point in the bass descent of the section. (This bass descent will be shown to be important in comparison with the opening of the Messiaen prelude.)

The movement from the home key (C major) to a new key area and back to the home key foreshadows the palindromic nature of this piece. In effect, it presents a

nested version of the whole.[2]

As shown in Figure 1, the tonal center shifts to B major in K (measures 16 to 27). Measures 19 to 21 move to E♭ major, and in measure 22, C major returns. In this section of the prelude the rhythmic momentum increases and the key areas are more clearly defined. The first vertical sonority in K is clearly a full B major chord. In the E♭ major passage (measures 19 to 21), full tonic chords are sounded several times. Although suggestions of the dominants of these key areas are made, neither the key area of B major nor that of E♭ major is confirmed with traditional dominant harmony; however, there are strong implications of the dominant in both key areas. Figure 4a shows the alternation of tonic and implied-dominant sonorities over a tonic pedal point in measure 16, an alternation that continues throughout the B major passage. Figure 4b shows the harmonic progression in measures 19 to 20[1], which uses the same implied-dominant chord over a tonic pedal point as in the B major passage. In Figure 4b, the movement from 'dominant' to tonic is interrupted with the submediant triad, an interruption that occurs before every statement of the 'dominant' chord in this E♭ Major passage.

[2] Roy Howatt, *Debussy in Proportion*, (Cambridge: Cambridge University Press, 1983), p. 159. Howatt considers the form of *La Cathédrale engloutie* as a proportional system. He provides a diagram of the form and acknowledges that this prelude avoids the principle of the Golden Mean prevalent in Debussy's compositions. Howatt identifies the form as ABCBA, an arch form, with the main divisions at measures 28, 47, 72, and 84. He considers the opening 27 measures the introduction with measures 7 to 13 as an anticipation of C. According to Howatt, the sections are thematically related, but distinguishable in other ways.

Figure 4a

"*La Cathédrale*" (measure 19)

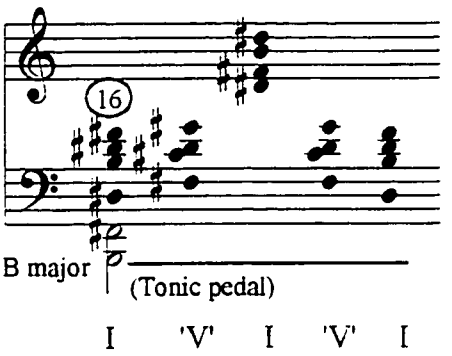
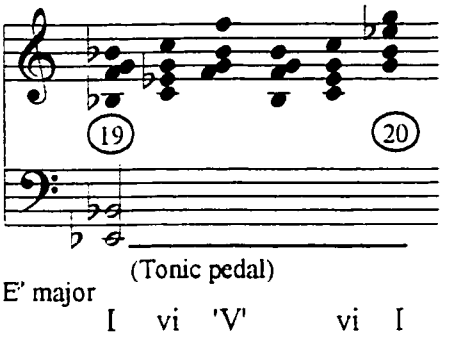


Figure 4b

"*La Cathédrale*" (measures 19 to 20)



However, a comparison can be made between J and K. In J, the shift is a tertial one, from C major to E major, a movement of a major third. In K, the key area of E^{b} major can be enharmonically reinterpreted as $D^{\#}$ major. Using this enharmonic reinterpretation, the intervallic relationship between the keys in J (C major and E major) and the two initial keys in K (B major and $D^{\#}$ Major) is also a major third.

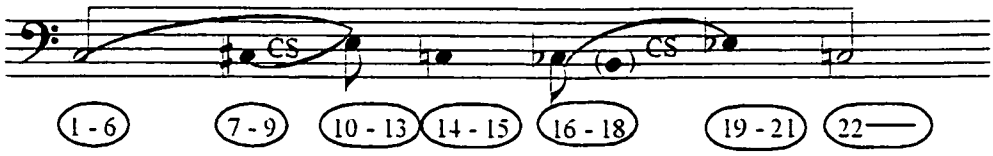
On the other hand, it is possible to consider the key of B major as an enharmonic reinterpretation of C^{b} major, with E^{b} major as the tonal area a major third above C^{b}. Following this analysis, C^{b} is the result of a chromatic shift down one semitone from C. If K proceeded in the same tonal manner as J, the E^{b} Major passage would have returned to B Major. However, in measure 22, the home key of C Major returns.

As illustrated in Figure 5, if we accept the proposal that B major is actually a reinterpretation of C^{b} major, which reflects a chromatic shift from C major, and that E^{b} major, as a tertially-related key area to C^{b}, expands C^{b} Major in the same manner that E major expands C major in J, then the B major/E^{b} major passage in K acts as an

overall prolongation of C major. The movement from E^{b} major directly to C major represents an elision by the omission of B (C^{b}) major.

Figure 5

"*La Cathédrale engloutie*" (measures 1 to 22)



L (measures 28 to 46) begins in C Major; the key of F major is projected by the appearance of B^{b}'s and the F Major chord in measure 38. Admittedly, this tonicization of F major occurs over a tonic pedal point. As a tonicized subdominant over a tonic pedal point, F Major can be considered a prolongation of C. In addition, the movement to F Major and back to C Major can be considered a variation of a complete neighbouring motion, a motion in which the subdominant harmony is frequently found: for example, in a plagal extension (I - IV - I). Following this F Major implication, C major returns. Measures 40 to 46 provide a link into M with a stepwise descent in the bass. This descent culminates in measure 44 with A^{b}, the lowered submediant of C Major[3]; subsequently, in measure 46, this A^{b} sonority is reinterpreted as $G^{\#}$, the dominant of $c^{\#}$ minor, the key that predominates in M (measures 47 to 71).

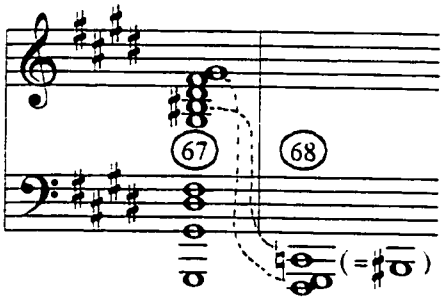
The link to L′ from measure 68 to 71 provides the return to the key of C in L′ that commences in measure 72. In measure 68, once again, Debussy uses the principle

[3] See Edward Aldwell and Carl Schachter, *Harmony and Voice Leading*, 2nd edition (New York: Harcourt Brace Jovanovich, 1989), pp. 355 - 365 and 504-508. The lowered submediant is frequently used in the major mode. According to the theory of modal mixture or modal borrowing, it is 'borrowed' from the parallel minor.

of enharmonic reinterpretation; instead of B#, he writes C natural. Figure 6 shows that the chord in measure 68 is, in effect, the same as the previous chord in measure 67.

Figure 6

"*La Cathédrale engloutie*" (measures 67 and 68)



C natural is introduced through reinterpretation of B#. Having prepared the listener's ear to accept C natural, Debussy proceeds by continuing with C, thus sliding back into C Major through a slow trill (C-D) in measures 70 and 71.

L′ (measures 72 to 83) follows the same tonal fluctuation as L, from C Major to F Major and back to C major. The closing section, L′J′ (measures 72 to 89), settles in C Major. The only tonal fluctuation is a tonicization of F Major over a tonic pedal point in L′ (measures 77 to 81), reminiscent of the same tonicization in L.

In terms of relations of sections, M serves as the central point in the palindrome. J, K, and L lead toward M; on the mirror image side, L′ and J′ lead to the close of the piece.

Obviously, the counterpart to K is missing between L′ and J′. While there can be no doubt that L′ derives from L, L′ is shortened to twelve measures from the nineteen measures of L because the linking material in L (measures 40 to 46) is omitted in L′. L ends in C Major; from this point, a tonal bridge is necessary to bring the tonal

center temporarily to $c^{\#}$ minor for M. Because L′ and J′ are both centered in C Major, the transitional passage is not required between them. Certainly surface differences exist between L and L′; however, both sections use the same chord progression with F Major as the contrasting key area.

While J is fifteen measures long, J′ is just 6 measures. Although the final section derives from the opening motive of J, it serves in reality as a coda to the prelude. It prolongs the tonic, C, with no tonal fluctuation.

Considering the image of the cathedral that rises from the depths of the ocean and out of the mist, then resubmerges with the reversal of the subsections of the opening (L′ J′), the effect of the form is most appropriate. Debussy clearly lays out the first three sections of the prelude; the character of each of J, K, and L differs significantly. In addition, he employs distinctive key relations within each section. M serves as the central point of this quasi-palindrome form. In $c^{\#}$ minor, it stands as the only section of the piece that avoids C Major. L′ is based on exactly the same chord progression as L over an undulating left hand. J′ evokes the same character as J, with widely spaced prolonged chords and ascending quartally conceived chords.

As stated in the 1978 RILM annotation of "*Idee twórze Olivieri Messiaena*" ("Olivier Messiaen's Creative Ideas"), "In addition to thematic organization as a unifying principle, the recurrence of similar and contrasting characteristic sound-events make clear the formal organization in Debussy's music" (Wozna 11-42). That is, thematic and formal aspects of Debussy's music are linked; consequently, the form of "*La Cathedrale engloutie*" can be determined through examination of the thematic material. It is apparent that this prelude does not fit any previous or standard mold. Instead, it evolves to enhance the image pertinent to the prelude and manipulates the

thematic material appropriately, a procedure familiar in the tradition of the romantic tone poem.

Having analyzed the form of "*La Cathédrale engloutie*," the following analysis of Messiaen's prelude "*Cloches d'angoisse et larmes d'adieu*" will show structural events that can be related and contrasted to Debussy's prelude. In *The Technique of My Musical Language*, Messiaen proposes a principle of form that is important in this prelude:

> All free instrumental forms are derived more or less from the four movements of the Sonata. The "Allegro with two themes" synthesizes the whole Sonata. Having written absolutely strict "Allegros with two themes," we find that there is one thing obsolete in this form: the Recapitulation (40).

For Messiaen, sonata-allegro is a powerful model, the most important sections of which are the development and coda, the least important of which is the recapitulation. In fact, Messiaen considers the recapitulation dispensable. It is interesting to note that the most interesting parts of this form for Messiaen are those that Debussy found the least attractive. Debussy is said to have left during a performance of a Beethoven symphony when the development began, saying that he had heard all that the composer had to say. To Debussy, the development expressed redundancy; to Messiaen it provided a valuable area for expansion of materials. Debussy abandons sonata-allegro form in favour of forms that evolve to suit the material and nature of the piece, while Messiaen embraces certain aspects of the classical form.

Messiaen thinks of the sonata sectionally just as he thinks of rhythm as an accumulative process, of one impulse following another.[4] He extracts the parts of sonata-allegro form and rearranges them. He incorporates certain traditional attributes

[4] Messiaen's concept of additive rhythm will be discussed in Chapter 4, the chapter that deals with meter in the two preludes.

of the parts but imposes his own characteristics as well. Messiaen created a form which he called development-exposition form. This form begins with the development rather than the exposition. Although the exposition follows the development, it is not called the recapitulation because the material intended for the recapitulation has not been presented; there is nothing to restate; instead, Messiaen retains the classical term "exposition" although the actual exposing of material takes place after the development of expositional materials. The modulatory development manipulates motives and fragments taken from the exposition; therefore, the term development-exposition is applied to this form. Of course, on first hearing without knowing that the exposition would follow the development, the listener could not identify this modification of sonata-allegro form. Messiaen's prelude, "*Cloches d'angoisse et larmes d'adieu*," follows development-exposition form.

Robert Sherlaw Johnson observes that

> The nature of the sonata is such that one could not detach parts of it and still retain the essential element of organic growth and development. Messiaen's developments (in the development-exposition form) are only parody developments insofar as they use a process of fragmentation and are totally undefined (*Messiaen* 23).

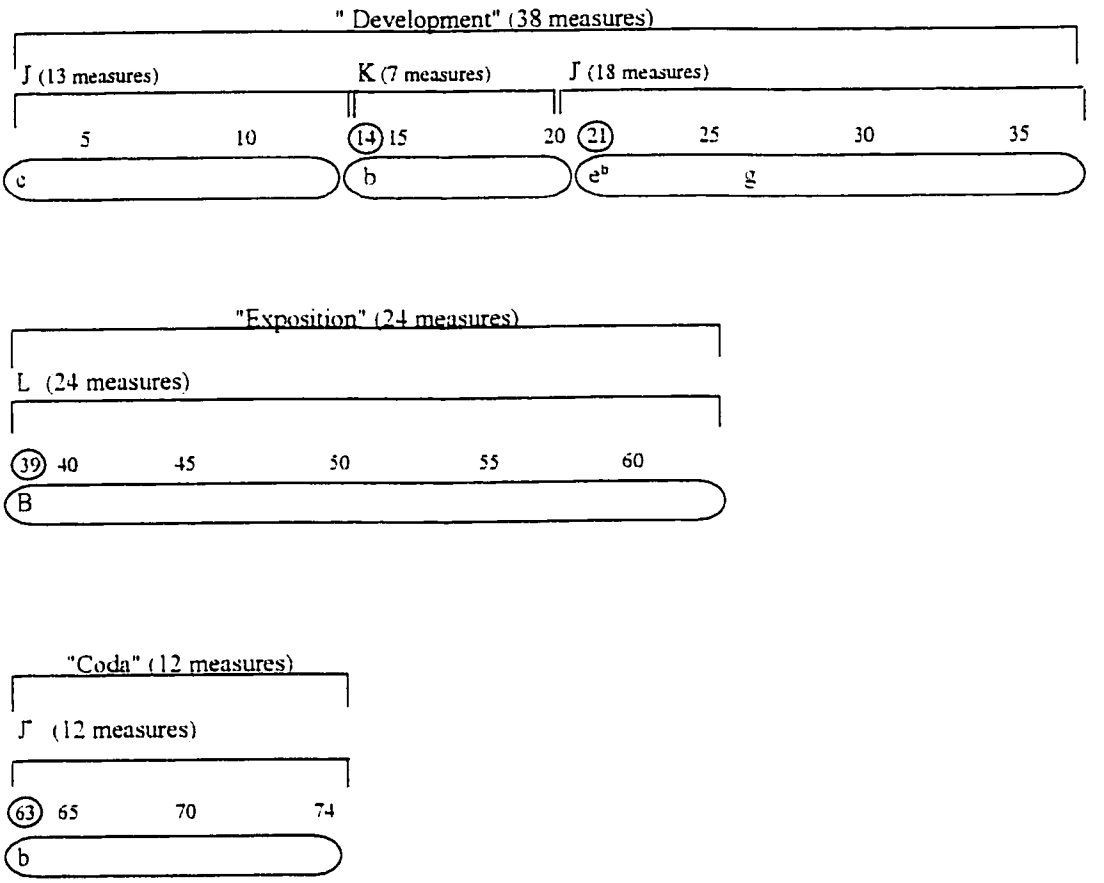
Although he disputes the validity of Messiaen's developments, Johnson considers "*Cloches d'angoisse et larmes d'adieu*" the second most effective of the four pieces that Messiaen wrote in development-exposition form because it accomplishes a sense of progression and climax. According to Johnson, the artificiality of this development-exposition form does not lend itself to the variety possible in true sonata form (*Messiaen* 23). For Messiaen, development of a theme is essentially melodic development. "*Cloches d'angoisse et larmes d'adieu* " provides an example of a theme

developed by repeating fragments in various transpositions with variations in rhythm, melody, and harmony. In fact, these transpositions and alterations shape the form of the piece. As the piece proceeds through various keys, certain fragments recur. While Messiaen promotes rhythmic fluidity and improvisational melodic development, he recognizes the structural value and unifying force of repetition.

Johnson's interpretation of the form of this prelude as an example of development-exposition is convincing. The opening (measures 1 to 38) certainly has elements of the development in a sonata-allegro form: this section is modulatory, proceeding through areas that suggest c minor, b minor, e^{b} minor, and g minor; its evolution grows out of motivic expansion and contraction. Measures 39 to 63 could represent the exposition in this form: this section is predominantly in a tonal area suggestive of B Major with tonic/dominant relations. The closing section of the prelude, measures 63 to 74, functions as a coda in b minor: in this tonality the coda links the minor character of the development, the beginning of the piece, with the key area of B, predominant in the exposition. Figure 7 outlines the form and key relations of Messiaen's prelude:

Figure 7

Form and key areas in "*Cloches d'angoisse et larmes d'adieu*"



The opening thirty-eight measures, which constitute the development, may be divided into three distinct sections based on key areas as well as upon insistent motivic manipulation. J, in c minor, grows out of the material presented in the first five measures: the additive rhythm in the lowest part[5], alteration of recurrent descending clusters, and the extension of this cluster concept through continuation of the descent. The left hand of K, which is in b minor, evolves out of a four-chord pattern that

[5] This rhythmic feature will be discussed at greater length in chapter 4 dealing with rhythm in the two preludes.

gradually transmutes. On the other two staves, motives not presented in J are manipulated. J′ begins in e^{b} minor with a nearly exact transposed restatement of the first five measures of J. There is a shift to g minor, following which the same opening phrase is repeated in the new key. The remainder of J′ employs motives derived from J, extending J′ to eighteen measures from J's thirteen. This development is really a three-part form: J, K, J′.

If measures 39 to 62 (L) represent Messiaen's exposition, the key of the prelude can be considered B Major.[6] L uses the key signature of five sharps with prominent use of the B Major sonority and prolongations of $F^{\#}$, the dominant of B.

The motives exploited in the development can be considered derived from this exposition. (Chapter 6 deals with opening motivic content in each of the preludes.) Traditionally, a coda utilizes elements previously exposed in the movement. Messiaen's coda, measures 63 to 74, shifts to b minor and incorporates previously generated motivic material.

An analysis of "*Cloches d'angoisse et larmes d'adieu*" in terms of traditional tonal language would certainly prove contrived, if not impossible; however, the sense of the key areas is evident through shifting key signature and prominent dominant pedal points. More importantly, each new key signature signals the beginning of a section of the piece and assists the charting of related sections.

Having discussed the forms of these two preludes, it is apparent that these two compositions are not only similar in length, but also that the sections in each of the preludes are similar in proportion. Debussy's prelude divides into three main sections: the first side of the quasi-palindrome (J K L), the central apex (M), and the

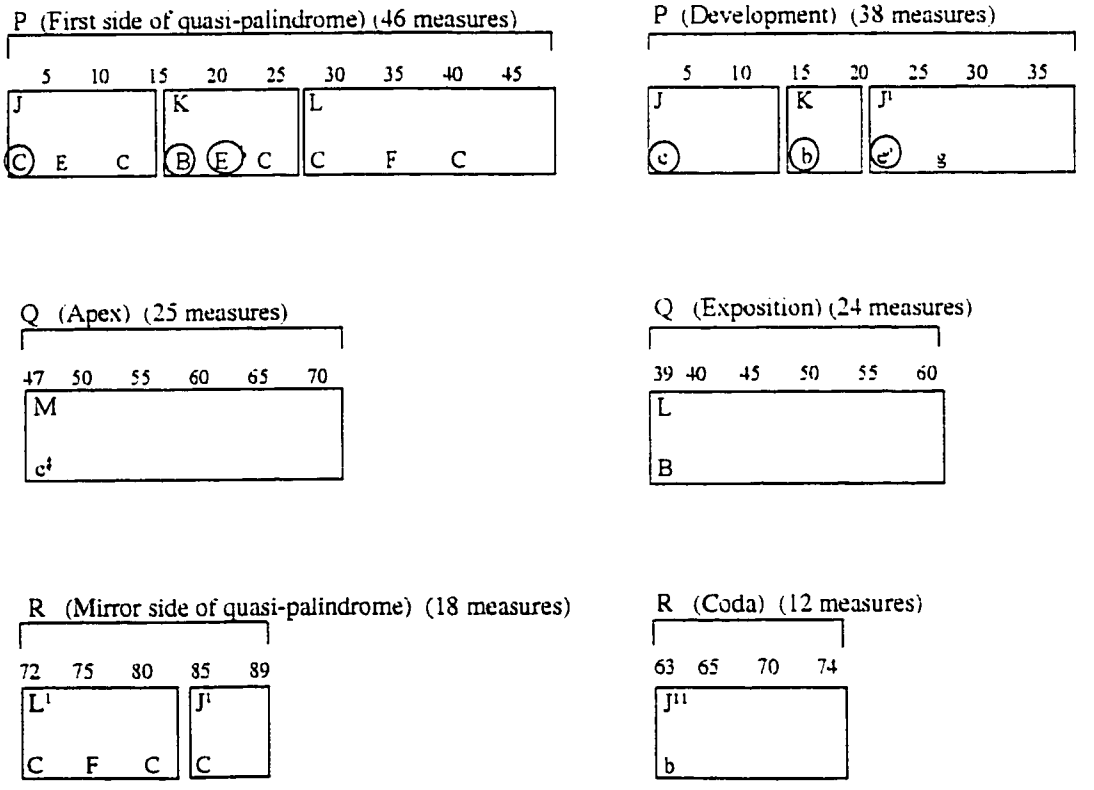
[6] In Messiaen's language, the key of B Major denotes spiritual fulfillment, according to Angela Hewitt in the liner notes of the Hyperion compact disc Angela *Hewitt Plays Messiaen*, 1998.

partial mirror (L' J'). Likewise, Messiaen's prelude divides into three sections previously identified as development, exposition, and coda; the outer sections, development and the coda, are derived from the material of the central section, the exposition. The tripartite forms of the two preludes offer a starting point of comparison.

Figure 8 combines Figures 1 and 7 providing the convenience of common identifiers and demonstrating the similarity in lengths of sections. The left half of the diagram repeats the information given earlier in Figure 1; the right half repeats the information given earlier in Figure 7.

Figure 8

Comparison of the forms of "*La Cathédrale engloutie*" and "*Cloches d'angoisse et larmes d'adieu*'



In both preludes, P is the longest section, R is the shortest; Q, the central section, is 25 measures long in "*La Cathédrale*" and 24 measures long in "*Cloches d'angoisse*." Furthermore, a similar equation represents the length of R in relation to the rest of the piece: in the Debussy, R = P - Q + 3; in the Messiaen, R = P - Q + 2.

The similarity of the basic outline of the forms is obvious. On the surface, Messiaen's form is three-part, just as Debussy's. However, Messiaen deliberately imposes upon his form elements of his own unique form that contrast not only with traditional constructs, but also with Debussy's model. Messiaen commences with a form having similar possibilities to the one used by Debussy; however, he makes significant adjustments, thereby creating his own unique form that he associates with sonata-allegro form, one that Debussy avoided. Debussy's form, a form with programmatic associations, evolves to reflect the image of the subject. The effect of the quasi-palindrome mirrors the ascent and subsequent descent of the cathedral. Messiaen's form, on the other hand, is created from selected blocks derived from a classical form. The blocks are presented in a retrograde order, closing with a section having properties allied with its classical counterpart. The form does not have programmatic associations. The elements that Messiaen imposes upon the form are in direct contrast with Debussy's very principles: Debussy avoided sonata-allegro form and Messiaen purposely wrote his prelude using his own variation on that traditional classical form. It appears that the forms of the two preludes are quite different.

However, the similarity between the form of "*Cloches d'angoisse*" and that of "*La Cathédrale*" is revealed when analysis divides each prelude into three constituent sections. Messiaen professes to create a reverse form of a classical sonata-allegro model. Within Debussy's P, three contrasting sections are laid out. In Messiaen's

prelude, P contains three sections that suggest statement-digression-restatement.

The overall three-part layout of "*Cloches d'angoisse*" might have evolved as statement-digression-restatement; instead it creates a development-exposition form that avoids restatement. Messiaen remembers the additive rhythm of the opening idea in the coda, but avoids structural and tonal remembrance. Debussy's prelude, on the other hand, makes a cyclical journey returning to the opening; Messiaen's, in accordance with its title, "*et larmes d'adieu*," proceeds in a one-way journey that remembers the opening only in its underlying rhythmic character.

Using Straus's tropes, we can interpret Messiaen's use of development-exposition form as *symmetricization* (Straus, *Remaking the Past* 17). That is, Messiaen alters a traditionally goal-oriented musical form (sonata-allegro) by reversing the order of the first two main sections thus immobilizing the function of the exposition. While Debussy's quasi-palindromic form is a variation on ternary form, a cyclical structure that returns to the opening, Messiaen's development-exposition represents a linear, one-way progression. He "[strips] the traditional function" (Straus, *Remaking the Past* 17) both from sonata-allegro form as well as from Debussy's ternary form. Not only does Straus alter the traditional form, he selects, then alters, a form that Debussy refused to use. In terms of the anxiety of influence, Messiaen uses a compositional device, *symmetricization*, to repress his predecessor and assert his independence.

Debussy establishes the tonality of his prelude in the opening and allows the form to progress tonally to increasingly remote keys, then pulls back to the original tonal center. Messiaen's opening key does not reflect the tonal center of the prelude: affirmation of B as the tonal center occurs in the major mode in the exposition that

follows the development, and is confirmed in the minor mode in the coda.

In addition to the relation of the structures and the significance of the overall tonal progressions of the two preludes, there is a tonal relation between the openings of the preludes although there is a significant difference in Messiaen's prelude. In the Debussy prelude, the first three key areas are C Major[7], B Major, E♭ Major. In the Messiaen, the first three key areas are c minor, b minor, e♭ minor.

That Debussy chooses initial tonal centers in the major mode and Messiaen opts for the same tonal centers in the minor mode appears to be more than coincidence. As shown in Figure 8, Messiaen exposes these three key areas in connection with integral structural events: they define the three components of his development section. Messiaen unfolds the tonal motive introduced by Debussy. His prelude can be identified with "*La Cathédrale*" in that he uses Debussy's tonal motive, albeit exploiting the minor side of the tonalities; however, he alters the tonal motive to relate to important structural events.

According to Straus's theory, Messiaen enacts the trope of *centralization* by elevating the significance of all three opening key areas. In the Debussy prelude, the first two key areas identify prominent structural moments: the beginning of the piece (J) and the beginning of the middle section of the the first side of the quasi-palindrome (K). However, in "*La Cathédrale*," the third key area, E♭ Major, does not identify a significant structural event; rather it represents a consonant skip related to the previous key of B Major,[8] an event that occurs within K. In the Messiaen prelude,

[7] As explained earlier in this chapter, the C Major tonality of section J is prolonged with an implication of E Major. However, the E Major tonality is not confirmed with any dominant or dominant-substitute. It arrives as a result of chromatic shifts over a prolonged E and serves as a prolongation of the main tonality (C Major) in J. Therefore, it is not considered here as one of the opening key areas that are comparable in the two preludes.

[8] See Figure 5, measures 16 to 21.

though, all three opening key areas mark important structural moments. The development divides into three distinct sections, identified by key signature changes: c minor, b minor, and e^{b} minor.

The similarities between the forms and the key areas (particularly the three opening key areas) of "*La Cathédrale engloutie*" and "*Cloches d'angoisse et larmes d'adieu*" are apparent through analysis. Through examination of these aspects of the two preludes, evidence of Debussy's influence on Messiaen, in terms of the theory of the Anxiety of Influence as proposed by Straus becomes apparent. Messiaen chooses to use Debussy's opening three key areas, modally altered, and to identify them with structurally significant moments in his prelude. He makes the three key areas central to the framework of the composition.

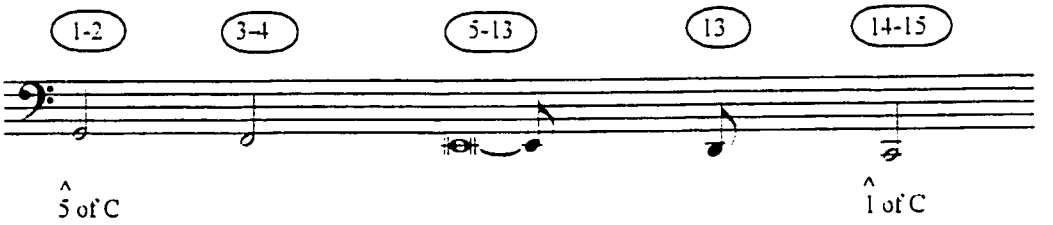
CHAPTER 3

A comparison of the bass prolongations of "*La Cathédrale engloutie*" and "*Cloches d'angoisse et larmes d'adieu*"

"*La Cathédrale engloutie*" opens with a descending bass line, a series of prolongations commencing with the dominant (G) and progressing by step to the tonic (C). Figure 9 graphs the descent. (In this figure, note values represent the relative durations of the bass prolongations.)

Figure 9

Bass prolongations in "*La Cathédrale engloutie*" (measures 1 to 15)

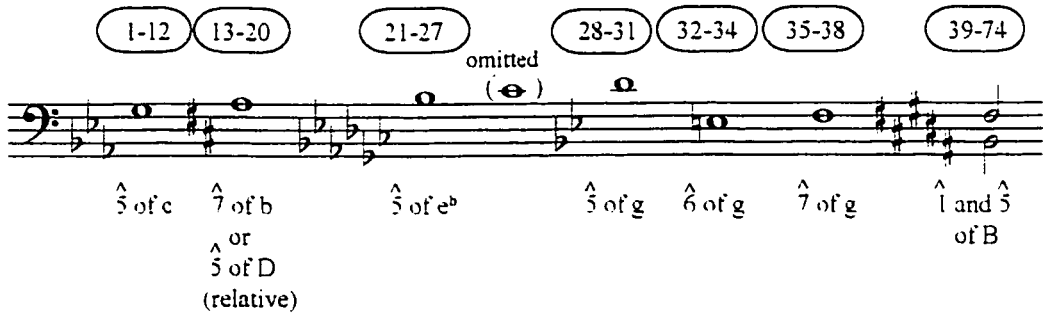


This descent spans the opening section of the prelude, J.

Debussy's prelude begins with a bass prolongation of the dominant of the central tonality, C Major. Messiaen's prelude also begins on G, the dominant of the opening tonality, c minor; however, c minor is not the central tonality of "*Cloches d'angoisse et larmes d'adieu*." Although Messiaen commences with the same pitch class in the bass as Debussy does, he initiates a motion in the opposite direction: from G, the bass prolongations in "*Cloches d'angoisse*" proceed by ascending step as displayed in Figure 10.

Figure 10

Bass prolongations in "*La Cathédrale engloutie*" (measures 1 to 15)



Measures 1 to 12 prolong G, the dominant of c minor. Measures 13 to 20 prolong A, the subtonic of b minor. Measures 21 to 27 prolong B^{b}, the dominant of e^{b} minor. Although the ascent continues, it misses the next pitch in line, C. Measures 28 to 31 prolong D, the dominant of g minor. Measures 32 to 34 prolong E natural, the raised submediant of g minor. Measures 35 to 38 prolong $F^{\#}$, the leading tone of g minor. Subsequently, in measure 39, $F^{\#}$ is restated in a new function, as the dominant of B Major. Simultaneously, the tonic of B is introduced as a bass pedal point. From measure 39 to the end of the prelude in measure 74, these final two pitches, $F^{\#}$ and B, function together as bass prolongations.

The key of B, in both its major and minor modes, functions prominently in this prelude: the exposition that follows the development is centered in B Major, and the coda confirms the parallel minor side of this tonality. In the opening section, however, b minor defines the second set of motivic materials expanded in the development (measures 13 to 20). The prolonged A, $\hat{7}$ of b minor, can also understood as the dominant of D Major, the relative of b minor. Indeed, Messiaen does not present the b minor tonality in the traditional way; although his key signature suggests b minor and

chordal outlines of the b minor sonority recur in this section, he does not rely on the leading tone and other traditional tendency tones to reinforce the gravitation of pitches toward the central point, B, according to the syntax of the tonal system. In fact, Messiaen's intention often appears to be to present tonal stasis lacking tendencies associated with the tonal system. Therefore, the value of A as a prolongation is no less important in this context than would be $A^{\#}$.

In the g minor section (measures 28 to 38), Messiaen presents an alternative deviation from typical leading-tone function. Following the dominant prolongation of D, the progression continues to E natural, decorated by neighbouring bass tones: first D, the lower neighbour, then $F^{\#}$, the upper neighbour. The next bass note, $F^{\#}$, suggests the ascending melodic minor scale of g that would naturally culminate at G. Instead, Messiaen reinterprets $F^{\#}$ as the dominant of B Major, denying $F^{\#}$'s tendency in the g minor context. In g minor, it serves as the most active tendency tone; in B Major, he combines it with B, the tonic, the one truly stable pitch.

But the most significant detail of Messiaen's bass line is the omission of C in an otherwise continuous ascent. C Major, on the other hand, is the tonal center of Debussy's "*La Cathédrale engloutie*." The prelude begins with a strong invocation of C implemented by the bass descent from dominant to tonic. With the exception of M, each section of the piece is partly or wholly in C Major, the coda reaffirming this centrality. C is the most important pitch in this prelude and it is precisely this pitch that Messiaen omits in his ascent from G. Not only is C never present in the bass long enough for justification as a prolongation, it simply does not appear as a bass note throughout Messiaen's entire prelude.

Using Straus's criteria, Messiaen's omission of Debussy's "C" can be considered *marginalization*. Debussy's descent to C is "central to the structure of the earlier work" (Straus, *Remaking the Past* 17). Although Messiaen's ascent is certainly important in his prelude, it does not occupy a central tonal function as does the bass line in the Debussy prelude. Messiaen's decision to implement an ascent as opposed to Debussy's descent shows a reaction to the earlier work manifested by *marginalization*, as defined by Straus.

In Debussy's prelude, the five-note bass descent spans the opening 15 measures; in Messiaen's prelude, the deviant ascent spans the entire development and effectively accounts for the prolongation of the bass to the end of the piece. Messiaen reverses Debussy's model by conducting his bass line in the direction opposite to Debussy's, by expanding the length of the line from Debussy's five to seven degrees, and by incorporating the entire piece, rather than a portion of the prelude, in the breadth of the line. Where Debussy's descent provides a tonal structural descent from dominant to tonic in the first section of his prelude, Messiaen's ascent of the g minor melodic scale culminates in the leading tone of this scale. He undermines the importance of the scalar bass-line by outlining a scale that does not identify with the principal key of the prelude. This linear event has a goal that is reinterpreted as the dominant of the ultimate key area; it begins in a remote key area and arrives at the particular pitch that can be identified as the dominant of the final key. Where this event in Debussy's prelude assigns a structural importance to its bass descent, in Messiaen's, it assumes a linear value: Messiaen's ascent counters Debussy's descent.

Indeed, Messiaen reverses Debussy's opening complete descent into his own incomplete ascent, incomplete in that it omits the one note that is crucial to Debussy's

descent. The pitch C is the very goal of Debussy's bass descent; it is the one pitch omitted from Messiaen's ascent. Having reversed the direction and the structural importance of Debussy's descent, Messiaen completely avoids the most stable pitch in his precursor's work. The bass prolongations in "*Cloches d'angoisse et larmes d'adieu*" reveal significant differences based upon integral structural elements in "*La Cathédrale engloutie*."

CHAPTER 4

A comparison of the meter and rhythm in "*La Cathédrale engloutie*" and "*Cloches d'angoisse et larmes d'adieu*"

In *La Cathédrale engloutie*, Debussy uses the time signature 6/4=3/2.[9] The intent of this indication is to diffuse the interpretation of 6/4 and 3/2. In traditional compositions, 6/4 identifies a compound duple meter, that is regular meter of two dotted-half-note beats per measure, with three quarter-note pulses per beat; 3/2 identifies simple triple meter, that is, three half-note beats per measure. Debussy's given time signature offers considerable flexibility.

In the first measure the quarter notes might be grouped into two sets of three by the registral break as in 6/4, compound duple time. However, the desired effect is one of regular pulsation, an unbroken ascent without nuance or accentuation, like six even quarter-note beats.

In measure 2, the impression is of 3/2, but Debussy did not notate this measure as the principles of triple time dictate. Figure 11a shows this measure as notated in the score; Figure 11b shows it as it would be notated in 3/2 meter.

---

[9] Roy Howatt discusses the meaning of this time signature in *Debussy in Proportion*, (Cambridge: Cambridge University Press, 1983), pp.159-62. He bases his observations on a piano-roll recording of Debussy playing this prelude. (Welte-Mignon roll no. 2738, available on a Telefunken LP record, GMA 65, issued in 1962.) On this piano roll, Debussy plays measures 7 to 12 and 22 to 83 at double the speed of the rest of the prelude. However, Debussy does not indicate the equivalency of note values in the score when the time signature changes. Howatt suggests that this omission may have been an oversight on Debussy's part as he copied from the draft. Howatt presents another argument: "Debussy may not have been able to count well enough to cope with these metrical complications" (p. 162). Certainly the availability of a recorded performance by the composer is a valuable resource; however, caution must prevail when basing performance or analysis on such a recording. Bartok was fastidious in his tempo markings, but recordings of the composer playing his own compositions reveal that he did not always adhere strictly to his own indications. In *La Cathédrale engloutie*, if one adopts an initial tempo that is unhurried yet steadily moving forward, the entire prelude can be presented with a consistent half-note pulse; at such a tempo the sections that Howatt warns become funereal (measures 7 to 13 and from measure 22 to the end) do not present a problem. The analysis in this thesis follows the rhythm as notated without considerations for adjustments that Debussy may have made in performance.

Figure 11a

"*La Cathédrale engloutie*" (measure 2)

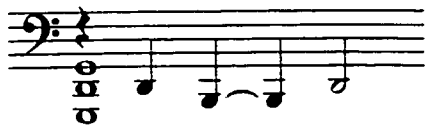
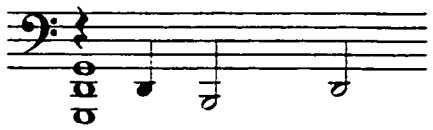


Figure 11b

Alternative notation (measure 2)



By notating the G in this measure with two tied quarter notes, as in compound duple meter, instead of with a half-note, he suggests a syncopation inviting a slight accent that would not be implied in 3/2 time.

Measures 5^6 to measure 7^2 introduce a rhythmic motive completely unfettered by the implications of the time signature; in fact, the additive rhythm obscures the meter. Figure 12a shows this passage as notated in the score. Compare Figure 12a with Figure 12b, which shows the durational structure of the passage and clarifies the additive durations.

Figure 12a

"*La Cathédrale*"
(measures 5^6 to 7^2)

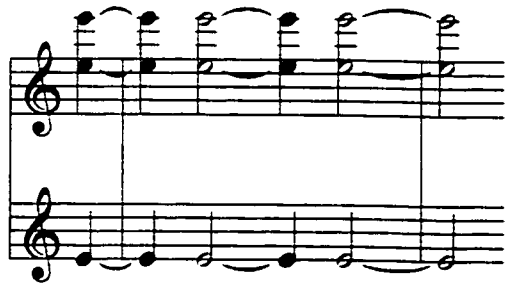
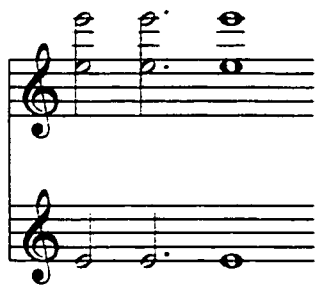


Figure 12b

Alternative notation
(measures 5^6 to 7^2)



The first sound has the duration of two quarter notes, the second of three, and the third of four; each repetition of the "E" grows in length by one quarter note.

From measures 6^5 to 13, the notation appears to suggest 3/2 meter; clearly,

there are three half-note beats per measure. However, the accents on each statement of "E" produce a hemiola effect of 3/1 meter, with the exception of measure 8 that adds one additional half note to disrupt the strict hemiola. (In measure 8 of Figures 13a and 13b the dot in parentheses is implied but not notated in the score.) Figure 13a shows measures 6^5 to 13 as notated in the score; Figure 13b reconstructs these measures as if in 3/1 meter, showing implied measure lines created by the hemiola.

Figure 13a

"*La Cathédrale engloutie*" (measures 6^5 to 13)

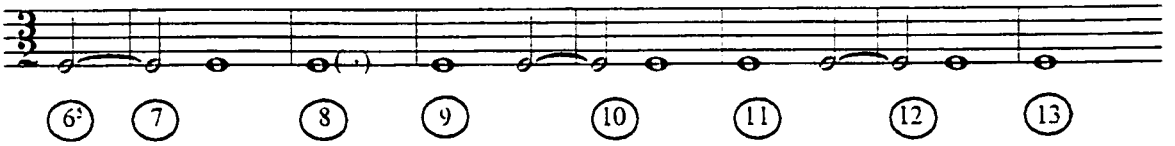
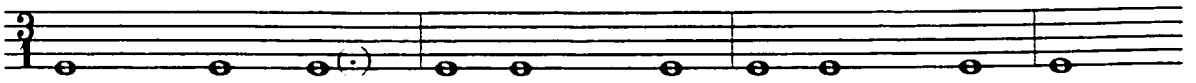


Figure 13b

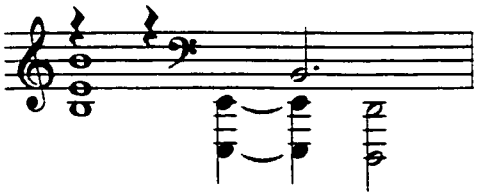
Alternative notation (measures 6^5 to 13)



Measure 13 utilizes another hemiola technique of superimposing triple and duple rhythmic groupings, as shown in Figure 14:

Figure 14

"*La Cathédrale engloutie*" (measure 13)



As in measure 2, the bass line is notated in 6/4 as a compound duple meter, but the syncopation on the third quarter-note pulse suggests 3/2, a simple triple meter. However, the notation for the inner voice, which is played by the left hand, clearly divides the measure into two compound beats, resulting in an ambiguity of metric meaning.

Measures 14 and 15 return to the metric character of the opening, that is, of six quarter-note beats to the measure. Within this opening section (J) several interpretations of the time signature are exposed in order to produce a shifting metrical effect.

In K, measures 16 to 21 establish a regular rhythmic character of compound duple time. The phrasing of the right-hand chords from measure 18 confirms this grouping. However, within the undulating left-hand figure of triplet-eighth notes there is flexibility with rhythmic shifts between triplets and duplets commencing in measure 19. The link to L, measures 22 to 28, abruptly shifts to simple triple meter; the repeated figure G A B, supported by chords, consistently begins on beat 2 and ends on beat one of the following measure.

L, the dynamic climax of this prelude[10], continues in regular 3/2 meter without definite metric shifts except for the hemiola in measures 38 to 40 that creates the effect of one measure of 3/1 rather than two measures of 3/2.

The first four measures of M begin with a hemiola; the syncopation created by the ties produce the effect of two measures of 3/1. However, the remainder of this section proceeds in 3/2 as does L'.

[10] This analysis differs from Howatt's interpretation of the prelude (*Debussy in Proportion* 159). He considers the dynamic climax the brief *ff* in measures 60 to 62. The analysis in this thesis prefers to consider L the dynamic climax because, although the *ff* in measures 60 to 62 is certainly in a higher register and requires brilliant sound, the prolongation of *ff* in L and the majesty it evokes lend to the dynamic impact of this section.

The closing section, J′, begins with two measures patterned after the first two measures of the piece with the sense of six steady quarter-note pulses. From measure 86 to the end, the meter returns to 3/2.

Although Debussy composes within the confines of traditional notation, using conventional time signatures and regular measure lengths, he creates the effect of shifting meter through irregular accentuations. With some flexibility, Debussy adheres primarily to the traditions of western music in which rhythm is perceived as a division of note values: the whole note divides into two half notes, the half note into two quarter notes, and so on. In traditional fashion, the music is divided into regular measures, each having a predetermined number of beats that remain constant. Debussy uses established principles of meter: within a metric structure, his rhythmic procedure is to begin with the whole and divide it into parts.

Messiaen, on the other hand, abandons this western tradition and considers rhythm as an accumulation of durations. In fact, he maintains that the essential element in music, rhythm, is change of numbers and duration. He makes the following explanation:

> Suppose there were a single beat in all the universe. One beat, with eternity before it and after it. A before and an after. That is the birth of time. Imagine then, almost immediately a second beat. Since any beat is prolonged in the silence which follows it, the second beat will be longer than the first. Another number, another duration. That is the birth of rhythm (Bell, *Olivier Messiaen* 5).

In other words, each successive impulse creates the rhythm. To Messiaen, rhythmic music avoids repetition and equal division. He rejects the western practice of rhythm as the result of division of a whole and adopts instead the practice predominant in eastern cultures and in the plainsong of the Catholic church of rhythm as an additive

procedure, of one impulse following another.

He was guided by Greek and Hindu rhythmic systems that he learned at the Paris Conservatory. Greek rhythms consist of accumulations of rhythmic feet of ratios of short and long durations. Hindu music develops a vocal phrasing with no percussive accents or regular meter. These rhythms are "sums rather than multiples of a series of equal time units" (Bell 5). For instance, six beats might be the sum of three plus one plus two. Messiaen extensively used three of these rhythmic principles:

1. added values (short values of notes or rests added to the rhythm).
2. augmentation or diminution by irregular values.
3. non-retrogradable rhythms (rhythms that remain the same in retrograde) (Bell 5-7).

His predilection for freely moving rhythms and meters is obvious in the analysis of "*Cloches d'angoisse et larmes d'adieu*." Inspection of this prelude reveals a constantly shifting meter. In addition, the key signature frequently changes; at each key-signature change, there is a corresponding change of the time signature used.

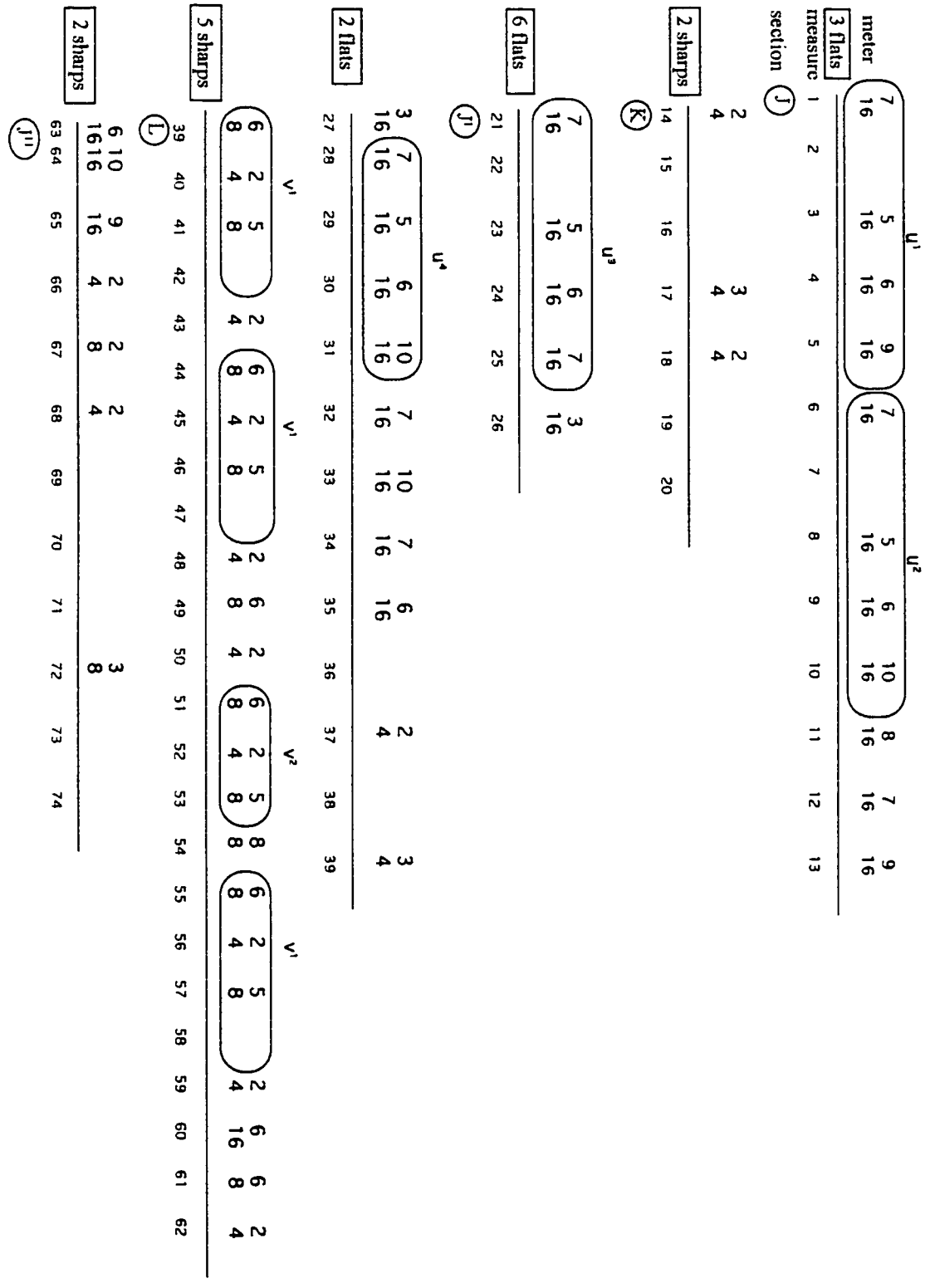
In Chapter 2, keys identified by key signatures are considered. In this present chapter, keys through which the music proceeds are not pertinent; that new key signatures correspond with altered patterns of meter signatures, however, does relate to the discussion of meter.

Figure 15 outlines the meter changes within sections of the piece as they are defined by changes of key signature. In this figure, each meter change is indicated in the measure in which the change occurs. In addition, the number of sharps or flats in the key signature and the section of the form (as introduced in Figure 7) are indicated. Repeated patterns, which often relate to repeated figures as well, are circled and

identified with letters: u^1, u^2,u^3, u^4, v^1, and v^2.

Figure 15

Meter Signatures in "*Cloches d'angoisses et larmes d'adieu*"



The prelude begins with two measures of 7/16 meter, followed by one measure each of 5/16, 6/16, and 9/16. The opening five measures (u^1) are repeated in measures 6 to 10 (u^2), but measure 10 adds one sixteenth pulse more than its comparable measure 5. The three succeeding measures are respectively in 8/16, 7/16, and 9/16. These first thirteen measures use meters of various numbers of sixteenth-note values. In this prelude 9/16 and 6/16 do not hold traditional compound meter implications: they are simply accumulations of nine or six sixteenth notes.

Beginning in measure 14, where the key signature changes to two sharps, the basic note value changes to the quarter note. Measures 14 to 16 are in 2/4; measure 17 is in 3/4; measures 18 to 20 return to 2/4. In this section of the prelude there are no repeated metric patterns.

In measure 21, the key signature changes to six flats, and a pattern of meters very similar to the opening returns. Measures 21 to 25 (u^3) proceed with two measures of 7/16, one measure of each of 5/16 and 6/16, and one measure of 7/16. This fifth measure continues as a direct transposition of u^1, omitting the last two sixteenths.

A series of eleven measures in various meters with the sixteenth note as the basic note value follows the next key-signature change, a change to two flats in measure 27. Measures 27 to 31 (u^4) begin, not with the measure of 7/16 that initiated previous appearances of u, but with a measure of 3/16. This section in two flats concludes with two measures having the quarter note as the basic note value: 2/4 and 3/4.

In measure 39, the key signature changes to five sharps. Throughout this section the meters used are primarily 6/8, 2/4, and 5/8. Within this section the metric pattern in measures 39 to 42 (v^1) recurs with some similar melodic material, as well as some entirely different melodic material as in v^2.

At measure 63, the key signature changes to two sharps, the final key-signature change of the prelude. The meters used in these eleven measures are 6/16, 10/16, 9/16, 2/4, 2/8, and 3/8. In this section, the coda of this composition in development-exposition form, there are no recurrences of metric patterns previously used in the prelude.

In "*Cloches d'angoisse et larmes d'adieu*", Messiaen coordinates changes of key signatures with changes of meter-signature patterns. In so doing, he sectionalizes the piece. Without consideration of the rhythms within the meters, the metric evolution of this prelude reveals fluidity of motion and resistance to the regularity of traditional repetitive metric structures. Whereas Debussy achieves fluidity through reinterpretation of metric patterns and the use of hemiola within traditional metric structures, Messiaen elects constantly shifting irregular meters to accommodate freely moving motives.

In "*La Cathédrale engloutie*," Debussy establishes a fluctuating rhythm within a traditional metric context. He adjusts accents and uses hemiola techniques to create the effect of shifting meter. Overall, his approach reflects a subtle, if persistent, personalization of traditional rhythm in this prelude. In contrast, Messiaen's exploitation of shifting and unconventional meter signatures takes metric fluctuation to the extreme.

Furthermore, Messiaen takes the role of meter one step further and links changes of key signature to changes of patterns of meter signatures. In general, key-signature changes, and therefore changes in the patterns of meter signatures, relate to structural sections of the prelude. Messiaen's use of groups of meter signatures and their association with the form of the piece show his seemingly randomly fluctuating

meter to be a highly organized and sophisticated structural component. In Straus's application of the theory of Anxiety of Influence to music, this elevation of the role of meter to a position tied to the very form of the prelude can be understood as another example of *centralization*, in which "musical elements that are peripheral to the structure of the earlier work . . . move to the structural center of the new one" (Straus 17).

In addition, within his shifting meters, Messiaen composes flexible rhythms, following his premise that rhythm is additive rather than the result of division of the whole. In "*Cloches d'angoisse*," Messiaen exploits the device of additive rhythm, the rhythm transmuting by adding values to the initiating rhythm.

Figure 16a shows the left hand rhythm of the first four measures, a recurring rhythmic pattern. Figure 16b shows a simplification of the rhythm, demonstrating the additive principle:

Figure 16a

Additive rhythm in "*Cloches d'angoisse et larmes d'adieu*" (measures 1 to 4)

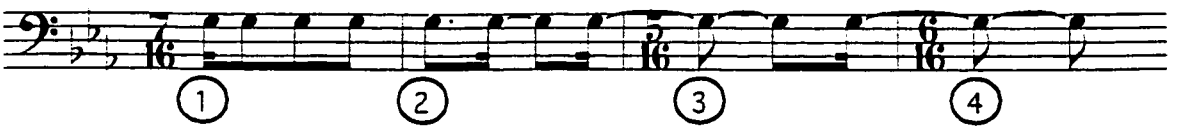
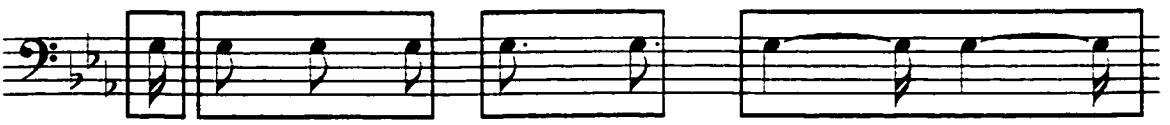


Figure 16b

Simplification of additive rhythm in Figure 16a



The comparison in Figures 16a and 16b shows that, to the first sixteenth note, one sixteenth is added to create the second note value, an eighth note. To this, another sixteenth is added to create the third note value, a dotted eighth. For the fourth note value in this series, an eighth note is added to the previous note value, resulting in the value of a quarter note tied to a sixteenth note. This last addition demonstrates Messiaen's desire to avert regularity. He sets up a pattern of regular proportion in the first two additions, adding one sixteenth in each case; however, in the third addition, he increases the value of the addition to an eighth note, twice the original additive value.

As shown in Figure 12, Debussy employs the principle of an additive rhythm in its strictest sense, thereby creating a rhythmic deviation with additions of a regular note value (a quarter note). However, Messiaen deviates further from this deviation by altering the added note value in the final leg. Debussy applies two additions; Messiaen applies three. His first two regular additions replicate Debussy's, but his third places his own personal stamp on the procedure, thereby distinguishing himself from Debussy.

Certainly we know from Messiaen's writings that additive rhythms appealed to him. However, *The Technique of my Musical Language* was not published until 1956, thirty-seven years after the publication of the preludes. Although he would have been forming his ideas about rhythmic and other musical techniques at the time of the writing of the preludes, his principles, about which he was later so convinced, were in all likelihood not fully developed.

Debussy uses only one fleeting example of additive rhythm in his prelude; Messiaen intensifies his use of additive rhythms and makes this device a main element in his prelude. According to Joseph Straus's theory, this is another example of

centralization: a peripheral element of the precursor's work is transformed to become a central element in the new composition (Straus 17). Debussy's brief passage that uses an additive rhythm consists of two additions: Messiaen's consists of three additions. Furthermore, Debussy's additions occur in the most straight-forward fashion: after a single sounding of each note value, he adds to that value for the next extended note value. Messiaen begins with a single sixteenth-note impulse, followed by three soundings of the next extended note value, and by two soundings of each of the following note values, avoiding regularity of repetitions of the additions. Where Debussy uses his series of additive rhythms only once, Messiaen not only immediately repeats his opening collection of additive rhythms, but also he uses it in every recurrence of J.

In this chapter, the analysis of some of the rhythmic details in "*La Cathédrale engloutie*" and "*Cloches d'angoisse et larmes d'adieu*" show that Messiaen inherited rhythmic flexibility and irregularity in his composition. However, he progressed from subtle rhythmic and metric fluctuations, as evident in Debussy's composition, to an extreme use of changing time signatures and rhythmic variation.

CHAPTER 5

A comparison of harmonic progressions in "*La Cathédrale engloutie*" and "*Cloches d'angoisse et larmes d'adieu*"

Is "*La Cathédrale engloutie*" a tonal composition? Christopher Lewis, following Aldwell and Schachter, proposed that "all tonal compositions proceed "I 'X' V I," with 'X' as a logical pre-dominant (II, IV, VI, etc.).[11] Within this formula various substitutions and expansions can occur. This sequence may apply to the overall tonal structure of a composition as well as to nested elements within.

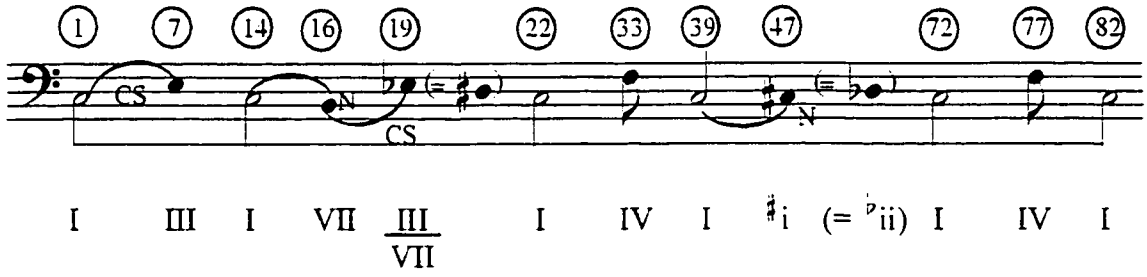
"*La Cathédrale engloutie*" establishes a central tonal area of C Major in which it both begins and ends. Returning to Figure 1, we see that the dominant key area, G Major, does not have a role in the prelude. Inherently, the dominant sonority has an active character with a strong tendency to resolve to the tonic. Avoiding the dominant sonority at a cadence is a technique that diffuses activity and promotes tonal stasis (Guck 4-12). Instead of V (the G major chord), IV (the F Major chord) provides the cadential chord of approach in L and L'. That is, IV replaces V in the tonal scheme "I 'X' V I."

Figure 17 provides a sketch of the relations of tonal areas in "*La Cathédrale engloutie*":

[11] Dr. Lewis used this formula in theory (harmony) classes at the University of Alberta (1983-93). For an explanation of the formula and its application, see Barbara Mackin, *Harmony: a Practical Approach*, 2 vols., (Edmonton: Concertino, 1996, 1997).

Figure 17

Graph of tonal relations in "*La Cathédrale engloutie*"



This analysis shows that the tonic, C, dominates the tonal palette; other tonal areas that have linear connections to C Major provide tonal colourings. In measures 7 to 13, E Major functions as a consonant skip to C Major. In measures 16 to 18, B Major functions as a neighbour to C Major. The E^{b} Major tonal area in measures 19 to 21 can be best understood as an enharmonic reinterpretation of $D^{\#}$ Major, which functions as a consonant skip (the upper third) to B Major, thus prolonging B, the neighbouring sonority to C, as explained in chapter 2. The $c^{\#}$ minor tonal area in measures 47 to 71, the only prolonged minor tonality in the prelude, functions as a chromatic neighbour to C.[12] Alternatively, $C^{\#}$ can be enharmonically reinterpreted as D^{b}, thus functioning as phrygian $\hat{2}$. The Neapolitan frequently functions as a prolonging neighbour to I, serving to prolong the tonic (Aldwell and Schachter 469). The F Major tonal areas in measures 33 to 38 and 77 to 81, as explained in chapter 2, are tonicized subdominants over a tonic pedal. They can be considered dominant substitutes, harmonies substituted for the dominant in order to diffuse the active effect of an authentic cadence. Therefore, in the sketch in Figure 17, these two F Major

[12] Allen Forte and Steven E. Gilbert, *Introduction to Schenkarian Analysis*, (New York and London: Norton, 1982). The terms "consonant skip" and "neighbour" as well as other terms of diminution are explained on pages 7 to 9. This book is used here as a source for symbology in Schenkarian related diagrams.

sections have been shown as having structural importance. F Major assumes the role that would traditionally have been assigned to G Major.

While the dominant tonal area does not appear in its traditional structural role, other dominant relations do exist. In fact, the opening sonority that begins the bass descent to the tonic (as discussed in Chapter 3) places the dominant in a strategic role. While this is the only invocation of the dominant in the C Major sections, the c$^{\#}$ minor section, the longest section of the prelude, evolves over a dominant (G$^{\#}$) pedal. In this prelude, the dominant is removed from its conventional role; however, it maintains a presence with traditional reflections.

Messiaen's "*Cloches d'angoisse et larmes d'adieu*" further stretches the tonal boundaries. As proposed in Chapter 2 in the discussion of musical form, B Major, the tonal center of this prelude, is important in the exposition that follows the development of this development-exposition form (Johnson, *Messiaen* 23). The prelude actually begins with the development in c minor, a tonality foreign to the home key, and, in typical developmental modulatory fashion, proceeds through several key areas.

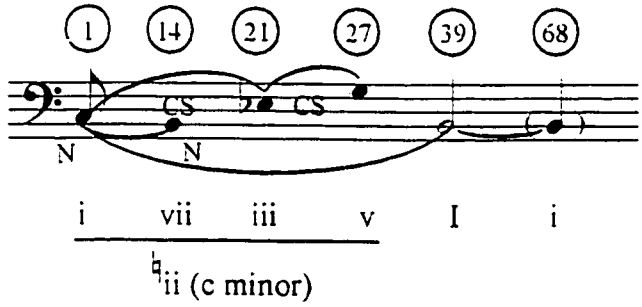
A traditional development closes with a prolongation of the dominant in preparation for the return of the tonic in the recapitulation. In Messiaen's development, a dominant preparation consisting of sonorities imposed upon the prolonged F$^{\#}$ prepares the arrival, not of the recapitulation, but of the exposition. In order to have a recapitulation, the exposition would have to have been stated so that there would be something to restate. It has not. Therefore, the dominant preparation prepares the entrance of the actual exposition, not the restatement of expositional

material.

In a manner similar to the analysis of tonal areas in "*La Cathédrale engloutie*" as presented in Figure 17, the sketch in Figure 18 shows the relation of tonal areas in "*Cloches d'angoisse et larmes d'adieu*":

Figure 18

Graph of tonal areas in "*Cloches d'angoisse et larmes d'adieu*"



The tonal areas in the development area outline a c minor triad. The b minor section (vii) functions as a lower neighbour to C. The introduction of b minor foreshadows the arrival of the central tonal area introduced in its major mode in the exposition and that concludes the prelude in its minor mode in the coda.

Like Debussy, Messiaen does not tonicize the dominant key area. He does, however, significantly employ individual statements of dominant sonorities. In the development, the three tonal areas that outline the c minor triad each begin with the rhythmic ostinato (the additive rhythm described in chapter 4) over a dominant pedal point: in measures 1 to 10 (c minor), the ostinato evolves over a G pedal point; in measures 21 to 25 ($e^{\flat}$ minor), it evolves over a $B^{\flat}$ pedal point; and in measures 28 to 31 (g minor), it evolves over a D pedal point. The last five measures of the development (measures 34 to 38 in the g minor section) feature $F^{\#}$ as a bass pedal

point. F# arrives in measure 34 as the final pitch in the ascending line of bass prolongations, and is reinterpretated at the end of measure 37 through measure 38 as the dominant of B. At the end of measure 37, A# is introduced in the vertical sonorities over F#; A# effectively alters the function of F# from the leading tone of g minor to the dominant of B Major, the home key. In both the development and the exposition, the dominant features prominently; in fact, the final bass note of the composition is not the tonic, B, but rather the dominant F#, elevated in status to a position traditionally held by the tonic.

Straus's trope *centralization* can be applied to Messiaen's intensified use of dominant pedal points in his prelude. As previously defined, *centralization* involves elevating peripheral musical elements of the precursor's composition to a central structural position in the descendent's work. This trope can be applied to Messiaen's persistent use of the dominant pedal point, making the pedal point a structural underpinning in his prelude. Although Debussy used the device of the dominant pedal point in the c# minor section of "*La Cathédrale engloutie*," Messiaen subjected substantial sections throughout "*Cloches d'angoisse et larmes d'adieu*" to dominant pedal points coupled with an insistent ostinato rhythm. In his prelude, Messiaen fully employed this device that Debussy used sparingly in his prelude. Messiaen's use of the dominant provides evidence that Debussy influenced Messiaen's composition according to Straus's trope, *centralization*.

Where Debussy diffuses the role of the dominant by using it sparingly and substituting a less active sonority for it in its traditional position, Messiaen gives the dominant a prominent role: he exposes it in insistent ostinatos over bass pedal points;

he places it in its traditional cadential position, leading to the tonic. However, the sonorities he superimposes over the dominant are not traditional triads, major/minor sevenths, or other conventional dominant chords; instead he creates complex vertical sonorities that imply dominant function.

Messiaen exaggerates his use of the dominant. However, in his final gesture, Messiaen says "goodbye" to the dominant. A traditional closing gesture, as shown in Figure 19, would be tonic - dominant - tonic:

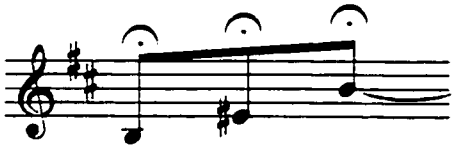
Figure 19

Traditional tonic-dominant-tonic closing gesture

Figure 20 shows the last three notes of "*Cloches d'angoisse et larmes d'adieu,*" which are played with the right hand:

Figure 20

Closing three-note gesture in "*Cloches d'angoisse et larmes d'adieu*"



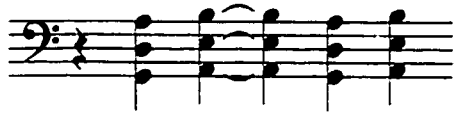
This gesture, the tonic octave equally divided into two tritones, completely avoids the dominant. These three notes represent "*larmes d'adieu*"; in fact, the word "*adieu*" appears above these notes.

In addition, these two juxtaposed, linear tritones allude to a pattern of vertical

sonorities consisting of two superimposed perfect fifths[13] that Debussy used in the left hand of measures 14 and 15 in "*La Cathédrale engloutie*," as shown in Figure 21:

Figure 21

Pattern of superimposed 5ths in "*La Cathédrale engloutie*"



Debussy used this chord in the left hand, as a vertical sonority, in order to create the effect of organum. Messiaen uses his final gesture in the right hand as a melodic contiguity in order to suggest, yet avoid, a conventional harmonic event. By absorbing this chord into the coda, he gives the prelude an open-ended quality.

For Messiaen's melodic variation on Debussy's harmonic model, Straus's trope *fragmentation* is applicable. In *fragmentation* elements that occur together in an earlier work are separated in the new one (Straus 17). In Debussy's prelude, the harmonic event of two superimposed fifths is a prominent sonority; in Messiaen's prelude, the solid chord is broken as a closing gesture.

Is "*La Cathédrale engloutie*" a tonal composition? The prelude exhibits many characteristics of a tonal composition: it begins and ends in the home key of C Major; in addition, this home key permeates the entire prelude. Although it does not function as a tonicized key area, the dominant is clearly invoked, first as the opening sonority of the bass descent, then as a prolonged pedal point in the c$^{\#}$ minor section. Its traditional role is suppressed, but the dominant remains important in this prelude. "*La*

[13] Throughout this prelude, series of parallel chords reminiscent of medieval organum evoke a sense of antiquity.

Cathédrale" does not follow the tonal formula "I 'X' V I"; however, if we agree that Debussy may have substituted the subdominant (a pre-dominant function chord) for a dominant-function chord, then the tonal formula is followed, albeit with adjustment. The prelude can be considered a tonal composition.

Is "*Cloches d'angoisse et larmes d'adieu*" a tonal composition? This prelude also exhibits some tonal characteristics. Because the prelude begins with the development, it does not need to begin in the home key. The home key arrives with the exposition after the development, the recapitulation being redundant to Messiaen. By the same token, the invocation of the home key before and after the development would express redundancy; therefore, the home key arrives following the development. Like Debussy, Messiaen avoided the traditional use of the dominant; however, the dominant does serve prominently as a pedal point in secondary key areas. Most importantly, $F^{\#}$, the dominant of B major, appears as a pedal point at the end of the development. Although this prolonged dominant does not support dominant harmony as in a traditional dominant preparation, it does imply the effect of preparing and introducing the entrance of the home key.

Comparing the two preludes, we can conclude that Debussy adjusted tonality to accommodate his compositional needs; Messiaen pushed the adjustments significantly further, while maintaining a connecting thread to tonality. "*La Cathédrale engloutie*" exhibits many of the criteria associated with tonal composition; "*Cloches d'angoisse et larmes d'adieu*" stretches the principles of tonality; however, its vocabulary and structure develop out of tonal models.

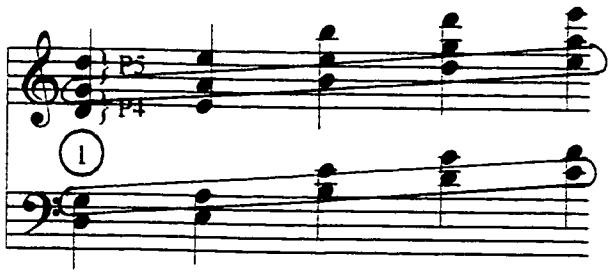
CHAPTER 6

A comparison of opening motivic content in "*La Cathédrale engloutie*" and "*Cloches d'angoisse et larmes d'adieu*"

The opening of "*La Cathédrale engloutie*" evokes an eerie atmosphere of gongs and bells representative of the submerged cathedral. In the first measure of the prelude, Debussy suggests medieval organum by means of chords built of perfect fifths and fourths in parallel motion. The pentatonic scale employed in the creation of the chords enhances the static, tonally non-centered effect of these chords. The pentatonic scale avoids the interval of the semitone that promotes tension and subsequent resolution in the traditional diatonic sense; instead, it produces a static spectrum in which any given note might serve as a point of rest, or which denies the need for points of rest. Figure 22 shows the parallel chords presented in the inner voices of the first measure; the chords consist of a series of perfect fourths with perfect fifths superimposed above each fourth. In addition, the occurrences of the pentatonic collection (G - A - B - D - E) are circled.

Figure 22

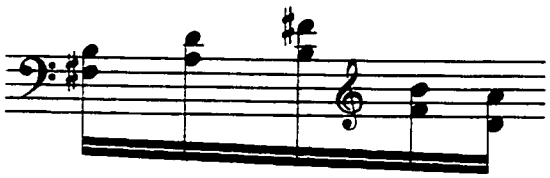
Pattern of parallel chords in the inner voices of the opening of "*La Cathédrale engloutie*"



"*Cloches d'angoisse et larmes d'adieu*" also features bell sounds, as indicated in the title. At the beginning of the exposition,[14] a pattern related to Debussy's opening of parallel chords evolves in the outer voices, with the melody in the inner voices. Figure 23 shows the series of vertical intervals as they are exposed in the lowest part. (This same series of intervals is presented simultaneously in the upper part in diminution.)

Figure 23

Series of vertical intervals at the beginning of the exposition of "*Cloches d'angoisse et larmes d'adieu*" (measure 39)

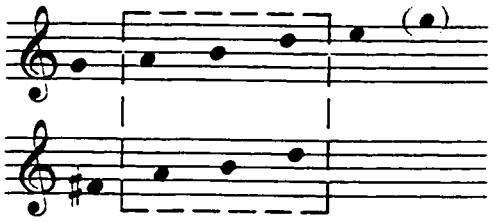


This pattern uses a series of harmonic perfect fourths and fifths; of course, the fifths are merely inversions of the fourths. In fact, the series is composed of only two dyads: $F^{\#}$ to B and A to D. These four pitches form the basis of Messiaen's second pattern. Three of these pitches match the central three pitches of the pentatonic scale employed by Debussy, A - B - D, as shown in Figure 24.

[14] Chapter 2 discusses the form of "*Cloches d'angoisse et larmes d'adieu*"; the exposition begins in measure 39 following the development that opens the piece.

Figure 24

Comparison of pitches used in "*La Cathédrale*" (measure 1) and "*Cloches d'angoisse*" (measure 39)



"*La Cathédrale*" (measure 1)

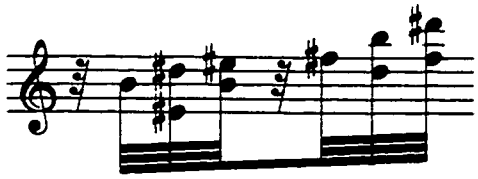
"*Cloches d'angoisse*" (measure 39)

With this pattern, Messiaen initiates his departure from Debussy's model.

In measure 40, the B Major triad is the source for the pattern in the lower part. However, $E^{\#}$ is added in the upper part to create a tetrachord; the available notes in this pattern are B, $D^{\#}$, $E^{\#}$, and $F^{\#}$. With $E^{\#}$, the dissonances of the tritone and the minor seventh are added to the vertical intervals that would be possible using only the B Major triad. Therefore, while the lower part exposes a series of harmonic intervals using only notes of the B Major triad, the upper part, reproduced in Figure 25, reveals a series of harmonic intervals with added chromaticism and dissonance:

Figure 25

Vertical intervals in measure 40 of "*Cloches d'angoisse et larmes d'adieu*"



In measure 41, the interval of the tritone is the prominent vertical construct; the lower part proceeds only in harmonic tritones, as shown in Figure 26:

Figure 26

Vertical intervals (tritones) in measure 41 of "*Cloches d'angoisse et larmes d'adieu*"

Tritone possibilities are further exploited in both outer parts that outline a fully- diminished-seventh chord as shown in Figure 27:

Figure 27

Diminished-seventh chord outline in "*Cloches d'angoisse*" (measure 41)

In similar manner, measure 42 employs another diminished seventh chord built of notes, each one semitone higher than in the previous chord.

With the three patterns presented in measure 39, 40, and 41, Messiaen's pattern progresses from one similar to Debussy's opening motive to patterns in which the intervallic content evolves to become more complicated with increased dissonance. Where Debussy begins with the pentatonic scale, Messiaen commences with a tetrachord having similar possibilities: it allows the formation of perfect fourths and fifths characteristic of Debussy's organum-like opening. As Messiaen expands the motive, he strays further away from the stasis of parallel perfect intervals to arrive at a version in which the tritone dominates. Furthermore, having arrived at the tritone-dominated pattern, Messiaen repeats this pattern in transposition.

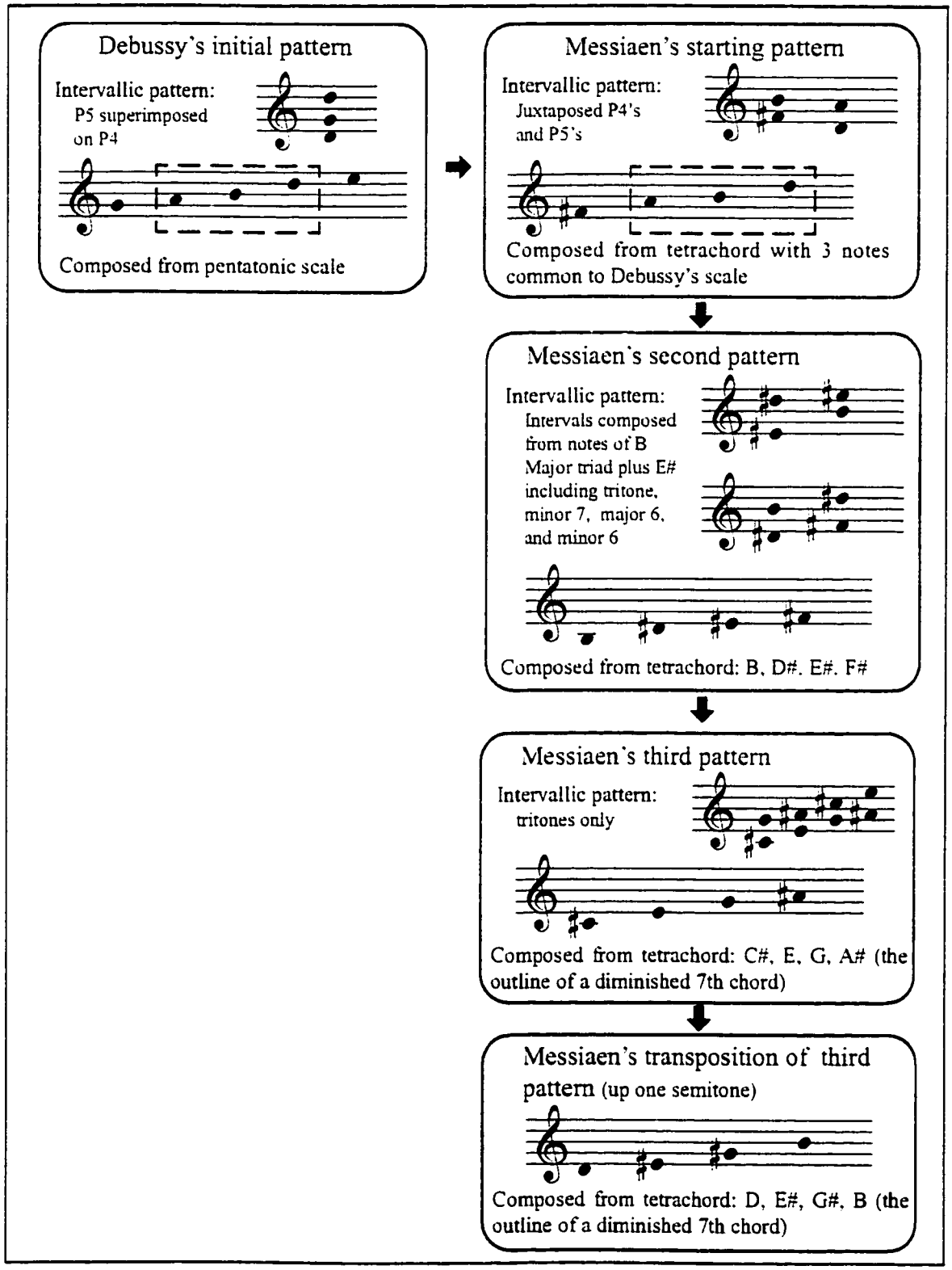
Debussy provides the motivic model: he initiates a pattern of open sonorities

in the inner voices. Messiaen expands the model. He initiates the pattern in the outer voices, the upper part in diminution, and continuously alters the pattern, then restates the final pattern, not at the initial pitch but transposed up one semitone. He essentially rewrites Debussy's evocative series of parallel chords.

We can draw comparisons between the compositional "opening" of the Messiaen prelude and the actual opening of the Debussy prelude. In the first five measures of Debussy's prelude, the outer parts function as the main material, including the important bass descent; the inner voices consist of the parallel-chord pattern, a motive evocative of an atmosphere of antiquity. In the first four measures of the exposition of Messiaen's prelude, the melodic material occurs in the inner part; the chord pattern evolves in the outer voices. Moreover, in Debussy's prelude, the motivic pattern remains constant; in Messiaen's prelude, the pattern develops from one roughly equivalent to Debussy's to one of entirely different intervallic content, as shown in Figure 28:

Figure 28

Chart of development from Debussy's initial series to Messiaen's series of tritones



In the Messiaen prelude, the chord pattern is disassociated from Debussy's by reversing its position in relation to Debussy's, by placing it in the outer voices rather than the inner, and by evolving distinctive tetrachords and intervallic content based on these tetrachords. Messiaen expands the pattern set forth by Debussy by transmuting the set of pitches upon which the intervallic content was based. Having arrived at his definitive pattern, based on the diminished seventh chord, he restates it, not at the original pitch but one semitone higher, thus reinforcing the arrival of his own pattern.

The motive of the opening parallel-chord pattern can be subjected to Straus's trope *motivication*. According to Straus, "[the] central misreading [of twentieth-century composers] is that of motivication" (21). He goes on to state that "In the period of common-practice tonality . . . , motivic design played an increasingly important role, if we understand a motive as any intensely used diminution or embellishment" (21-22). Undoubtably, the parallel-chord pattern in "*La Cathédrale engloutie*" is "intensively used," and indeed, this embellishment represents a prominent diminution in "*Cloches d'angoisse et larmes d'adieu*."

In *Remaking the Past: Musical Modernism and the Influence of the Tonal Tradition*, Straus devotes considerable time to the discussion of twentieth-century composers' analyses of compositions of earlier composers and notes that much of their analysis concentrated on motivic content (31). Following a discussion of Schoenberg's analysis of compositions of Brahms, of Webern's commentary on the ultimate value of thematicism in previous compositions, and of Berg's analysis of Schumann, Straus proposes,

> Like Schoenberg and Webern, then, Berg misreads his predecessors by motivicizing their music. . . . [We] must recognize that their passionate interest in earlier music is simultaneously a passionate commitment to their own

compositional interests (40).

In fact, "Schoenberg claims that he learned motivic saturation from Bach: 'From Bach I learned . . . the art of developing everything from one basic germ motif and leading smoothly from one figure to another'" (Straus, *Remaking the Past* 47).

This thesis proposes that, using Debussy's repeated motive of superimposed perfect fourths and fifths built upon a pentachord as a starting point, Messiaen composed his own evolving motive built upon tetrachords, thus exemplifying Straus's trope *motivication*.

CHAPTER 7

A summary of Straus's revisionary tropes used in "*La Cathédrale engloutie*" and "*Cloches d'angoisse et larmes d'adieu*"

Joseph Straus does not propose that all, or even several, of his eight tropes may be evident in a pair of compositions. However, rather than mapping the course of the tropes, his strategy is to isolate and interpret the analytical process of individual events; rather than following a line of relations, he picks and chooses from various compositions to demonstrate how his processes function.

The preceding analysis of relations between "*La Cathédrale engloutie*" and "*Cloches d'angoisse et larmes d'adieu*" identifies only five of Straus's eight tropes: *motivication*, *centralization*, *fragmentation*, *marginalization*, and *symmetricization*. Figure 29 summarizes the inter-readings of these two preludes outlining Straus's compositional techniques that demonstrate influence and evidence of the techniques in Messiaen's prelude:

Figure 29

Summary of inter-reading of Debussy's "*La Cathédrale engloutie*" and Messiaen's "*Cloches d'angoisse et larmes d'adieu*"

Technique	Evidence in Messiaen
Motivication: the motivic content of the earlier work is radically intensified	Messiaen adopts the idea of parallel chord patterns as presented by Debussy in J. However, he intensifies the motive by gradually altering it from a pattern reflective of Debussy's to one with radically different intervallic content. In Messiaen, the motive transmutes as a living, changing entity.
Centralization: musical elements that are peripheral to the structure of the precursor's work move to the structural center of the new composition	1. Messiaen elevates the significance of Debussy's opening key areas. In "*Cloches d'angoisse*", the three key areas mark prominent structural moments. 2. Messiaen elevates the role of meter to a position tied to the form of his prelude. 3. Debussy uses just one brief instance of additive rhythm early in "*La Cathédrale.*" Messiaen makes additive rhythm a central element in his prelude. 4. Messiaen intensifies the use of dominant pedal points in his prelude making the pedal point a structural underpinning in his prelude.
Fragmentation: elemtnes that occur together in the earlier work are separated in the new one.	Throughout Debussy's prelude, the harmonic sonority of two superimposed fifths is a prominent harmonic event; in Messiaen's prelude, the solid chord is broken and used as a final melodic gesture.
Marginalization: musical elements that are central to the structure of the precursor's work are relegated to the periphery of the new one.	Where Debussy's descent to C in J is fundamental to the structure of his prelude, Messiaen's ascent, which omits C, does not constitute a central tonal function.
Symmetricization: traditionally goal- oriented progressions and musical forms are immobilized	Messiaen strips the traditional function from ternary as well as sonata-allegro form, both of which are cyclical, and replaces it with his own linear, progressive form: development-exposition.

CONCLUSION

By comparing two preludes by Debussy and Messiaen, I have explored Messiaen's proclamation that he was profoundly influenced by Debussy. By applying the theory of Anxiety of Influence, as adapted to musical contexts by Joseph Straus, to related compositional aspects in Debussy's "*La Cathédrale engloutie*" and Messiaen's "*Cloches d'angoisse et larmes d'adieu*," one can detect traces of Messiaen's relationship to Debussy in structural aspects of Messiaen's music. The analysis of comparative aspects of these two preludes and the subjection of this analysis to criteria established by Straus's adaptation of Bloom's Anxiety of Influence reveal that Messiaen imposed himself upon Debussy's contribution. That is, he misread Debussy's prelude.

In Bloom's view:

> When we open a first volume of verse these days, we listen to hear a distinctive voice, if we can, and if the voice is not already somewhat differentiated from its precursors and its fellows, then we tend to stop listening, no matter what the voice is attempting to say (*The Anxiety of Influence* 148).

Unless the precursor's work has something new to say, something that distinguishes it from the work of the precursor and sets it above that previous work, it will not stand up to the scrutiny of the critical audience. According to Bloom's theory of the Anxiety of Influence the purpose of this misreading is to overcome the predecessor, to achieve superiority; however, the misreading is subconscious and unintentional.

For Bloom , misreading is "ideational," not formal or structural. It is not willful reconstruction. Korsyn's adaptation of Bloom's theory to musical contexts is also ideational and Korsyn also accepts that misreading is not deliberate. Straus's adaptation, on the other hand, is a technical analytical approach entirely concerned

with formal devices. Furthermore, Straus proposes that misreading by a composer is a willful act.

In his review of Korsyn's article "Towards a New Poetics of Musical Influence" and Straus's book *Remaking the Past: Musical Modernism and the influence of the Tonal Tradition*," Richard Taruskin compares the approaches of Korsyn and Straus in their modifications of Bloom's theory:

> Korsyn claims no more than an 'initial swerve' toward a new paradigm. At the least, he presents a reasonable exposition of Bloom and a painstaking attempt to apply Bloom's ratios. Any musicologist reading Korsyn's essay will come away with an accurate picture of the theory and some idea of its possibilities ("Revising Revision" 124).

Taruskin approves of Korsyn's adaptation of Bloom and its adherence to the main principles of Bloom's theory. However, he clearly disapproves of Straus's adaptation and attacks Straus's formalist approach. About Straus's theory Taruskin writes:

> Bloom is simply irrelevant to Straus's methods and purposes, the main purpose being the neutralization -- indeed the dematerialization -- of the "right deviation" so that its claims against the master narrative can be canceled.
>
> Bloom's irrelevance is apparent even in the preliminary paraphrase of his ideas, which Straus attempts to reduce to four propositions. This is third: The struggle between new poems and their precursors takes the form of misreading. Later poets WILLFULLY misinterpret their predecessors in a process analogous to repression in Freudian psychoanalytic theory.
> . . . Straus's strong reader, then, is a controller and a lumper. Bloom's is a resister and a splitter. . . . Bloom's is a metaphor for the composer and Straus's is a metaphor for the academic analyst. . . . It will therefore occasion no surprise to discover that Straus jettisons Bloom's revisionary ratios and substitutes his own; that these so-called revisionary ratios do not measure the relationship between particular works but define general style characteristics and technical procedures amounting to an asserted common practice; or that while he discusses all kinds of relationships between music new and old, in only two cases of more than a dozen does Straus discuss what Bloom would recognize as an instance of influence, anxious or not ("Revising Revision" 126-27).

> Where is the "anxiety"? There is no contention between rival subjects, no need for psychic defense. There is, in short, no fight at all (128).

Taruskin makes valid points in criticism of Straus's method as an adaptation of Bloom. In particular, Straus abandons a central premise of Bloom's theory, that misreading is unintentional. For Straus, misreading is planned and willful. He also avoids Bloom's Oedipal foundation that a later composer's misreading is a subconscious attempt to overcome, effectively to kill off, his predecessor.

Straus responded to Taruskin's attack in the communications section of the Spring 1994 issue of *The Journal of the American Musicological Society*:

> In his recent review of my book . . . Richard Taruskin's principle complaint is that I fail to interpret the work of literary critic Harold Bloom, and apply that work to music in the manner Taruskin would prefer. . . .
>
> Readers of Taruskin's review might get the impression that my book is a work of literary criticism. Rather, it consists almost entirely of musical analyses that are designed to reshape our understanding of modernism in music (194-5).

Straus goes on to say in his defense that there are many sides of Bloom and that, while Korsyn focused on certain aspects of Bloom's theory, he chose to investigate other possibilities. "May a thousand Harolds bloom!" he writes to point out that Bloom offers so many dimensions and that he has attempted to pursue just one avenue, knowing full well that there is more to Bloom's theory.

Taruskin replies uncompromisingly, "Professor Straus raises no objection that was not fully addressed in my review of his book" (Taruskin, "Communications" 195). Taruskin takes a firm stand in his objection to Straus's appropriation of Bloom. However, I have found Straus's method more applicable to the analysis in this thesis than Bloom's or Korsyn's ideational procedures. Straus offers concrete formulae for

comparing two compositions and investigating the possibilities of an earlier composer's influence on a later one. Indeed, neither Bloom nor Korsyn put forth an actual method, but Straus clearly lays out his tropes as a procedure for examining influence.

Through conventional analytical methods I have attempted to show compositional similarities and differences between "*La Cathédrale engloutie*" and through application of Straus's tropes, Debussy's influence on Messiaen. The questions remain, "Why do analysis? What is the relation between analysis and performance?"

Many performers would agree that a certain amount of analysis is beneficial to interpretation of a piece:

> Performance is based on knowledge, which is gained in part through the process of analysis. The more one knows about how a piece is put together, the greater the chance that the performance will be a convincing and accurate projection of the complex web of relationships inherent in its structure. It is the function of analysis to uncover these relationships (Beach 157).

Analysis facilitates the learning and memorizing process, ensuring the accuracy of the performance, and the actual presentation in public, refining the interpretation of the performance. Most performers do not acquire the depth of analytical understanding that a music theorist does; however, many performers appreciate the value of analysis and put it into practise when preparing a composition.

As a perfomer, I maintain that analysis enhances the interpretation of a composition. Examining the formal structures, harmonic progressions, melodic shapes, rhythmic patterns, and other compositional elements brings to the fore an understanding of the piece. On the other hand, as an analyst, I contend that playing a

composition clarifies structural details. Performance and analysis work hand in hand.

In this thesis, each of the two preludes chosen is analyzed. These analyses are beneficial in themselves as tools for the performer. The comparisons drawn from these analyses provide sources to investigate Debussy's influence on Messiaen, an influence suggested by surface details, affirmed by Messiaen's own professions, confirmed by similarities and differences between corresponding elements in the two compositions, and categorized using Straus's tropes derived from the theory of Anxiety as Influence.

BIBLIOGRAPHY

Aldwell, Edward and Carl Schachter. *Harmony and Voice Leading*. 2nd ed. New York: Harcourt Brace Jovanovich, 1989.

Beach, David. "The First Movement of Mozart's Piano Sonata in A Minor, K. 310: Some Thoughts on Structure and Performance." *Journal of Musicological Research* 7 (1987).

Bell, Carl Huston. *Olivier Messiaen*. Boston: Twayne, 1984.

Bell, Carla Huston. "Olivier Messiaen." *Music Journal* 39 (September 1978): 8-10.

Birkby, Arthur. "Interview with France's Noted Organist and Composer." *Clavier* 11 (March 1972): 18-20.

Bloom, Harold. *The Anxiety of Influence*. New York and Oxford: Oxford University Press, 1973.

Bloom, Harold. *A map of Misreading*. New York and Oxford: Oxford University Press, 1982.

Boulez, Pierre. *Notes of an Apprenticeship*. New York: Knopf, 1958.

Boucourechliev, André. "Messiaen, Oliver." In the *New Grove Dictionary of Music and Musicians*. Edited by Stanley Sadie. London: Macmillan, 1980: 204-210.

Brzezinska, Barbara, RILM 1978 annotation of "*Idee twörze Oliviere Messiaena*" ("Olivier Messiaen's Creative Ideas) by Malgorzata Wozna in *Muzyka* 23/4 (1978): 11-42 .

Burkholder, Peter. "Museum Pieces: the Historicist Mainstream in Music of the Last 100 Years." *Journal of Musicology* 2/2 (1983): 115-134 .

Debussy, Claude. "La Cathédrale engloutie." *Préludes*. Vol. 1. Paris: Durand, 1910.

Debussy, Claude. *Préludes*. 2 vols. Paris: Durand, 1910.

Demuth, Norman. *Musical Trends in the 20th Century*. 1952. Reprint. Westport, Conn.: Greenwood, 1975.

Forte, Allen and Steven E. Gilbert. *Introduction to Schenkarian Analysis*. New York and London: Norton, 1982.

Freundlich, Irwin. "Random Thoughts on the Preludes of Claude Debussy." *Current Musicology* 13 (1972): 48-57 .

Gavoty, Bernard. "Who Are You, Olivier Messiaen?" *Tempo* 58 (Summer 1951): 33-36 .

Golea, Antoine. *Contemporary Music in Europe: a Comprehensive Study*. Edited by Lang and Broder. New York: G. Schirmer, 1965.

Griffiths, Paul. *A Concise History of Modern Music from Debussy to Boulez*. London: Thames and Hudson, 1978.

Griffiths, Paul. *Olivier Messiaen and the Music of Time*. London: Faber, 1985.

Guck, Marion A.. "Tracing Debussy's ". . . Des pas sur la neige." *In Theory Only* 1/8 (Nov. 1975): 4-12.

Halbreich, Harry. *Olivier Messiaen: Musiciens d'aujourd'hui*. Paris: Fayard/Sacem, 1980.

Rév, Lívia. *Debussy: Images* Set 1, *L'Isle Joyeuse*, *Préludes* Book 1. London: Hyperion: 1990.

Hodie, André. *Since Debussy: a View of Contemporary Music*. New York: Grove Press, 1981.

Howatt, Roy. *Debussy in Proportion*. Cambridge: Cambridge University Press, 1983.

Jean-Aubrey, G. *French Music of Today*. Translated by Edwin Evans. 4th ed. London: Kegan Paul, Trench, Trubner & Co. Ltd., 1926.

Johnson, Robert Sherlaw. *Messiaen*. London: Dent, 1975.

Korsyn, Kevin. "Towards a New Poetics of Musical Influence." *Music Analysis* 10 (1991): 3-68.

Landormy, Paul. *La Musique française après Debussy*. Paris, Gallimard, 1943.

Lester, Joel. *Analytic Approaches to Twentieth-Century Music*. Cambridge, Mass. and

London, England: Belknap, 1986.

Mackin, Barbara. *Harmony: a Practical Approach*. Part I. Edmonton: Concertino Publications, 1996.

Mackin, Barbara. *Harmony: a Practical Approach*. Part II. Edmonton: Concertino, 1997.

Messiaen, Olivier. "Cloches d'angoisse et larmes d'adieu." *Préludes*. Paris: Durand, 1930.

Messiaen, Olivier. *Préludes*. Paris: Durand, 1930.

Messiaen, Olivier. *Technique de mon langage musical*. Vol. 1. Trans. John Satterfield. Paris: Alphonse Leduc, 1956.

Myers, Rollo. *Modern French Music: It's Evolution and Cultural Background from 1900 to the Present Day*. Blackwell's Music Series. Gen. ed. F.W. Sternfeld. Oxford: Basil Blackwell, 1971.

Nichols, Roger. *Messiaen*. 2nd ed. Oxford Studies of Composers (13). Oxford, New York: Oxford University Press, 1986.

Renza, Louis A., "Influence," in *Critical Terms for Literary Study*, ed. Frank Lentricchia and Thomas McLaughlin. Chicago: University of Chicago Press, 1989, 186-202.

R, Angela. *Angela Hewitt Plays Messiaen*. London: Hyperion: 1998.

Reverdy, Michèle. *L'oevre pour piano d'Olivier Messiaen*. Paris: Leduc, 1978.

Samuel, Claude. *Conversations with Olivier Messiaen*. Trans. Felix Aprahamian. London: Stainer & Bell, 1976.

Smalley, Roger. "Debussy and Messiaen." *Musical Times* 49 (February, 1968): 128-31.

Straus, Joseph. *Remaking the Past: Musical Modernism and the Influence of the Tonal Tradition*. Cambridge, Mass.: Harvard, 1990.

Straus, Joseph. "Anxiety of Influence in Twentieth-Century Music." *Journal of*

Musicology 9/4 (Fall 1991): 430-47.

Straus, Joseph. "Communications." *Journal of the American Musicological Society*. 47/1 (Spring 1994): 178-95.

Stravinsky, Igor and Robert Craft. *Memories and Commentaries*. Berkley: Berkley Press, 1981.

Taruskin, Richard. "Revising Revision." *The Journal of the American Musicological Society*. 46/1 (Spring 1993): 114-138.

Taruskin, Richard. "Communications." *Journal of the American Musicological Society*. 47/1 (Spring 1994): 178-95.

The Concise Oxford Dictionary of Current English. 7th ed. Ed. by J. B. Sykes. Oxford: Clarendon Press, 1981.

The New Harvard Dictionary of Music. Ed. by Don Michael Randel. Oxford: Clarendon Press, 1981.

Watts, Harriet. "Colors, Canyons, and Birds: an Interview with Olivier Messiaen." *Tempo* 128 (March 1972): 2-8.

Winner, Ellen. *The Point of Words: Children's Understanding of Metaphor and Irony*. Cambridge Mass. and London England: Harvard University Press, 1988.

Wozna, Malgorzata. "*Idee twórze Olivieri Messiaena*" ("Olivier Messiaen's Creative Ideas"). *Muzyka* 23/4 (1978): 11-42.