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Narrative Strategies and Debussy's Late Style

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Abstract

Many music scholars share a belief in a deep-seated connection between music and language. This belief underlies the exploration of homologies between musical and linguistic structures that have been an important area of study within our field. In recent years, however, a number of scholars have been considering larger units of musical structure, taking as their model not the syntactic structure of the *sentence*, but rather the organizational structure of whole narrative texts. One goal of narratology is to investigate the ways that events experienced separately are comprehended as a unified whole. Because of its attention to the interplay of schema-driven and data-driven perception, narrative theory is suggestive of an approach to the study of the early post-tonal repertoire, music that involves both tonal configurations and atonal, “intra-opus” processes.

Debussy's late works, which include the *Etudes* and the three *Sonatas*, exhibit a distinct style which combines elements of late nineteenth-century chromaticism with atonal features, innovative formal structures and new pitch resources. This study begins with the assumption that the large-scale tonal structure of most nineteenth-century instrumental music is analogous to the “plot” of a classical narrative text: in contrast, Debussy's quasi-tonal structures represent alternatives to that classical narrative syntax. I view Debussy's innovative musical language as a departure from a prevailing “narrative code,” which is embodied in the works of composers like Wagner, and dominated by notions of tension and resolution, tonal departure and return, and monumental formal structures. In contrast to this tonal idiom, Debussy's late works exhibit other modes of organization which can be more accurately modeled using alternative story-types. The alternative narrative models I invoke come out of two main research areas: studies on the development of story-telling ability in children, and studies of the spatial and temporal relationships exhibited in the early silent cinema. Throughout this study I attempt to contextualize the array of narrative strategies manifested in Debussy's music within the general cultural reorientations of the early twentieth century that we identify as Modernism.

Résumé

Plusieurs musicologues sont d'accord à estimer un rapport profond entre la musique et le langage. Cette croyance sous-tend l'exploration d'homologies entre des structures linguistiques et musicales, un domaine de recherche très important de nos jours. Récemment, un certain nombre de musicologues ont pondéré de plus grands unités de structure, ayant comme modèle l'organisation de textes narratifs en entier, et non seulement la structure syntactique de la phrase. Un des buts de la narratologie est de comprendre comment l'on englobe des événements perçus séparément dans un tout unifié. La théorie narrative, de par son intérêt dans l'interaction des perceptions contrôlés par le schéma ou le data, se dispose bien à l'analyse du répertoire post-tonal, une musique qui comprend à la fois des configurations tonales et des processus atonaux "intra-opus".

Les oeuvres tardives de Debussy, incluant les Etudes et les trois Sonates, exhibent un style distinct, combinant des éléments du chromatisme fin-dix-neuvième-siècle et des éléments atonaux, des structures formelles innovatrices et de nouvelles ressources harmoniques. Cette étude part avec l'idée que la macro-structure tonale de la plupart des oeuvres instrumentales du 19ème siècle est analogique à l'intrigue d'un texte narratif classique; en contraste, les structures quasi-tonales de Debussy offrent une alternative à cette syntaxe narrative classique. Je perçois le langage innovateur de Debussy comme étant une brisure avec le "code narratif" traditionnel, perpétué dans les oeuvres de Wagner (entre autres), et qui est dominé par des notions de tension-résolution, départ et retour de la tonalité, et des structures formelles monumentales. En contraste avec cette idiôme tonale, les dernières oeuvres de Debussy exhibent d'autres modes organisationnels qui peuvent être modelés d'après des types de narration alternatives. Les modèles de narration alternatives que j'invoque proviennent de deux sphères de recherche: les études du développement chez les enfants de l'art de conter, et des études sur les relations spatiales et temporelles dans les débuts du cinéma muet. A travers cette étude, je vais tenter de mettre dans un contexte

culturel du début XXème siècle (le renouveau de la Modernité), la série de stratégies narratives que l'on retrouve chez Debussy.

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Chapter 1. Introduction

Introduction

The music of Claude Debussy occupies a special position in Western musical history, one in the midst of profound changes in musical syntactic structures. His career spans a crucial historical period, coincident with widespread social and technological transformations that occasioned new economic realities, class relations, artistic movements, and new conceptions of the nature of time and space.¹ Like all music, Debussy's work engages a social world and affords valuable insights into the broader cultural landscape from which it stems. Debussy's music represents a compelling artifact for anyone interested in the historical transition into modernity. For music scholars, his language embodies the perplexing process by which western music, out of its tonal origins in the nineteenth century, came to be the way we find it in the twentieth.

This chapter describes the general features Debussy's music that have presented and continue to present challenges for the analyst. I explore some of the reception history of the music by citing examples of critical response to these "Debussyisms," the characteristic features of his musical language. To contextualize this language I discuss the considerable influence of Wagner on Debussy's music, the nature of the changes that Debussy's style undergoes in his mature career, and the special characteristics of Debussy's late style. I then consider current Debussy reception: the chapter examines the roles that traditional music theories have played in forming cognitive templates for our perception and awareness as listeners, inasmuch as they have determined the discourse of critics, teachers, and

¹Several recent publications explore the complex relationships between new technologies and the emergence of modern conceptions of time and space. See especially Friedrich A. Kittler, *Discourse Networks 1800/1900*, trans. by Michael Metteer with Chris Cullens (Stanford: Stanford University Press, 1990). Kittler investigates the sweeping cultural changes wrought by the invention of the typewriter, the phonograph, the camera, and other technologies. (I discuss some of Kittler's work below in Chapter 3.) Stephen Kern takes up these issues in his book *The Culture of Time and Space: 1880-1918* (Cambridge: Harvard University Press, 1983). Kern documents some of the far-reaching cultural consequences of the military technology that arose in connection with first world war, including links between cubism and the development of military camouflage, soldiers' experiences in the trenches and their effect on musical perceptions of temporality, and changes in international diplomacy brought about by the development of telegraph communication.

scholars. After outlining some of the premises of traditional analytical approaches, I suggest new ways that we might formulate a more satisfactory theoretical model for this repertoire. I argue that such a model can contribute in a significant way to the positive reception and informed performance of this repertoire.

"Debussyisms"

Musicians throughout the twentieth century have always acknowledged Debussy's contribution of a number of new techniques to compositional practice. Some of these techniques represent a fundamental shift in the nature of pitch organization. They include his much-celebrated whole-tone sonorities, pentatonicism, parallelism, a "non-teleological" or non-directional organization of harmony, and a blurred relationship between structure and ornament, between chord-tones and non-harmonic tones. These innovative features have been precisely categorized by a number of scholars, most recently by John Clevenger who has traced their chronological development in a series of papers dealing with Debussy's early compositions.² Scholars have also explored the relationship between these musical features and the literary devices employed by the Symbolist poets with whom Debussy is associated. First appearing in songs composed as early as the 1870s, these techniques remain hallmarks of Debussy's style throughout his oeuvre. These Debussyisms may be categorized very generally according to the kinds of effects they achieve. Some of these devices, for example, represent ways of evading cadential closure: the placement of scale-degree flat 7 at points of tonic arrival (as in V7/IV instead of I after a dominant), for example. Related to this is the use of the modal cadence, v - I, where the leading-tone is replaced by the subtonic. Another category of Debussyisms has to do with exploiting pitch-spatial and intervallic symmetries: "planing," or harmonic parallelism, is one such technique. Clevenger has described this as a technique which effects an equalization of the structural weight of individual sonorities. Similarly, pentatonic and

²John Clevenger, Unpublished papers presented at Society for Music Theory meetings in Montreal 1993, Tallahassee 1994, and New York City 1995.

especially whole-tone sonorities, because of their internal intervallic symmetries, tend to dissipate tonal functional propensity. Other techniques accomplish a similar disruption of normative harmonic syntax: non-functional chord successions, composed either of diatonic chords, which momentarily suspend tonality, or of chromatic chords, which effect a more drastic disruption of syntax: progressions based on root motion from scale-degree flat 2 to 1; upper-third elaborations of tonic and dominant; and chord succession based upon semitonal shifts or common-tone links. Finally, we may note Debussy's formal idiosyncrasies, including the device Clevenger calls *reiteration*, the repetition of short fragments so as to produce a "disjunctive interface between the statement and its reiteration."³ Other scholars have noted Debussy's predilection for "additive" forms, non-schematic structures built up from disjunctive blocks of material, as compared with the "hierarchical" forms characteristic of eighteenth- and nineteenth-century instrumental music.⁴

Although some of these devices represent procedures already available within the nineteenth-century tonal idiom, Debussy's saturation of the musical surface with such devices radically undermines unitary tonal identity. Their aim is to complicate the binary oppositions of tension and resolution, structure and ornament, departure and return, consonance and dissonance--oppositions which are defining characteristics of the tonal idiom. Yet while Debussy certainly obscures functional tonality, he does not entirely abandon it either. Frequently, Debussy effects the destabilization of a unifying referential tonic but still preserves the recognizable shapes of familiar tonal objects--triads and seventh chords. While some new types of sonorities are introduced in his music, such as quartal and whole-tone harmonies and chords based on accumulations of upper partials, Debussy's originality often lies in the new orderings and contexts for familiar sonorities. Chord successions that are disengaged from explicit key centres are partly responsible for the

³This unusual formal device has also been discussed by Nicolas Ruwet in "Note sur les duplications dans l'oeuvre de Claude Debussy," *Langage, Musique, Poesies* (Paris: aux Éditions du Seuil, 1972), p. 70-99. It is subsequently discussed by William Benjamin in "'Pour les sixtes': An Analysis," *Journal of Music Theory* 22/2 (1978), p. 286. Benjamin adopts Ruwet's term "duplication" for this technique.

⁴See, for example Richard Parks, *The Music of Claude Debussy* (New Haven: Yale University Press, 1989), p. 126. See below for further discussion of Parks' analysis of Debussy's form.

impressions of “weightlessness,” “circularity,” and “stasis,” observed by many writers.⁵ It is this aspect of Debussy’s music that closely approximates the quality of language in Symbolist poetry, which is often characterized by nebulous interconnections among vivid images of indeterminate significance. Like the images in the poems of Mallarmé and Baudelaire, Debussy’s musical objects, chord *functions*, are continuously convoked and dissolved, with their tonal identity always remaining precarious. Debussy’s illusory tonality resonates not only with the major themes of Symbolism, but also with the linguistic theories of his contemporary Ferdinand de Saussure, namely the unstable and arbitrary relationship posited between signifier and signified in natural languages.⁶

Coupled with his harmonic language, Debussy’s unique approach to register and texture, his subdued dynamics, speech-like rhythms and fragmentary melodic structures all work to create an impression of *tentativeness* in his music. Paradoxically, the most salient aspect of Debussy’s language is his refusal to allow musical ideas to assert themselves as full-fledged subjects, a reluctance to grant musical *themes*, as such, an independent existence. Casual listeners to a work of Debussy are less likely to recall specific tunes or themes than to be left with a certain impression of tonal space or a sensation of movement. Indeed, many descriptions of Debussy’s work characterize the music as fluid, shifting, expressive of a state of flux or transition. This impression is conveyed in spite of the fact that Debussy eschews the very devices that are traditionally understood to represent transition and motion: harmonic sequences, motoric rhythms, and the tracing of long

⁵Such terms are employed by Arthur B. Wenk throughout his *Claude Debussy and Twentieth-Century Music* (Boston: Twayne, 1983).

⁶ In *Cours de la Linguistique Générale*, (posthumously published in 1916, from the notes for his lectures at the University of Geneva) Ferdinand de Saussure argues that language is an internally self-sufficient, rule governed system. Saussure illustrates the relationship between thought and language using the image of a body of water and a mass of air. Articulations, in the form of waves on the water’s surface, only exist at the point where the two masses meet. In the same way, the continuum of semiotic chora and that of ideas, are each, by themselves, inchoate. They become organized and articulated through language into thought-sound pairs, defined according to a system of internal differences. The link between particular phonemes and the thing they represent is thus essentially arbitrary; a linguistic meaning arises when a social group, such as the community of English-speakers, invests sounds with particular values. This view counters the notion of a pre-existing reality, independent of language, which somehow causes itself to be represented linguistically. Instead of a direct mapping of words onto ideas, Saussure envisions a semantics that is stabilized only through the force of social conventions. Debussy’s treatment of tonal function seems to me to represent a musical analogue of this precarious and contingent mapping.

melodic arches. Instead, Debussy more often employs his idiosyncratic technique of "duplication," or furnishes truncated themes and fragmented formal structures.

Music theorists set themselves the difficult task of reducing the complexity of the listening experience to analytical information. For Debussy's music this has been especially difficult. There is discrepancy between, on one hand, the overall effect of propulsiveness and fluidity, and a sense of contrast between motion and stasis, and, on the other hand, analytical terminology that can only identify reiterations, discontinuities, and fragmentation. Clearly this music is more than a sum of discontinuous parts. Music theorists attempting to model musical processes are hindered by the curious intangibility of these works, which undermine many of our most basic music-theoretical premises for coherence. Among critics steeped in the canonical repertoire of European tonal master-works, Debussy's metaphysical unpretentiousness has at times been seen as a shortcoming, a perceived unwillingness or inability to commit to a single style or ideology. This sentiment plagued the early reception of Debussy's music, and is sometimes encountered even today.⁷ The following citations reveal that initial critical response to many of his works was often coloured by conservative conceptions of musical logic. Upon first hearing *La Mer*, for example, one critic felt that the looseness of the work did not sufficiently engage the intellect:

For perfect enjoyment of this music there is no attitude more to be recommended than passive unintelligent rumination . . . as long as actual sleep can be avoided. At all events, the practical result of this music is to make the musician hungry for music that is merely logical and beautiful.⁸

This American critic lamented the absence of any palpable melodic content in *Prélude à l'après-midi d'un faune* :

⁷A thorough examination of issues surrounding the reception of Debussy's music around the turn of the century is Jann Pasler's "Pelléas and Power," *Nineteenth-Century Music* 10/3 (1987), p. 243-264.

⁸*London Times*, February 3, 1908. Quoted in Nicholas Slonimsky, *A Lexicon of Musical Invective* (Seattle and London: University of Washington Press, 1953), p. 96. No author is given for this remark.

The work gives as much dissonance as any of the most modern art works in music. All these erratic and erotic spasms but indicate that our music is going through a transition state. When will the melodist of the future arrive?⁹

The same sense of dissatisfaction with the supposed architectural flimsiness of Debussy's compositions was expressed by critics in Paris:

All in this music is indeterminate, vague, fleeting, indecisive, deliberately indefinite; formless music without muscle or backbone: gray music forming a sort of sonorous mist which one would like to pierce to see if there is anything behind it, but whose somnolent opacity makes it impenetrable.¹⁰

Doubtless these remarks reflect the critical response of a only a minority of Debussy's audience and it is easy to dismiss them as wrong-headed or misinformed. Yet the authors express an attitude that springs from the particular critical stance implicit in much music theory, even today. As some scholars have recently argued, the particular analytical methodologies that music theorists have developed tend to highlight the aspects of musical structure that are most compelling in our canonical texts, the tonal "masterworks," or, alternatively, the twentieth-century avant-garde. When such methodologies are applied to Debussy's music, the analysis can often leave the uncomfortable impression that purported logical relationships are being manufactured by the analyst rather than emanating from the work itself. Furthermore, these analytical techniques can completely ignore whole dimensions of the music which may impact heavily on listeners' experience, like timbre or rhythm, not to mention intertextual factors and expressive content. As I shall demonstrate below, Debussy analysis has tended either to privilege Schenkerian principles, explaining all deviations as temporary suspensions of an over-arching tonality, or else to retreat from tonal explanations altogether. But the music is neither exclusively tonal or atonal, and thus many questions arise. What makes it "go"? What accounts for the impressions of stasis and of motion? How are seeming discontinuities perceived as a unified whole? In absence

⁹Louis Elson, Boston *Daily Advertiser* Feb.25, 1904. Quoted in Slonimsky, p. 92.

¹⁰Arthur Pougin, *Le Ménestrel*, Paris, April 9, 1910. Quoted in Slonimsky, p. 98. The author is writing about Debussy's "La Damselle élue."

of a unifying tonal framework, how can pitch events be implicative? What, besides tonality, can structure the musical form? Working within our conventional methodologies, it is difficult to know just how to talk about this music in a way that is meaningful for more than just a few specialists within the musically literate community. While the importance of Debussy's contribution is widely acknowledged by scholars, teachers, and performers, our discussion of his music remains problematic in classrooms and even in the highly specialized scholarly literature, often forcing us to admit that our received "rules" of musical logic are hopelessly intratheoretical. The purpose of this study is to address this problem by developing some new analytical tools suited to the particularities of this repertoire, thereby making it more accessible to pedagogical and scholarly discourse.

Debussy's Early and Late Styles

In some respects it is appropriate to consider Debussy's music as a form of post-Romantic "extended" tonality, and in doing so we acknowledge at least one very real issue: the profound influence of Wagner on Debussy's music. That Wagner's prestige looms large in the background of Debussy's musical world is clear. A survey of the programs for concerts given in Paris during the second half of the nineteenth century reveals that performances of Wagner's works were given in increasing numbers through the 1870s; by the 1880s, Parisian audiences were being exposed to massive amounts of Wagner, mostly in the form of concert pieces excerpted from the operas.¹¹ At the same time, Wagner was becoming an intensely politicized symbol in France in a climate of political paranoia and growing nationalism.¹² During Debussy's student days at the Conservatoire, it would have been almost impossible for any French musician to remain indifferent toward Wagner's music and artistic ideals. Debussy's attendance at the Bayreuth festivals of 1888 and 1889 and his participation in the Symbolist idolatry of Wagner attest to the esteem in which he

¹¹See "Oeuvres wagneriennes au programme des concerts parisiens, 1841-1914," in Martine Kahane and Nicole Wild, ed., *Wagner et la France* (Paris: Bibliotheque Nationale, 1983), p.158-165.

¹²See Pasler, 1987.

held the German composer in the early stages of his career.¹³ Later, however, Debussy's feelings about Wagner grow ambivalent. While his published remarks during this time are characterized by an almost pathological aversion to Wagner, his own music abounds with Wagnerisms, including the leitmotiv technique, seamless formal plans, even direct quotations of orchestration and harmony.¹⁴ "Wagner has set us a number of precedents in how to fashion music for the theatre," Debussy writes in *La Revue Blanche* in 1901: "One day we shall see how useless they all are."¹⁵ Elsewhere he describes Wagner's orchestra as "a kind of multicoloured putty, perfectly evenly spread," in which one "could no longer differentiate between the sound of a violin and that of a trombone." In a well-known passage in which he praises the unfettered melodies of Bach, Debussy remarks:

Certainly my method of composing--which consists above all of dispensing with 'methods of composing'--owes nothing to Wagner. In his work each character has, one might say, his own 'calling card,' his image--his leitmotiv--which must always precede him.¹⁶

Debussy's criticisms are symptomatic of a more general tendency to disparage all things German that characterizes French thinking at this time. In a passage praising French musicians he writes:

César Franck serves music without seeking any glory. What he takes from life, he puts back into art with a modesty that is almost selfless. When Wagner takes something from life, he conquers it, treads it under his feet, and forces it to proclaim the name of Wagner louder than the loudest trumpets of fame."¹⁷

¹³See François Lesure, *Claude Debussy avant 'Pelléas', ou les années symbolistes* (Paris: Klincksieck, 1992).

¹⁴Carolyn Abbate has argued that in the writing of *Pelléas* Debussy took great pains to erase the traces of Wagner's influence, but that this influence nevertheless remains obvious in all aspects of the work, from the choice of libretto to the numerous musical "puns" involving the Tristan chord. See "Tristan in the Composition of *Pelléas*," *Nineteenth-Century Music* 5 (1981), p. 117-141. Also of interest is Robin Holloway's discussion of the song "Recueillement" in *Debussy and Wagner* (London: Eulenberg, 1979), p. 44-47, in which he compares the song with the opening of *Tristan und Isolde* Act II. See also Roger Nichols, who makes similar claims about Debussy and Wagner in *Debussy* (Oxford University Press, 1973), p. 9-11.

¹⁵Debussy, *La Revue Blanche* 15 May 1901. Quoted in François Lesure, *Debussy on Music* (London: Secker and Warburg, 1977), p. 35.

¹⁶Debussy, "Pelléas et Mélisande: A reply to the Critics," *Le Figaro*, 16 May 1902.

¹⁷Debussy, "At the Concerts Spirituels: César Franck's *Les Béatitudes*," *Gil Blas* 13 April 1903. Quoted in Lesure, p. 173.

In his latter career Debussy's pleas for a more genuinely *French* music, a music that need not be evaluated by Germanic musical criteria, take on a less hysterical tone. He makes the following statements in 1910, 1913, and 1917, respectively:

I am neither revolutionizing nor demolishing anything. I am quietly forging my own way ahead, without any trace of propaganda for my ideas--as is proper for a revolutionary. I am no longer an adversary of Wagner.¹⁸

An old friend of mine, M. Croche (who died recently), used to call the *Ring* the 'Who's Who of the Gods'. An irreverent quip! But it does underline the fact that even if Wagner no longer exerts the same influence as he used to on French music, people will still be consulting this admirable reference book for some while yet.¹⁹

For some years now, although we hardly seem to have been aware of it, French music has had to put up with a great deal of importation. Our natural hospitality has facilitated this, but we have not been enough on our guard against these often contradictory disciplines. Even at this very moment, when France is sacrificing the blood of her best children, without regard for birthright or class, one hears some strange proposals about Beethoven put forward: Flemish or German, he was a great musician. And Wagner, too--although he was more of a great artist than a musician. But that has been understood for a long time.²⁰

The complex relationship between Debussy and his Teutonic forerunner is probably best understood in terms of "anxiety of influence," as formulated by Harold Bloom.²¹ Debussy's desire for an ethnically distinct musical tradition, with himself in the role of the exemplary *musicien français*, can be read as an attempt to resist and overcome Wagner's

¹⁸This passage is claimed by Léon Vallas, in *Revue musicale de Lyon* 8 January 1911, to have come from a publication in December 1910. Lesure, however, is unable to trace it. See Lesure, p. 243.

¹⁹Debussy, "Apropos of the Wagner Centenary," *Les Annales Politiques et Littéraires* 25 May 1913. Quoted in Lesure, p. 294.

²⁰Debussy, "Preface in the Form of a Letter," *Pour la Musique Française: Douze Causeries*. December 1916. Quoted in Lesure, p. 324.

²¹Harold Bloom, *The Anxiety of Influence* (New York: Oxford University Press, 1973). Bloom argues that what he calls the "anxiety of influence" is, in fact, the very subject matter of all post-enlightenment poetry. The later one arrives in poetic history, Bloom claims, the more conscious one becomes of other texts, and the more one's experience is structured by textuality. Kevin Korsyn, summarizing Bloom, states:

Hence the poet discovers poetry with a sense of belatedness, with feelings of guilt and indebtedness towards his predecessors. Love for anterior poetry--the love that awakened his poetic calling--soon turns ambivalent. . . . [T]he poet's preoccupation with self-hood is the anxiety that his precursors have not left him room to become a self, to speak with his own poetic voice. Self-consciousness manifests itself as text consciousness. . . . Influence becomes something poets actively resist, rather than something they passively receive, and poetry becomes a psychic battlefield, an Oedipal struggle against one's poetic fathers, in which poems seek to repress and exclude other poems.

See Korsyn, "Towards a New Poetics of Musical Influence," in *Music Analysis* 9 (1990), p. 7-8.

powerful influence, itself born out of an unarticulated but deeply-felt attachment to Wagner's music. Kevin Korsyn's recent study of the intertextual links between the music of Brahms and that of his predecessors has obvious applications to the case of Debussy and Wagner.²²

A marked change in Debussy's musical language coincides with the composer's later, less perturbed relationship with the Wagnerian legacy. It is these late works, those composed after 1914, that serve as the focus of this present study. The kinds of tonal anomalies found in Debussy's early works, particularly his use of nontonal pitch material and his enigmatic "additive" formal structures, become more pronounced in these later compositions.²³ The specific period I am interested in begins in January of 1915, when Debussy's publisher Jacques Durand assigned him the job of editing Chopin's piano works. During the following summer Debussy produced his *Douze Études*, apparently rejuvenated by his reacquaintance with Chopin's achievements in that genre. These pieces were soon followed by the publication of the Sonata for Cello and Piano, the Sonata for Flute, Viola, and Harp, *En blanc et noir* for two pianos, and, Debussy's final work, the Violin Sonata. This productive period follows nearly fruitless months of 1914, a period that the composer described as "the long drought imposed on my brain by the war."²⁴ Some scholars have pointed out that certain elements in these late works recall features of

²²Korsyn develops his intertextual inquiry in sophisticated ways by drawing on Schenkerian analytical techniques for the comparison of works by Brahms, Chopin, and Schumann. Korsyn claims:

Conventional source study tends to dissolve a poem into its alleged sources, without explaining what constitutes a poem's unique claim on our attention. Formalist criticism treats poems as autonomous entities, leaving poems unconnected to history. . . . [W]e need a model that explains both tradition and uniqueness, that explains how a work becomes original by struggling against other texts. The model should also leave room for the imagination, so that we remain artists even in our model-building. It should integrate knowing with feeling, lest our complex modes of analysis alienate us from music.

See Korsyn, p. 13.

²³Roy Howat, who argues that most of Debussy's music is based on formal proportions derived from summation series, considers the late compositions as conspicuous exceptions. He claims that Debussy's formal procedures become increasingly individualized and that these late works "carry on the process of subverting proportional systems to its full conclusion." See Howat, *Debussy in Proportion* (Cambridge: Cambridge University Press, 1983), p. 162.

²⁴Letter to Jacques Durand, July 30, 1915 in *Lettres de Claude Debussy à son éditeur* (Paris: Durand, 1927). Debussy's inactivity during this time is probably also connected to his suffering from the effects of cancer, although some have attributed it to a kind of creative after-shock following the premier of Stravinsky's *Rite* in 1913.

eighteenth-century French music--an emphasis on linearity, counterpoint, and intricate ornamentation, for example--and that they represent a kind of homage to the French clavecinists and to Rameau. In this respect, these pieces prefigure the Neoclassical movement of the 1920s. His use of generic titles "sonata" and "etude," rare in his oeuvre, reflects Debussy's self-consciousness of his own position within an historical musical tradition going back to the eighteenth century: at the same time, however, these are also the works in his oeuvre which most radically undermine that tradition. While many musicians agree that these constitute some of the most interesting compositions in the early twentieth-century instrumental repertoire, these late works have received little significant analytical attention in our theoretic literature.

Scholars generally agree that Debussy's late style properly begins in 1913 with the orchestral work *Jeux*.²⁵ In order to clarify what distinguishes Debussy's "late" from his "early" style, it is instructive to consider how *Jeux* compares with works that predate it. While I will not undertake an analysis of this seldom-studied piece, it is among my goals in this study to establish some kind of analytical context within which a discussion of this enigmatic work might be possible. The lack of scholarly attention paid *Jeux* has to do with the work's extraordinary formal structure. Its nearly overwhelming complexity also explains the public indifference to the first performance: *Jeux* garnered little response, excepting that of a few critics, like Emile Vuillermoz, who championed Debussy's formal innovations: "It changes speed and nuance every two measures," Vuillermoz wrote enthusiastically, "it abandons a figure, a timbre, a gesture, in order to go headlong in another direction." Lawrence Berman has remarked on the ways in which *Jeux* inaugurates the new, more formally amorphous style associated with Debussy's late works. He illustrates this by pointing out some of the differences between *Jeux* and *Prélude à l'après-midi d'un faune*, composed nearly twenty years earlier. Berman envisions *Jeux* as a second, more successful musical rendering of the Mallarmé poem upon which *Faune* is

²⁵See Wenk, p. 73. Wenk observes that "in *Jeux*, Debussy goes several steps beyond *La Mer* in exploring fragmentation as a compositional procedure."

based: Berman believes that *Jeux* follows the structure and spirit of the poem more closely than the Prelude itself.²⁶ The Prelude, he observes, has a singular consistency and flow.

However:

In writing his poem . . . such a smoothness of continuity may not have been what Mallarmé had uppermost in his mind. The French artist of the time, in attempting to catch the fugitive quality of an impression, had essentially two means at his disposal. One was to present the subject more or less in its entirety but to blur its edges and contours--to have us see it through the distorting haze of impressionism. The other way--the one offering more radical distortion--was to *suggest* the subject by presenting parts and fragments of it only. Debussy's prelude, it seems to me, represents the first way, Mallarmé's eclogue the second. Each work offers an essentially different challenge to the reader or listener in coming to terms with it. With the prelude, repeated listenings will reveal subtle details which enrich and confirm a sense of the work we have had from the start. With the poem, repeated readings are imperative in order for us to piece together the shards and fragments which only gradually and resistingly yield up a unified idea.²⁷

Berman argues that in *Faune* Debussy does not really capture the essence of the poem.

"The presence of a functional harmonic structure and what that implies of completed shapes and fairly sharp distinctions between stable and unstable areas, limits the possibilities for the sorts of side-steppings and tangents which are a major characteristic of the poem."²⁸

The music of the Prelude, Berman concludes, is formally more akin to Wagner where "a new atmosphere emerges by means of a slowly moving and ultra-graduated phase of transition."

I have quoted Berman at length because his description highlights two general features of Debussy's late works that warrant close inquiry: their collage-like formal layout and the prevalence of non-tonal harmonic structures. Berman's idea that the earlier work, *Faune*, represents an "impressionistic" style characterized by the depiction of whole "images" with smudged edges, while the later work utilizes *fragments* of images, is

²⁶Laurence D. Berman, "Prelude to the Afternoon of a Faun and Jeux: Debussy's Summer Rites," *Nineteenth Century Music* III/3 (March 1980), p. 225-238. Berman argues that the scenario for *Jeux*, supplied by Diaghilev, may have been inspired by that of *Faune*, choreographed and performed by the Ballets Russes the previous year. The two works share common narrative elements including a love triangle and the theme of pursuit.

²⁷Berman, p.228

²⁸Berman, p.229.

evocative. His linking of the earlier practice with Wagner conforms with my view of the late works as those most resistant to the Wagnerian idiom. With these general stylistic observations established, it remains to be seen exactly how such effects are achieved and how we might develop more subtle theoretical models for this repertoire which signals a transition from a Wagnerian tonal practice to a Modernistic idiom. The next part of this chapter surveys three existing analytical approaches and assesses the particular suitability of each method for the analysis of Debussy's late style.

Analytical Approaches to Debussy's Music

Debussy's harmonic practice seems to fall midway between "extended" major-minor tonality and a fully-fledged atonal language. The consideration of pitch structure in this music has been problematic because writers have tended to embrace one or another of two analytical paradigms, Schenkerian analysis and atonal pitch-class set theory. Some authors, such as Matthew Brown, have chosen to view Debussy's language as essentially tonal, with temporary anomalous interruptions.²⁹ In his analysis of *Prélude à l'après-midi d'un faune*, Brown is concerned with showing "the degree to which Schenkerian theory can cope with extreme chromaticism, modal or exotic harmonies, free dissonances, parallel chords, and many other anomalies in Debussy's style."³⁰ Brown addresses both harmonic and formal issues in the work. He begins with a rather schematic conception of the form, in which discrete sections function as "transition," "development," "second theme," "dominant pedal," and so on. Brown then shows how various techniques obscure these formal boundaries. He asserts that "Debussy's music is often extremely complex polyphonically, especially at critical moments in the form." This is an important point; counterpoint is an aspect of this music that is rarely discussed. Brown accounts for as many of the unorthodox pitch events as he can in terms of complex counterpoint and

²⁹Matthew Brown, "Tonality and Form in Debussy's *Prélude à l'après-midi d'un faune*," in *Music Theory Spectrum* 15 Vol. 2, (1993), p. 143.

³⁰Brown, p. 143.

according to variations of normative tonal paradigms. Thus when he encounters a passage based on whole-tone harmonies, he invokes an altered dominant harmony, V⁷ with a lowered fifth. Brown claims that many such exotic passages represent parenthetical interruptions which merely serve to delay an anticipated functional harmony. Brown thus analyzes the opening of the Prelude--a controversial passage that has been variously construed as an implied E major with contrapuntal elaborations³¹, a double-tonic complex E - C#³², and as a configuration of complementary set classes³³--as a fairly unproblematic transformation of the functional progression vii⁷/V - V⁹ - I in E major. Following his Schenkerian analysis of the complete Prelude, Brown quotes Arnold Whittall, whose views on Debussy's language resonate with his own: "As a language," Whittall maintains, "it can best be described as 'expanded tonality', a language in which tonality still acts as a basic term, giving perspective to all other harmonic activity."³⁴ Brown and Whittall both imply that many of the supposedly Debussian devices are already available within the tonal idiom. Certainly it must be admitted that non-syntactic harmonic successions and upper-third elaborations of chords can be found in the music of the eighteenth century and earlier. Hexatonicism and suspensions of tonal centricity can conceivably be understood as prolongations of functional harmonies and complex linearity. Brown concludes that "[Debussy's] genius was perhaps not so much in creating entirely new principles of harmony and form, but rather in exploiting established techniques in bold and unusual ways."³⁵ This approach can make for a convincing analysis of some of Debussy's music. In his *Faune* analysis, Brown successfully demonstrates that tonality structures the piece to a great extent. In other pieces, however, a tonal reading will seem forced. Clearly, other alternative organizing principles are at work in Debussy's music, particularly in his later compositions. To consider all non-syntactic chord successions as prolongations of

³¹Felix Salzer, *Structural Hearing* (New York: Boni. 1952), Vol. 1, p. 209-210, and Vol. 2, example 455.

³²John Crotty, "Symbolist influences in Debussy's *Prelude to the Afternoon of a Faune*," *In Theory Only* 11 (1982), p. 17-30.

³³Parks, p. 156-157.

³⁴Arnold Whittall, "Tonality," in *The Music Review* 36 (1975), p. 271.

³⁵Brown, p. 143.

functional harmonies would greatly oversimplify the subtleties of Debussy's non-tonal materials. For this reason, some theorists have turned to post-tonal analytical methodologies.

In order to better address the particularities of Debussy's pitch material, Allen Forte has approached this music from the perspective of atonal pitch-class set theory. In his article "Debussy and the Octatonic" Forte classifies Debussy's pitch vocabulary according to pc set labels, and argues that many of these pc sets are manifestations of an underlying *octatonicism* that pervades his music.³⁶ As a theoretical construct Forte proposes an octatonic *genus*, a potential repertoire of set-classes characterized by particular intervallic content. In Forte's theory, octatonic sets include all the subsets of the octatonic scale (plus the complementary hexachords of the octatonic z-hexachords and the heptachordal supersets of these). Many of these set-classes also double as diatonic sonorities, such as major, minor, and diminished triads, dominant and half-diminished seventh-chords; but Forte argues that octatonicism structures pitch material more and more as Debussy's language evolves, while functional tonality is increasingly remote. As justification for his theoretical model Forte points out that incipient octatonicism is already present in the work of composers known to be important influences for Debussy, like Wagner and especially Mussorgsky.³⁷ He cites other possible influences--Liszt, Berlioz, Rimsky-Korsakov, and Scriabin--and points out that octatonicism was becoming a conspicuous pitch resource in the early twentieth century, appearing in the works of many of Debussy's contemporaries.³⁸ Forte's theory, then, is likely to have great explanatory power for

³⁶Allen Forte, "Debussy and the Octatonic," *Music Analysis* 10/1-2 (1991), p. 125-169. This article further develops theoretical work begun in "Pitch-class Set Genera and the Origin of the Modern Harmonic Species," *Journal of Music Theory* 32/2 (1988), p. 187-270. In the earlier article, Forte proposes his pitch-class set genera as a means of subdividing the set-class table, resolving the 223 different set-classes into broad categories based on attributes other than set cardinality. In short, the interval content of the twelve trichordal set-classes provides the basis for twelve genera; set-classes that are supersets of one or another of the trichords are grouped together into the same genera.

³⁷A famous example of octatonicism in Mussorgsky's music is the celebrated "Coronation Chord" from *Boris Godunov*; study of the score for this work is known to have occupied Debussy throughout 1889.

³⁸Forte mentions Strauss's *Elektra*, Webern's *Four Pieces for Violin and Piano*, Ravel's *Trois poèmes de Mallarmé*, and Stravinsky's *Petrouchka* and *Rite of Spring*.

Debussy's late compositions. Forte not only provides analytical labels for nontonal pitch events, he is also able to link surface events with the "deep" structure of the music. Many of the anomalous pitch events that remain unexplained in a tonal reading can be resolved into an underlying octatonicism. Forte's set-theoretical approach is less strong, however, when it comes to linear aspects of the music. If the octatonic collection can be thought of as a kind of "background," it is a static one that does not determine how the music progresses over time. And by relying exclusively on pc set labels, Forte completely overlooks the role of vestigial tonal propensity, the functional allusions that still operate along side octatonic organization, even in Debussy's most unconventional works.

Among recent attempts to overcome the traditional division of analysis into tonal and post-tonal methodologies that has served Debussy (and many composers) so poorly, is Richard Parks' study *The Music of Claude Debussy*.³⁹ Parks begins by determining the extent to which tonal principles do structure Debussy's music. He examines such factors as the structural soprano and bass progressions characteristic of tonal works, the role of structural levels, and harmonic organization based on fifth-relations. Parks quickly concludes that conservative tonal features are relatively unimportant in Debussy's music, except perhaps in his student compositions. Rather Parks demonstrates Debussy's proclivity to employ more eccentric tonal devices, such as remote forms of modal mixture, and his tendency to exploit the functional ambiguity of the subdominant. In place of functionally-based chord progressions, Parks notes how sonorities often succeed one another by means of common-tone progressions and voice leading based on semitonal proximity. He employs the term "kinesthetic shifts" for such successions, which can replace functional syntax and diatonic melodic tendencies as a way of moving linearly through pitch space in this music.

Parks' solution to the problem of Debussy's unconventional pitch organization is to establish a range of "referential collections" by which pitch-class resources may be

³⁹Richard Parks, *The Music of Claude Debussy* (New Haven: Yale University Press, 1989).

classified, be they diatonic or modal sonorities, hexatonic, octatonic, or dodecaphonic. These are pitch-grouping categories other than “keys” and “chords” that lie between the polar extremes of tonality and atonality. As in Forte’s analytical method, sonorities are identified according to their membership in some “cynosural,” or representative super-set. Five such pc-set genera are posited: the octatonic, diatonic, whole-tone, and chromatic collections, plus an additional collection that Parks calls the “8-17/18/19 complex,” a kind of distorted variant of the octatonic.⁴⁰ Parks claims that these pc-set genera were first employed by Debussy in 1887-88 in his *Cinq poèmes de Charles Baudelaire*, marking a break with the exclusive diatonicism of his early works;⁴¹ thereafter they are an integral part of his vocabulary. After determining criteria for pc sets’ membership in the various genera, Parks now demonstrates the role of pc subsets that are shared among two or more collections. These may act as pivots for “modulations” between different referential collections or “mutations” (in the Guidonian sense) between different transpositions of the same genus. A half-diminished seventh-chord, for instance, which belongs to both the diatonic and octatonic genera, may signal a modulation between one genus and the other. Genera changes can structure large-scale form and can be linked on the surface by these pivot sonorities. Thus Parks elucidates a kind of “back-ground” of shifting referential collections, replacing the function of an *Ursatz* in a tonal work. Like Forte, he is able to link surface events with a “deep” structure in the music. Debussy’s hexatonicism, modality, parallelism, and many of unorthodox chord progressions can be resolved into an intelligible background, and one that is a more dynamic and fluid construct than Forte’s in that the referential collections are in flux.

After working out his system of pc-set genera, Parks begins exploring the connections between pitch materials and extramusical factors. By looking at the texts associated with particular pitch materials in Debussy’s vocal music, Parks is able to map

⁴⁰The status of the 8-17/18/19 collection as “referential” is, however, highly problematic.

⁴¹Parks, p. 91. Parks singles out the two songs “Le jet d’eau” and “Recueillement” as the first examples of this compositional strategy.

words and images onto particular pc sets, and, by extension, pc-set genera. In an analysis of the text and music of *Pélleas et Mélisande*, Parks associates representative pc-set genera with specific affects, psychological implications, characters, and actions. He notes, for example, that throughout *Pélleas*, the diatonic genus has a benign quality, and is associated with passivity, while the octatonic genus has opposite characteristics, malignancy and activity. Whole-tone materials are expressive of fate, death, and mystery, while the chromatic genus, which is often mixed in with the other genera, simply serves to intensify the affect of whatever genus accompanies it. Thus Parks makes the link between elements in the narrative and particular harmonic choices made by the composer.

Parks devotes the last part of his book to questions of form. He concedes that formal *schemes*, as such, are only marginally operative in Debussy: even terms like “phrase” and “period” or “cadence” can be problematic “where the defining characteristics long associated with them are either incomplete or lacking altogether.”⁴² Debussy’s avoidance of traditional phrase and period structure means that “his works do not easily reveal their architectonic levels.” It seems that Debussy “subordinates the customary role of continuity as a means of grouping like events into coherent entities to that of discontinuity as a means of determining their boundaries.”⁴³ This observation supports the notion of Debussy’s forms as “additive” rather than “hierarchic” sorts of structures. Parks now distinguishes between what he terms *morphological* form and *kinetic* form. The former is a conception of form derived from spatial metaphors, like symmetry or contrast and return: the latter “addresses the sense of vitality that we perceive in music. . . . [I]t treats the disposition of musical events as metaphors for *motion*: acceleration versus deceleration, ebb versus flow, building towards versus receding from.”⁴⁴ Debussy’s morphological designs in his early works exhibit fairly strict regularity and later evolve into “those of remarkable fluidity and astonishing complexity.”⁴⁵ So an early song like “Beau Soir” from 1880

⁴²Parks, p. 203.

⁴³Parks, p. 204.

⁴⁴Parks, p. 203.

⁴⁵Parks, p. 203.

divides neatly into two sections of equal length, while later works tend to exhibit marked asymmetries. Late works, like *Jeux*, are often based on what Parks calls a “developing variation/reprise” form, in which “opening material is modified to generate new but related material, which in turn becomes the basis for more new material. The process is repeated over and over . . . until an advanced stage is reached, followed by a brief and rather literal reprise.”⁴⁶ Parks sees a gradual evolution from hierarchical designs to additive ones in Debussy’s oeuvre.

In contrast to morphological form, kinetic form, Parks claims, directly confronts temporality. The analysis of kinetic form begins with the identification of spans in the music whose boundaries are determined according to some salient event in some parameter—change of tempo, meter, genus, texture, etc. Essentially a work’s kinetic form is determined by the changes in duration between consecutive spans. This approach promises to address formal issues with some subtlety. Rather than simply ascribe attributes of “circularity” or “stasis” to a passage based on a static harmonic field, for example, the analyst might distinguish between one such passage that is *anticipatory*, one that acts as a point of arrival, or one that is expressive of equilibrium. Unfortunately Parks’ strict reliance on his system of “form-defining parameters” means that his formal analyses often tend to become rather reductionist, and do not always achieve the goal of capturing the vitality of musical changes over time. What finally stands out most in Parks’ approach is his demonstrations of the interconnections between form and harmony in Debussy’s music. The particular strategies in each domain, Parks argues, serve a common aim:

Debussy’s earliest constructional formal principles are consistent with those of the late nineteenth-century French Romantic tradition that characterized the Conservatoire’s milieu. His subsequent innovations entail formal principles compatible with his innovations in the realm of pitch materials. As a compositional resource, mutation and modulation [between different pc-set genera] point directly towards the exploitation of contrasts between and interconnections among sonorities and kinesthetic patterns and expose the latter’s essential paradox of unity within variety. Debussy explores this dichotomy over and over in a continuing testament

⁴⁶Parks, p. 220-221. Parks views this type of design as derivative of traditional ternary form, A-B-A, and represents it schematically as A---(developing variation)--->A’.

to its rich potential. Since a distinctive sonorous type can be established very quickly (and contrasted with another type that it replaces), a technique that juxtaposes very brief formal units, each differing in sonority or pc content, is an efficacious way to project and compare those special properties and relations. Dramatic fluctuations in the lengths of formal units and, therefore, in the rapidity of changes, provides a temporal analogue to the range of fluctuation in sonority inherent in modulation and mutation: together they widen the listener's range of experience.⁴⁷

Parks claims that Debussy's pitch organization is intimately connected with the listener's experience of kinetic and morphological form in his works. Yet Park's range of possible formal configurations is ultimately limited by his exclusive reliance on pc-set analysis. In spite of his discussion of tonality at the beginning of the book, Parks greatly underplays the role of functional harmony, even at times when tonal centres are clearly operative in the music. This shortcoming is most apparent whenever pc sets are identified as members of a diatonic collection. The diatonic genus is routinely treated as an unordered collection without regard for any of the internal asymmetries of the rich tonal and modal associations that diatonic sets engender. Thus some of the same problems that attend the atonal theoretical approach of Forte arise here as well. Parks' analytical method overlooks the melodic subtleties that create tonal and modal allusions, and this in turn affects his conclusions about kinetic form. Relying exclusively on kinesthetic shifts as the vehicle for harmonic motion, Parks does not treat the processive aspects of the music that arise from tonal tendencies. By focusing exclusively on pc sets, Parks chooses to underplay certain linear aspects and the elusive but still considerable role of tonal propulsion. Furthermore, as Douglas Green has pointed out in his review of the book, Parks provides no theory of melody or of generative process for this music.⁴⁸ Parks' method offers many insights into the structure of Debussy's music but there is still more to say about both its pitch and formal organization.

⁴⁷Parks, p. 232.

⁴⁸Douglas Green, *Music Theory Spectrum* 14/2 (1992), p. 214.

Issues of Coherence and Heterogeneity in Music Theory

A major obstacle to the development of a holistic approach to Debussy analysis has been the emphasis placed on tightly-knit logical systematicity in structuralist theories. Structuralism takes the internal relationships of an artwork as its analytical object. Traditional music analysis is structuralist insofar as it is characterized by an *immanent* critical method which considers every musical event as predicated upon the internal structure of the piece. It seeks sources and motivations for the compositional surface strictly within the work itself. For Debussy's music, however, a theory that nails down every note into a consistent, intricate, hierarchically interrelated framework is not always practicable nor especially desirable. Frequently, much of a piece of music appears to escape this kind of logical systematicity. A theoretical approach that privileges internal structural "coherence" and excludes fragmentation and disorder is not capable of elucidating the vital role played by the disruptive elements. Thanks to recent post-structuralist trends in musicology, however, theorists are becoming better equipped to deal with the transgression of musical logic as an integral part of a musical language. Trends in the so-called "new musicology" have legitimized alternative theoretical approaches which, in turn, have opened up previously unregarded repertoires for investigation. These alternative approaches tend to focus more on the listener as the object of analysis; they concede that listeners bring the experience of other pieces and of other media to bear upon their encounter with a work. Post-structuralist methodologies consequently accord a important role to intertextuality and to the discourse, both casual and scholarly, within which music is inscribed.

Many of these new trends ultimately owe a great deal to French feminist writers like Julia Kristeva.⁴⁹ Indeed, one of the most significant contributions of the new musicology has been the infusion of feminist ideas into traditional music theory. Feminist critique has

⁴⁹See Julia Kristeva, "The System and the Speaking Subject" in *Times Literary Supplement* October 12, 1973, p. 1249-50. In her critique of generative grammar and of linguistics as a field, Kristeva has argued that we must go beyond the reduction of signifying practices to their systematic aspects. She insists that any consideration of "speaking subjects" outside of the context of signifying practice is necessarily artificial and sterile. See also her *Revolution in Poetic Language* trans. Margaret Waller (New York: Columbia University Press, 1984).

provided a forum for exploring how and why discourse surrounding music has tended to become gendered. In her book *Feminine Endings*, Susan McClary discusses the subtle, and sometimes blatant, gender-mappings that take place in much supposedly neutral musical discourse.⁵⁰ She shows how musical events that escape logical systematization, like chromaticism, have typically been linked with excess and sensuality, and linguistically marked as “feminine.” This is especially relevant to the music of Debussy, where systematic tonal relations are often radically undermined. McClary notes that “Debussy reception has been waged in terms of the ‘masculinity’ or ‘effeminacy’ of his musical style.”⁵¹ As an example she offers this passage from a 1929 publication:

Sybaritism, too has its own vulgarity; the question of aim is fundamental in art; and in judging the distinction of Debussy's aims we can not evade the question whether physical pleasure, however refined, is the highest good an artist can seek. His charm, beyond doubt, is great enough to justify his popularity. Yet it would be regrettable if the student of modern French music, satisfied with this charm, were to neglect the less popular but more virile, more profound, and more spiritual music of Cesar Franck, Ernest Chausson, and Vincent d'Indy.⁵²

Here the author implies that the appeal of Debussy's music is primarily sensual as opposed to intellectual (something for which the composer himself would not likely have apologized). But Mason contrasts this with what he sees as a less trivial kind of music, one that expresses virility rather than charm by transcending the mere sensuality. Other examples of this kind of gendered discourse can be found among critical reviews of the premieres of Debussy's works. In both of the following examples, tonal and thematic ambiguity is associated with decay, feebleness, and weakness in the form of feminine persona:

We clung like a drowning man to a few fragments of the tonal wreck, a bit of a theme here, and a comprehensible figure there, but finally this muted-horn sea

⁵⁰Susan McClary, *Feminine Endings* (Minneapolis: University of Minnesota Press, 1991).

⁵¹McClary, p. 172.

⁵²McClary's example is from Daniel Gregory Mason's *Contemporary Composers* (London: Macmillan, 1929).

overwhelmed us. If this be Music, we would prefer to leave the Heavenly Maid until she has got over her hysterics.⁵³

The music of Debussy has the attractiveness of a pretty tubercular maiden, with her languorous glances, anemic gestures, whose perversity had the charm of one marked for death. A symphony, a piece of music, are organisms. A Debussyan organism reminds us of the jellyfish whose translucent substance lights up brilliantly at the touch of a sunlit wave, but which will never be anything but a protozoan. All this lacks fiber and blood. I have the sensation of originality covering up a kind of impotence.⁵⁴

These remarks return to the same themes of architectural flimsiness and vagueness expressed by the critics quoted earlier. McClary would argue that the theoretical stance responsible for the views of these writers, a stance which equates logic with beauty, ultimately stems from a masculinist bias which has far-reaching social and political implications. Feminist approaches to musical analysis take seriously the role played by extraneous discourse in our musical experiences: referential meaning, it is argued, accrues to music because we access our understanding of music through language. Current aesthetic theories, especially those informed by writings of Michel Foucault and by psychoanalytic theory, all tend to share this preoccupation with the role of discourse and the ways that language can structure aesthetic experience.

A New Approach to Debussy's Late Style

Theories which accord a crucial role to language have rich potential for the analysis of music. The specific method I propose for dealing with Debussy's music is a *narratological* one. Narratology, the study of narratives, is suggestive of applications to music in that it investigates the ways in which events experienced separately are comprehended as a unified whole. In taking a narratological approach, my research complements that of a number of musicologists and music theorists in recent years. The

⁵³Slonimsky, p. 93. Louis Elson, *Boston Daily Advertiser*, March 4, 1907.

⁵⁴Slonimsky, p. 97. Alfred Mortier, *Rubriques Nouvelles*, Paris, December 1909.

ways in which music is or is not like a narrative, questions about the nature and significance of symmetry and closure in music, and the possibility of paradigmatic musical “plots” are some of the issues currently being debated by scholars such as Jean-Jacques Nattiez, Carolyn Abbate, Leonard Meyer, and Anthony Newcomb. Many of these scholars share a belief in a deep-seated connection between music and language. This belief underlies the exploration of homologies between musical and linguistic structures that has for some time been an important area of study within our field. A particularly influential work in this area is Fred Lerdahl and Ray Jackendoff, *A Generative Theory of Tonal Music*, in which the authors explore the musical implications of generative grammar, pointing out isomorphic relations between sentences and musical phrases.⁵⁵ In recent years, however, a number of scholars have been considering larger units of musical structure, taking as their model not the syntactic structure of the *sentence*, but rather the organizational structure of whole narrative texts. This approach has several advantages over generative grammar-type approaches. First, it attempts to go beyond the reduction of musical language to its purely systematic aspects inasmuch as a narrative model implicitly acknowledges an anthropomorphic element in the listening process. Secondly, it allows the analyst to talk about whole pieces without first having to build up a large structure from little “analyzable” fragments; narrative theory can begin with analysis of large-scale form, and it eliminates the need to maintain consistent reduction criteria through a series of hierarchical levels.⁵⁶ The structure of a whole narrative is looser and more flexible than is the syntax of an individual sentence: narrative structure is not simply a direct extension of sentence syntax and neither are whole pieces simple enlarged harmonic periods. The relatively underdetermined structure of a complete narrative permits more “fuzziness” in the mapping of a narrative onto musical form, avoiding the strained analogies that attend

⁵⁵Fred Lerdahl and Ray Jackendoff, *A Generative Theory of Tonal Music* (Cambridge Mass: MIT Press, 1983).

⁵⁶This is a constraint imposed in Lerdahl’s and Jackendoff’s analyses which often seems cumbersome and, at times, completely counterintuitive.

attempts to correlate, for example, harmonic entities with the grammatical parts of a sentence.

I begin with the assumption that the large-scale tonal structure of most nineteenth-century instrumental music is analogous with the “plot” of a classical narrative text; in contrast, Debussy’s quasi-tonal structures represent alternatives to that classical narrative syntax. I view Debussy’s innovative musical language as a departure from the prevailing “narrative code,” which is embodied in the works of composers like Wagner, and dominated by notions of tension and resolution, tonal departure and return, and monumental formal structures. Speaking of this idiom, Susan McClary writes:

Tonal music is narratively conceived at least to the extent that the original key area--the tonic--also serves as the final goal. Tonal structures are organized teleologically, with the illusion of unitary identity promised at the end of each piece. But in order for pieces to have any narrative content, they must depart from the tonic and enact an adventure in which other key areas are visited (theorists sometimes say ‘conquered’) and in which the certainty of tonal identity is at least temporarily suspended. Otherwise there is no plot. Yet with the exception of a few pieces in the nineteenth century and early twentieth century that deliberately call into question the premises of this narrative schema, the outcome--the inevitable return to tonic--is always known in advance. To the extent that the “Other” keys stand in the way of unitary identity, they must finally be subdued for the sake of narrative closure.⁵⁷

The particular narrative structure that tonal works deploy resonates with the narrative codes of the bourgeois novel and with broader cultural codes of representation. I believe McClary would include many of Debussy’s compositions among the rare works which challenge this prevailing narrative code. But rather than consider these as *antinarratives*, representative of an “Other” to a monolithic “Narrativity,” it is perhaps more useful to explore what characteristics create the differences between Debussy’s idiom and tonal narrative. Narrativity itself can be construed as a complex and multifarious phenomenon, comprising a wide range of possible kinds of stories and story-structures, which serve a variety of social

⁵⁷McClary, p. 155.

or psychological ends. Debussy's works may be seen as representative of alternative organizational strategies for the telling of new musical stories.

The remainder of this dissertation consists of three main parts: Chapter 2 explores the field of narratology and looks at some of the ways that narrative theory has been applied to music; Chapters 3 and 4 develop an analytical methodology based on narratological models; Chapter 5 presents an analysis of a work in which I apply the method developed in the previous chapters. A final chapter summarizes the main arguments of the dissertation. The overview of narratology that I provide in Chapter 2 begins with a brief account of the history of the field: narratology has its roots in the early twentieth century, in the research of Russian scholars such as Vladimir Propp, who sought to reveal the general configurations common to all narrative texts. I introduce Propp's theories and then move on to discuss more recent formalist theories, including the structuralist model proposed in the early writings of Roland Barthes. While these formalist theories focus exclusively on the properties of a text, other studies have attempted to go beyond a reductive structuralism by considering narrative from the perspective of the reader or *narratee*. In Barthes' later work the focus of analysis shifts more towards the reader and what the reader brings to a narrative. Barthes provides an account of the various organizational strategies that come into play when processing a narrative text. Chapter 2 continues with a discussion of Barthes system of "narrative codes," each of which represents one way in which a reader processes information according to recurring patterns of narrative convention.

Currently, narrative theories draw on two main disciplines in varying degrees: cognitive science, which aims at an empirical understanding of cognitive behaviour, and semiotics, which accounts for knowledge through the logic of signification and discourse. Narratology informed by phenomenology and cognitive science focuses on the "competence" of readers and the conditions that make possible the comprehension of narrative texts. What we call "narrative," then, is seen not only as an attribute of a text, but also as a particular type of strategy for organizing data. This strategy is viewed as a more

general attribute of human cognition which can be applied in the creation and perception of “fiction,” but also in the reading and writing of history, science, law, education, psychoanalysis, etc., and, arguably, music. Narrative theory based on cognitive science is represented by the work of a number of scholars in the field of Psycholinguistics. Those working within this branch of narrative theory are primarily interested in what narrative structures can teach us about cognition. Narratology informed by semiotics, on the other hand, maintains that discourse and linguistic signs are in fact *constitutive* of cognition. It is useless, semioticians argue, to speculate about underlying principles of mind that language supposedly reflects, since these principles could only ever be accessible through further language. Rather, language itself is taken as a starting point, and narrative is seen as part of the larger structural properties of language in general. To contrast these two positions, I summarize some representative research in each camp: psycholinguistic work by Ruth A. Berman and Dan Isaac Slobin, Arthur Applebee, and others demonstrates the cognitive-science angle, while the writings of A. J. Greimas represent the semiotic approach.

Throughout Chapter 2 I discuss the musical applications of narratology that have been proposed by Anthony Newcomb, Fred Maus, Patrick McCreless, Eero Tarasti, and other music scholars. These scholars draw on a variety of theoretical premises from the formalist, structuralist, cognitivist, and semiotic positions within narratology. For the most part their work consists of proposed analytical methodologies for and actual analyses of *tonal* music. To date, the potential applications of narratology to post-tonal music have been overlooked. This dissertation thus explores some new territory in this respect.

One reason narrative theory is attractive to many music theorists is that it focuses on the interplay between expected configurations and instantiated patterns in a composition. An encounter with a work, either a musical or a literary one, always combines a schematic arrangement of knowledge already possessed by the perceiver that is used to predict and classify information, with a linear, chronological presentation of information which engages a “bottom-up” type of processing in the perceiver. It is the interaction of these two

dimensions that narrative theory highlights. A narratological approach to analysis thus meshes well with a post-structuralist view of the musical artwork as something that is forged at the site of tension between a logical symbolic system and an encroaching “meaninglessness” that threatens to undermine that system. I feel that narrative theory is especially useful for the study of early post-tonal repertoire: questions about the interplay of schema-driven and data-driven perception become increasingly consequential as tonality becomes more attenuated. Narrative theory can be particularly illuminating for music that involves both tonal configurations and atonal, “intra-opus” processes. Narrative theory can reveal something about the nature of succession and continuity in this music, taking into account the roles of sophisticated chromatic harmony as well as modernist techniques, unconventional formal structures, and innovative pitch relationships. This idea of the complex play of configurational and episodic dimensions is a key to understanding Debussy’s style. When we listen to these compositions, the musical data acts as inductive samples that are projected onto a *range* of possible organizational strategies: chords, keys, tonalities, paradigmatic harmonic progressions, referential collections, pc-set genera, etc. The relative contribution of various types of schema results in a graded set of expectations that informs our listening. A narratological approach suggests some interesting ways to unravel these complex organizational strategies in Debussy’s music.

In this study I will be drawing on narrative theory from both the cognitive science and from the semiotic camps. Since I am interested in developing a musical model, I will take a pragmatic approach to these two theoretical positions, side-stepping the issue of whether cognition or language is more fundamental. I am most interested in finding and describing a repertoire of stories which represent alternatives to the well-known “plot” structure of the classical narrative text. While eighteenth- and nineteenth-century musical works have been regarded as having a structural affinity with the classical narrative, Debussy’s late works exhibit other modes of organization which might be more accurately modeled by these alternative story-types. The alternative narrative models I invoke come

out of two main research areas: studies on the development of story-telling ability in children, and studies of the spatial and temporal relationships exhibited in cinema. Chapters 3 and 4 are devoted to a detailed investigation of each of these areas, respectively.

In Chapter 3 I return to some of the psycholinguistic research outlined in Chapter 2, research in which narrative is treated as a cognitive phenomenon--i.e., a particular type of strategy employed by a perceiver for organizing data. The first part of the chapter focuses on the development of story-telling abilities in children, on their gradual acquisition of narrative competency. I invoke studies which suggest that children tend to progress through a series of identifiable stages in the development of complex narrative syntax. I outline a variety of narrative categories which model the different levels of organizational complexity which children's own stories exhibit as they mature. At the earliest stages a child's stories are characterized by "minimal event packaging," that is, a child tells of an arbitrary event X, then Y, then Z, and so on, treating each as an isolated element. A new stage is reached when the child begins to create a chain of cause-and-effect relations between contiguous elements in a story. After this stage, children's narratives begin to exhibit an overall plan with a hierarchical organization. Finally, children learn how to fit events to both the local and global events of an overall plot, and to handle features like "closure" and the development of a central core in a story. The variety of different ways that children create narratives suggests some ways of modeling musical form. In the second part of Chapter 3 I propose a model for musical event-succession based on the different organizational strategies manifested in children's stories. I explore a range of modes of musical organization, designed according to various music-theoretic schema, and I develop the idea of a hierarchical arrangement of these modes. Selections from Debussy's late works demonstrate each stage of this model.

In the fourth chapter of the dissertation, I discuss Debussy's organizational strategies in connection with the devices of the early silent cinema. As a form of temporal media, cinema is situated somewhere between exclusively narrative media, like written or

spoken stories, and *performative* media like music. Therefore a discussion of cinema can draw together observations about narrativity and temporality, bringing music's narrative aspects into sharper focus. I treat the silent cinema as a source for new kinds of story-structures that emerged in the early twentieth century in a period of time coincident with the composition of Debussy's mature works. I see meaningful analogies in the ways that cinematic devices disrupted existing narrative conventions and the ways that Debussy's formal and harmonic practices disrupted musical conventions. Although very few of the actual films from the early 1900s have survived, extant film reviews and contemporary criticism evoke a vivid sense of the early cinema, how it was received and what its most salient devices were. For modern cinema audiences, these devices have been largely internalized as part of a "film-reading" competence, but early film reviews by Emile Vuillermoz, Louis Delluc, Louis Aragon, and others, as well as remarks made by Debussy himself reveal the extent to which early cinema impressed its spectators. Chapter 4 begins with a discussion of early film criticism that refers to the new cinematic techniques made possible by and peculiar to the motion-picture camera. These new devices and film-editing practices express a new kind of visual logic; they include: the "fade," in which the screen gradually turns black; the "dissolve," in which one image gradually disappears while another emerges; the "cut-in," an instantaneous cut to a close shot; the juxtaposition of different camera angles; a variety of special effects involving stop-motion tricks, adjustment of film speed and direction, double-exposure of the film, and matted images. What is clear from the accounts of early film reviewers is that such devices represented a radical departure from the temporal and spatial orientations to which traditional theatergoers were accustomed. I argue that these cinematic devices represent disruptions to a traditional narrative idiom, and as such are comparable to the formal innovations found in Debussy's music. I examine a variety of cognate musical and cinematic situations and I argue that the particular narrative situations that give rise to these devices in films can

suggest specific formal functions for the musical passages in which analogous devices occur.

In Chapter 5 I present an analysis of one of Debussy's most enigmatic late works, the second movement of the Sonata for Cello and Piano. I have chosen this piece because I believe it vividly demonstrates the "cinematic" and "alternative-narrative" techniques that I discuss in the other chapters. I speculate that the music's expressive power derives from the ways that particular musical techniques map onto a network of extra-musical experiences--experiences of visuality and narrativity. I argue that the anomalous and asystematic aspects of this work relate to a broader preoccupation at the turn of the century with issues of "primitivism," "naïveté" or artlessness, and the hidden world of the unconscious.

Essentially, the goals of this study are to try to account for the full range of compositional techniques in Debussy's late works, and to explore some of the ways that this music is made meaningful through its participation within the network of relationships among various narrative media. Throughout this study I will attempt to contextualize the array of narrative strategies manifested in the music within the general reorientations of the intellectual landscape of the early twentieth century that we identify as Modernism. I anticipate that my theoretical work here will have applications beyond the specific musical works I discuss. Thus, although I will deal exclusively with the late works of Debussy, I hope that this study will suggest some ways of formulating a more generalized theory of musical narrative strategies.

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Chapter 2. Theories of Narrative

Introduction

The goals of this chapter are to outline some of the contributions to narrative theory that have come from literary criticism, semiotics, cognitive science, and linguistics, and to address the issues that arise when we attempt to formulate a narrative theory for music. The chapter begins by situating a narrative model for music within the context of language models in general; a narrative model is shown to have certain advantages over other types of linguistic models when we are discussing particular kinds of musical works. I argue that a narrative model is a convincing and plausible model because of several attributes that are shared by both pieces of music and narrative texts. I supply a number of examples of these shared structural and functional characteristics. The chapter then surveys several specific narratologies, beginning with theories of folklorist Vladimir Propp, the structuralist theory of Roland Barthes's, as well as his later work on Text, and A. J. Greimas's semiotic account of narrative. Each of these narratologies is presented along with examples of music theories that have drawn upon these different approaches: work by Anthony Newcomb, Patrick McCreless, Fred Maus, and Eero Tarasti is discussed. I then turn to theories of narrative that have come from cognitive science; these suggest further musical applications. The chapter concludes with a summary of the criticisms of musical narrativity that have been voiced by music scholars. I respond to these arguments, and I try to reinforce the theoretical basis for a narratological analysis of Debussy's music.

Musical Linguicity and Musical Narrativity

The ways in which music and language are alike have been of great interest to many music theorists. In turning to language models for music, rather than, for example, models drawn from architecture or mathematics, we explicitly acknowledge music's temporal dimension, its sound-in-time condition. In his article "Language Models and Music

Analysis." Harold Powers considers the various ways that theorists have relied upon the attributes of spoken and written language to explain musical phenomena.¹ Powers points out that there are three separate aspects of language which are invoked when we posit analogies with music: *phonology*, *semantics*, and *syntax*. Of these three, the phonological aspect of language is perhaps the most easily translated into musical terms. As sound in time, spoken language has rhythm, tonal inflection, and accentuation, all of which may be identified with musical parameters; the regular periodicity of measured verse corresponds to musical meter and phrasing. In vocal genres, the characteristic inflections of ordinary speech are often taken as a model for the musical setting or singing by composers and performers. A phonological model is implicit in some of our assumptions about purely instrumental music as well, in that we often take vocal music as our model for instrumental gestures.

The semantic aspect of language presents more complex problems when translated into musical terms. Inasmuch as words are ordinarily understood to refer to specific things or ideas, there is less agreement among listeners as to music's semantic referents. Nevertheless certain musical "affects" and "topoi" have enjoyed widespread corroborability at different times in music history and in different musical cultures. Moreover, the recent interdisciplinary explorations in our field, including forays into semiotics and critical theory, have motivated attempts to minimize the differences between linguistic and musical signs. This has led to a renewed interest in music's semantic dimension and its capacity for signification.

Finally, the *syntactic* aspect of language has been shown to have great explanatory power for music analysis. Tonal music, in particular, has been well served by linguistic-syntax models. Analysts have focused on the similarities between the generative structure of language grammars and the hierarchical structure of tonal works, especially as revealed through Schenkerian analysis. Studies like that of Lerdahl and Jackendoff have overtly

¹Harold Powers, "Language Models and Music Analysis," in *Ethnomusicology* 24 (1980), p.1-60.

taken over the analytical methodologies from context-free generative grammars in order to elucidate tonal structure. Computers have been the test-bed for such theories, and some of the most compelling research in this area has come out of work in musical computation. Linguistic-syntax models have been implemented and tested in computer programs that are meant to generate real music. David Cope's EMI (Experiments in Musical Intelligence) program is representative of this type of work.² In his book, *Computers and Musical Style*, Cope describes EMI, a program designed to replicate musical styles. Predictably, EMI employs Schenkerian principles of parsing and hierarchy in order to replicate tonal music.³ What is more surprising, however, is that the same hierarchical structure of generative trees is used by EMI to produce music in non-tonal styles. Cope's book reproduces some examples of EMI's compositions in the style of Prokofiev and in the style of the Balinese gamelan. Cope remarks:

Grappling with quasi-tonal styles demonstrates the effectiveness of the hierarchical approach to machine composition. The harmonic progressions that one finds in the piano music of Sergei Prokofiev might lead one to expect that a fundamental revision of the code would be necessary to replicate them. In EMI, however, this is not the case. Even though this composer's style differs drastically from the music presented so far [Bach and Mozart], only the ATN [automated transition network] part of the program requires alteration. The entire work tree that functions so well for language as well as music stays intact. This substantiates the premise that all music, no matter what the vocabulary, has progressions that are antecedents, consequents, and so forth.⁴

To the extent that EMI's quasi-tonal compositions are stylistically accurate, these examples seem to show that the linguistic syntax model for music has applications well beyond those that have been developed to date by theorists who have concentrated primarily on tonality.

²David Cope, *Computers and Musical Style* (Madison, Wisconsin: A-R Editions, Inc., 1991). Briefly, EMI takes real music as input, and looks for "signatures"—typical recurring patterns and motives within a given work or group of works. It then generates new signatures similar to the ones it finds. EMI now categorizes these signature units according to a limited range of grammatical functions; units may function as statements, preparations, extensions, antecedents, and consequents. EMI then organizes the material using an automated transition network, a kind of grammar which specifies rules for connecting networks of signatures.

³The success of EMI's tonal replication was recently demonstrated at a lecture given by Douglas Hofstadter at McGill, during which the audience was asked to determine which of a group of recorded piano works were by Rachmaninov and which were by EMI. At least half of the audience, which consisted largely of musicians, was unable to identify the works correctly.

⁴Cope, p. 173.

Not all scholars are in agreement about the utility of language models for music. Harold Powers, writing from an ethnomusicological perspective, points out that not all musics are language-like to the same degree. He claims that "the linguicity of languages is the same from language to language, but the linguicity of musics is not the same from music to music."⁵ Some cognitive scientists, such as Howard Gardner, go so far as to argue that music and language represent two quite separate aspects of human cognition; therefore any structural similarity between the two may be merely epiphenomenal.⁶ It is important to keep in mind, however, that, as language scholars such as Roman Jakobson have emphasized, *literary* language differs from ordinary language in significant ways; and musical compositions in the western tradition may have more in common with this literary style of language than with ordinary language. Most music scholars, including Powers, would concede that western music is language-like to a high degree. But it would be more accurate to claim that western music is *literary*. Unquestionably, high status has been accorded literary creation in the west; the culture itself, as we come to know it, is largely structured by its own canonical literary texts. Given the exalted position of literature, it is reasonable to claim that other media intentionally aspire to the conditions of literature. Very generally then, a suitable metaphor for compositions of western music since the eighteenth-century is not spoken or written language per se, but rather composed literature.

A literary model for music has several advantages over a rigorous linguistic model. For one thing, it allows us to shift our emphasis onto *works* of music rather than rule-governed *systems* of music. For another, it grants a place to the musical equivalents of literary ambiguity and metaphor, logical anomalies not generally represented in strict grammatical models. Also, a literary model brings with it the critical methodologies of literary scholarship, many of which may be usefully employed in the service of music theory. The ways of thinking about texts that are peculiar to literary criticism offer a fresh

⁵Powers, p. 38.

⁶See Howard Gardner, *Frames of Mind* (London: Paladin, 1984).

perspective for music theorists accustomed to viewing musical works as manifestations of rule-governed systems. The literary-historian Stephen Greenblatt's position is typical of much recent scholarship that seeks to interpret literary texts in terms of the cultural work that they perform.⁷ He cautions against theoretical positions which overemphasize authorship on one hand, or purely abstract, ahistorical narrative systems on the other:

Literature functions within a system [of culture] three interlocking ways: as a manifestation of the concrete behaviour of its particular author, as itself the expression of codes by which behaviour is shaped, and as a reflection upon those codes. . . . If interpretation limits itself to the behaviour of the author, it becomes literary biography, (in either the conventionally historical or psychoanalytic mode) and risks losing a sense of the larger networks of meaning in which both the author and his work participate. If, alternatively, literature is viewed exclusively as the expression of social rules and instructions, it risks being absorbed entirely into an ideological superstructure. . . . Finally, if literature is seen only as a detached reflection upon behaviour, a view from a safe distance, we drastically diminish our grasp of art's concrete function in relation to individuals and to institutions, both of which shrink into an obligatory 'historical background' that adds little to our understanding.⁸

Greenblatt's caveat rings true for many music scholars who have found problematic the traditional division of musical scholarship into its separate theoretical and musicological branches: the feeling is that theory has tended to become enthralled with the internal structure of the musical object, while musicology has sometimes concentrated on cultural, biographical, and historical contexts at the expense of "the notes." The theoretical stance advocated by Greenblatt and other literary critics infuses musical scholarship with a more pluralistic, interpretive spirit, one that recognizes the role of personal, social, historical, and technical factors in musical compositions.

Besides its underlying premises about the position of art within culture, literary theory offers a variety of analytical tools that have potential applicability to music. Narratology, the study of the organization of stories, is one such tool. Roland Barthes has described narratology as a kind of "second linguistics," a linguistics of discourse. This second discursive level is required because "linguistics stops at the sentence, which is the

⁷Stephen Greenblatt, *Renaissance Self-Fashioning* (Chicago: University of Chicago Press, 1980).

⁸Greenblatt, p. 4.

last unit it considers itself entitled to deal with: . . . Hence linguistics cannot take an object superior to the sentence, because, beyond the sentence, there is never anything but more sentences."⁹ Barthes sees a homological relationship between the organization of the sentence and that of narrative: "structurally, narrative participates in the sentence without ever being reducible to a total of sentences: narrative is a great sentence, just as every constative sentence is, in a way, a little narrative."¹⁰ A musical application of narratology will likewise consider large-scale musical form as an irreducible entity with its own syntactical logic, but one which shares certain characteristics with smaller units of musical structure.

In some ways, a narrative model can conflict with the analytical and interpretive goals outlined by Greenblatt. At first glance such a model might appear to retreat into a theoretical position which attends to rule-governed systems, rather than to individual works. Furthermore, a narrative model can seem to lead the theorist back to intrinsic musical structure, away from the broader "networks of meaning" that Greenblatt urges we explore. Later in this chapter I will address the work of several music scholars who have criticized narratology on these very grounds. At this point I will simply assert that the exploration of the organization of a work's structure does not preclude the possibility that such structures or syntactic systems are produced within a broader cultural context, or that structure can have meaning. The point is simply to establish the behavioural and cultural norms as they are manifested in the conventional aspects of works, a necessary step before determining the ways in which an individual work subverts, conforms with, escapes, universalizes, personalizes, etc., those norms. In the next part of this chapter I will argue that music and narrative do share certain significant traits, and that these shared attributes are sufficient to justify a narrative model for music.

⁹Roland Barthes, *The Semiotic Challenge*. Trans. by Richard Howard (New York: Hill and Wang, 1988), p. 98.

¹⁰Barthes, p. 100.

Naturally the assumption that there are concrete similarities between music and narrative depends upon the way that narrative itself is defined. The possible definitions of narrative range from conservative interpretations in which narrative is construed simply as a category of fiction, to more radical ones in which narrative is seen as a fundamental attribute of cognition and socialization. Narratologist Gerald Prince's definition is one that is widely accepted and is suitably broad for the present purposes: Narrative, he states is "the recounting . . . of one or more real or fictitious events communicated by one, two, or several (more or less overt) narrators to one, two, or several narratees."¹¹ Significantly, this definition includes the reader or audience as an integral part of narrative. A narrative theory for music, then, would acknowledge the vital social dimension and communicative function of musical works. What Prince calls in the following paragraph "the contract between narrator and narratee" may be understood to apply to the relationships among composers, performers, and listeners in a musical context:

The very depiction of a narrator and narratee emphasizes the fact that narrative is not only a product but also a process, not merely an object but also an act which occurs in a certain situation because of certain factors and with a view to fulfilling certain functions (informing, diverting attention, entertaining, persuading, etc.). More specifically, narrative is a context-bound exchange between two parties, an exchange resulting from the desire of (at least one of) these parties, and the "same" story can have different worth in different situations. . . . This sheds light on the tendency of many narrative texts to underline the contract between narrator and narratee, that contract on which the very existence of the narrative depends: I will tell you a story if you promise to be good; I will listen to you if you make it valuable; . . . This also explains why unsolicited narratives, in particular, must awaken and maintain desire in the audience by relying on the dynamics of surprise and suspense; why narrators try to make it clear that their narrative has a point; and why the very shape of the narrative is affected by the situation in which it occurs and the goal which it seeks to attain, with the sender of the message giving certain kinds of information, disposing it in a certain way, adopting one kind of focalization as opposed to another, underscoring the importance or strangeness of certain details, so that the receiver can better process the information in terms of certain imperatives and ends.¹²

Here Prince emphasizes the fact that narrative always has a kind of exchange value. But he adds that narrative, as its etymology suggests, also represents a particular *mode of*

¹¹Gerald Prince, *A Dictionary of Narratology* (Lincoln: University of Nebraska Press, 1987), p. 58.

¹²Prince, p. 59.

knowledge.¹³ In other words, one way (*the way*, some would argue) that the construction and maintenance of knowledge about the world is attained is through stories. A story represents a way of creating meaning out of daily happenings, and this story, in turn, will serve as the basis for anticipation of future events. This partly explains the acquisitive nature of reading and listening, and the readers' motivation to learn new stories. Inasmuch as musicians are motivated to seek out new works for listening and performing, music might be understood to possess something like this same attribute.

As for the structural characteristics of narrative, Prince begins with the classical Aristotelean concept of the story as a coherent entity with a beginning, middle and end:

In order to distinguish narrative from mere event description, some narratologists . . . have defined it as the recounting of at least two real or fictive events (or one situation and one event), neither of which logically presupposes the other. In order to distinguish it from the recounting of a random series of situations or events, narratologists . . . have also argued that narrative must have a continuant subject and constitute a whole.¹⁴

The musical counterpart to this notion is found in many theories of musical form. The idea that events should cohere, yet not explicitly infer one another is an underlying premise in such musical concepts as developing variation, departure and return, and perhaps even consonance and dissonance. Granted, this represents a somewhat conservative view of form in both literature and music, one that has been challenged many times by creative writers and composers. Nevertheless, the notion of "unity in variety" continues to be a significant issue in theoretical conceptions of both musical and narrative form. Prince continues:

Narrative can thus shed light on individual fate or group destiny, the unity of a self or the nature of a collectivity. Through showing that apparently heterogenous situations and events can make up one signifying structure (or vice versa) and, more particularly, through providing its own brand of order and coherence to (a possible) reality, it furnishes examples for its transformation or redefinition and effects a mediation between the law of what is and the desire for what may be. Most

¹³The word "narrative" derives from Latin *gnarus*, meaning "knowing," "acquainted with," or "expert."

¹⁴Prince, p. 58. See also Gerald Prince, *A Grammar of Stories* (Bloomington: Indiana University Press, 1973). There Prince argues that what he calls a "minimal story" consists of two states and one event: S-E-S'. A "complex story" is one which combines two or more minimal stories through linking, embedding, or alternation.

crucially, perhaps, by marking off distinct moments in time and setting up relations among them, by discovering meaningful designs in temporal series, by establishing an end already partly contained in the beginning and a beginning already partly contained in an end, by exhibiting the meaning of time and/or providing it with meaning, narrative deciphers time and indicates how to decipher it. In sum, narrative illuminates temporality and humans as temporal beings.¹⁵

The above passage highlights the principal attribute of narrative that makes it a valuable model for music: by reading "music" in place of "narrative" in the above paragraph, we can obtain an accurate portrayal of the way music works within *time*. Some writers have suggested that the evocation of significant wholes out of successive temporal events is a property unique to narrative. The part/whole interplay that Prince describes has been approached in different ways by other scholars. Paul Ricoeur, for example, speaks of the *configurational* and *episodic* dimensions of narrative.¹⁶ These categories refer to the ways in which a reader processes a narrative in terms of an expected overall pattern of events on one hand and as a scattering of discrete moments on the other. Addressing temporality less explicitly and focusing more on the properties of the text itself, Roland Barthes speaks about the *readerly* and *writerly* aspects of narrative: the features of a text which conform to an expected pattern and those that are eccentric with respect to our expectations. The two dimensions of narrative ultimately have to do with the dual nature of perception. Cognitive scientists tend to conceive of this as a process in which a moment-by-moment engagement with incoming sensory data combines with a reflective/predictive mode of attending. Psychoanalytic theories, on the other hand, would frame this in terms of a dialectic in which the many parts of the self express discrete modes of attention before condensing into a transcendental unitary ego: psychoanalyst Christopher Bollas, writing about object relations, explains that "all self-experience involves this split, which can be described as a division between ourself as simple selves (when we are immersed in desired or evoked experience) and ourself as complex selves (when we think about experience)."¹⁷

¹⁵Prince, p. 58.

¹⁶Paul Ricoeur, "Narrative Time" in *Critical Inquiry* 7 (Autumn 1980).

¹⁷Christopher Bollas, *Being a Character: Psychoanalysis and Self Experience* (New York: Hill and Wang, 1992), p. 27.

If, however, as Bollas states, all experience is characterized by this split, then narratology's emphasis on the interplay of configurational and episodic dimensions may be somewhat overstated. After all, any sort of perceptual act, temporal or otherwise, may be characterized in terms of a pattern-matching cognitive exercise, an exercise so universal as to be ultimately trivial. But some narratologists insist that narrative's temporal dimension imparts a special quality to the way that it is processed by a reader. Paul Ricoeur, in particular, has written persuasively on this issue. Narrative, he claims, "reckons with time." The act of reading or writing narrative involves a unique process of eliciting a *configuration* from a *succession*. Following a story involves what he calls "the paradox of contingency:"

But a narrative conclusion can be neither deduced nor predicted. There is no story if our attention is not moved along by a thousand contingencies. This is why a story has to be followed to its conclusion. So rather than being predictable a conclusion must be acceptable. Looking back from the conclusion to the episodes leading up to it, we have to be able to say that this ending required these sorts of events and this chain of actions. But this backward look is made possible by the teleological movement directed by our expectations when we follow a story.¹⁸

Ricoeur maintains that our experience of time is always "narrativized," and that narrative is at the core of cognitive and social existence. It is as if we can only grasp our temporal condition through the telling of stories. In Ricoeur's writing, then, narrative appears to function as a kind of interface between a lived experience of time and a mental representation of that experience that is more spatial or static in nature.

Recent research on questions of musical time, such as Jonathan Kramer's book *The Time of Music*, has many potential points of contact with Ricoeur and other narratologists who have dealt with the nature of temporal perception in narrative.¹⁹ Their work raises general issues of memory and cognitive representation, issues which pertain to specifically musical questions about, for instance, pitch-space and formal lay-out and how we might hear them. Ricoeur's image of an interface between temporal and spatial dimensions is

¹⁸Ricoeur, p. 174.

¹⁹Jonathan Kramer, *The Time of Music: New Meanings, New Temporalities, New Listening Strategies* (New York: Schirmer Books, 1988).

evocative and possibly of great value for music theory.²⁰ It can provide a framework for understanding how spatially derived notions, like symmetry, can function in a temporal medium like music. It also suggests that referential meanings can arise when characteristics of one domain are mapped onto another. Ricoeur's ideas thus draw attention to the network of relationships between not only music and narrative, but also music and movement, and music and visuality.

Some Narratologies and Their Applications to Music

Having established some of the important general ties between music and narrative, I will now discuss several specific narratologies that have been or could be employed in music analysis. One of the first and most influential modern accounts of the structure of narrative is the model proposed by Vladimir Propp. His *Morphology of the Folktale*, first published in the 1920s, is a study of the structural organization of one-hundred different Russian fairytales.²¹ Propp sets out to find common narrative patterns across this repertoire of stories. This leads him to propose the idea of narrative functions, archetypal events which form a kind of fundamental structure that is shared by many instances of narrative. A function is an event in a story which has consequence for the subsequent direction taken by the story's action. He argues that all folktales consist of a series of events drawn from a limited number of possible functions. Similarly, the actors or personages in folktales can be categorized in terms of a limited number of possible *roles*. Consequently the notion of an actor in Propp's analysis is rather abstract and is to be distinguished from the notion of a character: actors are defined not in terms of psychological essences, but rather according to particular sets of functions that they perform or participate within. This means that one role can be performed by more than one

²⁰Gilles Deleuze imagines something like this interface when he describes the ability of human memory to create a "durable present". See his *Difference and Repetition*, trans. by Paul Patton (New York: Columbia University Press, 1994).

²¹Vladimir Iakovlevich Propp, *Morphology of the Folktale*, 2nd edition, revised and edited by Louis A. Wagner (Austin: University of Texas Press, 1968).

character, or, conversely, a single character could play several roles. Propp identifies seven of these archetypal roles, any of which might be found in a typical folktale: *Villain*, *Donor*, *Helper*, *Sought-for Person*, *Dispatcher*, *Hero*, and *False Hero*. In Propp's model, the roles are actualized through the various narrative functions, events which remain essentially the same from one story to another in the corpus of Russian folktales. He determines that there are a total of thirty-one discrete functions. Not all stories contain all of the functions; any number of these events can occur in a given tale. Propp's complete list of functions is as follows:²²

1. *absentation*: of some member of a family or group from their home;
2. an *interdiction* addressed to the hero;
3. *violation*: of the interdiction;
4. *reconnaissance* attempted by the villain;
5. *delivery* of information about the victim to the villain;
6. *trickery* perpetrated by the villain in order to deceive the victim;
7. the victim's unwitting complicity with the villain;
8. *villainy* causing harm to a member of the family or group;
OR *lack*: one member of a family either lacks or desires something;
9. *mandate*: a misfortune or lack is made known and the hero is approached with a request or command;
10. the *hero's decision* in which he agrees to or decides upon counteraction;
11. *departure* of the hero from home;
12. *the first function of the donor*: the hero is tested, interrogated, attacked, etc..
which prepares the way for his receiving either a magical agent or helper;
13. the hero's reaction to 12;
14. *provision*: the hero acquires the use of a magical agent;
15. *spatial transference*: the hero is led to the whereabouts of an object of search;
16. *struggle* between the hero and villain;
17. *branding* or marking of the hero;
18. *victory*: over the villain;
19. *liquidation* of misfortune or lack;
20. *return*: of the hero;
21. *pursuit, chase*: the hero is pursued;
22. *rescue* of the hero from pursuit;
23. *unrecognized arrival*: the hero arrives home or in another country,
unrecognized;
24. *unfounded claims* : a false hero presents unfounded claims;
25. *difficult task*: proposed to the hero;
26. *solution*: of the task;
27. *recognition*: of the hero;
28. *exposure* of the false hero;
29. *transfiguration*: the hero is given a new appearance;

²²There are some subtle differences among the different English translations of Propp's work. This list is adapted from two sources: Prince's synopsis of Propp's theories in *A Dictionary of Narratology* and from A.J. Greimas, *Structural Semantics* (Lincoln: University of Nebraska Press, 1984).

30. *punishment*: of the villain;
31. *wedding*, or *ascension to the throne*.

This list represents the invariant aspects of Russian folk-tale structure; presumably, such plot elements are enduring because of their relevance to the basic social and psychological tasks that people routinely confront within their culture. The crucial issue for Propp is that these 31 functions always occur in the given order. For instance, if a story consists of trickery (#6), departure of the hero from home (#11), struggle between the hero and the villain (#16), victory (#18), and return of the hero (#20), these events will happen in that particular chronological order. This is related to the fact that many of these generalized plot-driving events are conceived as functional dyads: the hero is unrecognized and later recognized; the hero leaves home, and later returns, etc. Thus many of the events are implicative while others complete a pair of actions. Propp's system of functions and their prescribed chronology is an attempt to account for expectation of continuation in narrative, the fact that certain events imply further events while others intimate closure.

The idea of narrative as an ordered series of functions has relevance for music analysis. Application of this kind of narratology has been pursued by Anthony Newcomb, who has incorporated Propp's narrative theory into his analysis of the music of Robert Schumann. Newcomb claims:

The kind of narrative structure (and the kind of literary model) that seems closest to the musical instance and that provides the best point of departure for the exploration of my analogy [between paradigmatic narrative succession in literature or history and formal types in music] is the one first proposed by the Russian Formalist Vladimir Propp in his now sixty-year old study of Russian folktales.²³

Newcomb characterizes the structural analysis of narrative as a process by which a *paradigmatic plot*--a typical series of events in a prescribed order--is deduced from a repertoire of texts. Newcomb stresses that this paradigmatic plot:

... is not the same thing as a quasi-architectural formal schema, such as ABA, with its patterns of repetition and complementarities. The paradigmatic plot may be a unidirectional unfolding of events, without overt repetition. Nor is it the same as a

²³Anthony Newcomb, "Schumann and Late Eighteenth-Century Narrative Strategies," *Nineteenth-Century Music* 11/2, p. 165.

series of musical sections defined by specific thematic content. The surface content of each individual instance of the series may differ widely. The paradigmatic plot is a series of functions, not necessarily defined by patterns of sectional recurrences or by the specific characters fulfilling the functions.²⁴

The value of Propp's model, then, is that it does not necessarily rely on *repetition* within the work to delineate form. Newcomb points out that some 18th- and 19th-century theories of musical form, like those of Heinrich Koch and A.B. Marx, are based upon a just such a functional understanding of the construction of motives, phrases, sections and movements--a functional understanding that closely parallels Propp's conception of narrative form. (William Caplin's theory of classical formal functions should also be added to these.²⁵)

Newcomb continues:

The two general questions that arise are: first, what are the codes, or conventions, by which we isolate musical events as discrete identities; and, second, what are the codes or conventions by which we locate them in a paradigmatic series of events, pre-existent in our minds and drawn from past experience?²⁶

Newcomb stresses that the very act of segmenting a work into component elements is code-governed. In addition, the way in which events succeed one another is perceived according to patterns that are stored in memory. These patterns characterize the nature of musical continuity and succession, not the specific musical content or material. Newcomb goes on to imply that these patterns might be of a general enough character as to characterize event successions in more than one medium:

Inasmuch as music may be (and is by many listeners) heard as a mimetic and referential metaphor, the mimesis involved is of modes of continuation, of change and potential. And modes of continuation lie at the very heart of narrativity, whether verbal or musical.²⁷

Here Newcomb suggests the possibility that the modes of continuation peculiar to literary narrative might be rendered musically--mapped onto sequences of musical events--either by composers or by listeners. This idea has far-reaching implications for theories of musical

²⁴Newcomb, p. 165.

²⁵William E. Caplin, *A Theory of Formal Functions*, forthcoming.

²⁶Newcomb, p. 167.

²⁷Newcomb, p. 167.

meaning: a paradigmatic plot could be deduced not just from one's experience with other pieces of music, but also from one's experience with nonmusical phenomena, like literature, dance, or film, or from combinations of any of these. And these modes of continuation could perhaps carry with them particular affective connotations of their original medium.

Since Propp first published his study many scholars have argued that his model needs further refining to better capture the processive aspects of narrative. Roland Barthes, for example, considers Propp's system to be too schematic to adequately capture the flow of narrative events. Barthes addresses this in his essay "Introduction to the Structural Analysis of Narrative" (1966). He argues that:

...the analysis of folktales has revealed the major actions, the primordial articulations of the story (contracts, ordeals, or adventures undertaken by the hero); but in literary narrative, once these principal actions are identified, supposing this can be readily done, there remains a host of minor actions, apparently trivial and more or less mechanical (knocking at the door, engaging in a conversation, making an appointment, etc.): are we to consider these subsidiary actions as a sort of insignificant background and withhold them from analysis on the pretext that it goes without saying that the discourse utters them in order to link two principal actions? No, for this would be to prejudice the final structure of the narrative, this would mean inflecting that structure in a unitary, hierarchical direction.²⁸

Barthes' method of dealing more exhaustively with the details of narrative action is to incorporate them into a system of narrative *levels*. In his essay, Barthes develops an analytical system that is at once accessible to any musician familiar with the idea of structural levels in Schenkerian theory. Barthes begins by assigning different degrees of structural weight to different events within a narrative plot. As in Propp's analysis, greater emphasis is placed on the events which have consequences for the subsequent playing out of the action. Those events which can not be eliminated without destroying some kind of causal-chronological coherence are designated as *cardinal* functions. Other events, those which are not logically essential for causal coherence but which are merely chronological,

²⁸Roland Barthes, *The Semiotic Challenge*, p.137.

are grouped together around these crucial nodes. These he call *catalyses*, and claims that they serve to "expand" cardinal functions. Barthes illustrates the distinction as follows:

For a function to be cardinal, it suffices that the action to which it refers opens (or sustains or closes) an alternative consequential for the rest of the story, in short that it inaugurate or conclude an uncertainty. . . . On the other hand, between two cardinal functions, it is always possible to arrange subsidiary notations, which agglomerate around one nucleus or another without modifying their alternative nature: the space which separates "*the telephone rang*" and "*Bond answered*" can be saturated by a host of tiny incidents or tiny descriptions: "*Bond went over to the desk, picked up a receiver, put down his cigarette,*" etc.²⁹

It is a short step to setting up musical counterparts to Barthes ideas here.

Schenkerian analysis already provides a method of segmenting a tonal work into what would be the equivalent of cardinal and catalytic functions. The structural bass and soprano of a tonal work may be understood as a series of cardinal nuclei around which prolongational material is arranged like the catalyses in Barthes's scheme.

In addition to cardinal and catalytic functions, Barthes identifies another element in the narrative structure which he calls the *index*. Indices are elements in the story that are linked to others in the same sequence, not in chronological or causal terms, but in metaphorical terms. Indices refer to moods, personality traits of the characters, or they provide information about time and place setting. This category allows Barthes to incorporate into his analysis many elements that would be left out of a strictly event-based or role-based model: elements of description, symbols, references to the tacit knowledge of the readers--the things that do not necessarily have bearing upon the course of a story's chronological action, but which are nonetheless deemed to be an integral part of the narrative. "The indices," Barthes explains, "imply an activity of decipherment: the reader must learn to know a character, an atmosphere; the items of information supply a ready-made knowledge; . . . [they] serve to authenticate the reality of the referent, to implant the fiction in reality."³⁰

²⁹Barthes, p. 108.

³⁰Barthes, p. 110.

The segmentation of narrative into its cardinal, catalytic, and indexical elements allows Barthes to make several interesting observations. He claims, for example, that different narrative genres can result from a variation in emphasis on one or another of these different functional categories:

The two major classes of units, Functions and Indices, should already permit a certain classification of narratives. Certain narratives are powerfully functional (such as folktales), and on the other hand others are powerfully indicial (such as "psychological" novels).³¹

Within a single narrative, Barthes is able to show how the indexical, catalytic, and cardinal elements can combine in interesting ways. For example, one element in the narrative may fulfill several functions at once:

Thus the whole play of possibilities arises in the narrative economy: in the novel *Goldfinger*, Bond, having to search his adversary's bedroom, receives a skeleton key from his partner: the notation is a pure (cardinal) function; in the film, this detail is altered: Bond manages to relieve an unprotesting chambermaid of her keys: the notation is not only functional now, but also indicial, it refers to Bond's character (his offhandedness and his success with women).³²

Barthes ideas here strongly suggest musical counterparts. For one, we could broadly characterize the distinction between tonal and post-tonal music in terms of the former's pronounced functionality, and the latter's reliance on the musical equivalent of the index, which could be "secondary parameters" like timbre, sonority, and gesture. Leonard Meyer's view of music history relies on this kind of characterization. Barthes' second point, that functions and indexes can combine on the narrative surface, provides a good analogy for the often profoundly satisfying moments in music where a passage fulfills both a motivic function and structural role, as in the case of motivic enlargement.

Barthes states that the various cardinal functions in a narrative succeed each other according to patterns, although these are not presented schematically as in Propp's model. Rather, Barthes comes up with a list of simple relations that govern the sequence of actions: the relationships between events may be characterized as, for example, consecutive,

³¹Barthes, p. 108.

³²Barthes, p. 110-111.

consequential, volitional, reactive, or durative. It is the logic of these sequences, Barthes argues, that makes a narrative "readable." Barthes claims that "by staking out an elementary rationality with sequences of actions, we approach the *limits* of narrative, beyond which begins a new art, which is that of narrative transgression."³³

The idea of transgression of narrative logic is dealt with in detail in Barthes's later work *S/Z* (1970).³⁴ Greatly influenced by the writings of Julia Kristeva, Jacques Derrida, Michel Foucault, and Jacques Lacan, Barthes' *S/Z* inaugurates a new, poststructuralist phase in his work. Speaking of *S/Z* in relation to the "Introduction to the Structural Analysis of Narrative," Barthes claims that "the latter work in some sense denies the former by abandoning the structural *model* and resorting to the practice of the infinitely different Text."³⁵ Barthes' work at this time also has a more explicit political dimension. He views the study of narrative as part of the larger project of semiology, which he defines as "the close analysis of the processes by which the bourgeoisie converts its historical class-culture into universal nature."³⁶ Its value for ideology critique lies in its ability

. . . to question its own discourse: as a science of language, of languages, it cannot accept its own language as a datum, a transparency, a tool, in short as a metalanguage: strong with the powers of psychoanalysis, it interrogates itself as to *the place from which it speaks*, as interrogation without which any science and any ideological criticism are ridiculous: for Semiology, at least so I hope, there exists no *extraterritoriality* for the subject, even if he is a scientist, with regard to his discourse; in other words, finally, science knows no site of security, and in this it must acknowledge itself as *writing*.³⁷

In *S/Z*, an analysis of Honore de Balzac's *Sarrasine*, the narrative text is no longer viewed as a structure but as a "structuration", a work, or a game: Barthes argues that a literary text "is not a group of closed signs, endowed with a meaning to be rediscovered, it is a volume of traces in displacement."³⁸ In order to incorporate the plurality of narrative voices into the analysis of narrative, Barthes proposes analyzing Balzac's story in terms of a variety of

³³Barthes, p. 147.

³⁴Barthes, *S/Z*. Trans. by Richard Miller (New York: Hill and Wang, 1974).

³⁵Barthes, "Introduction: The Semiological Adventure," in *The Semiotic Challenge*, p. 7.

³⁶Barthes, *Ibid.*, p.5.

³⁷Barthes, *Ibid.*, p. 8.

³⁸Barthes, *Ibid.*, p. 7.

narrative *codes*, recurring patterns of narrative convention according to which readers process the text. The notion of narrative code is closely tied to Kristeva's idea of intertextuality, the ways in which a discourse refers to other texts: a narrative code is essentially a feature or group of features common to many texts. The codes are a new way of representing the syntactical logic of actions and the workings of metaphor. They are no longer configured in a hierarchical relationship, but instead operate concurrently and in overlapping ways. Barthes describes five of these codes: the proairetic, the hermeneutic, semic, symbolic and referential codes. The *proairetic* code is essentially equivalent to the sequence of cardinal functions described in his previous essay. The proairetic code operates when a narrative presents transformations of some initial situation. It is the pattern according to which a narrative may be read as a series of actions, or functions. The *hermeneutic* code is the pattern by which a narrative forms a path leading from an enigma to a possible solution. A passage signifies in terms of this code when there is some question, allusions to possible answers, obstacles to finding the solution, or resolution of the problem; the archetypical example is the detective story. Unlike the proairetic and hermeneutic codes, the remaining three codes are not chronologically conceived: the *semic* code governs the construction of characters, things, and settings in a narrative; the *symbolic* code has to do with ways that items in the narrative are linked with broad abstract meanings; and the *referential* code represents the ways in which items refer to a reader's tacit systems of beliefs, such as religious or scientific assumptions--it governs the elements in the narrative that make it seem life-like or plausible. These last three codes allow Barthes to deal in a more subtle and differentiated way with narrative elements that were formerly subsumed under the category of index in the previous essay.³⁹

³⁹Barthes proposes several additional codes in his essay "The Structural Analysis of Narrative Apropos of Acts 10-11." (in *The Semiotic Challenge*, p. 217 -245); These include the *narrative* code, which pertains to the ways in which fictional spaces are marked off from reality (as in the use of the phrase "once upon a time"); the *topographic* code which deals with geographical setting and its associated functions (e.g., the Orient, in western conceptions of it); and the *onomastic* code, which governs the construction of proper names.

Recent articles by Patrick McCreless demonstrate musical applications of Barthes's theories.⁴⁰ McCreless has found Barthes's system of codes particularly helpful in amplifying and modifying Schenkerian theory. In the proairetic code, the code which governs the succession of the principal events, he sees an equivalent to the linear-harmonic structure of a tonal work. The semic code McCreless sees as a model for motivic structure: the motive acts as the musical counterpart for a character or role in a story. The hermeneutic code, the posing and solving of enigmas, is a parallel to the process of motivic development and "working out" of tonal problems, a process that is emblematic of late 18th- and 19-century instrumental practice. McCreless demonstrates the musical parallels to Barthes codes in a discussion of Beethoven's D major piano trio Opus 70, no. 1. He points out that, while Schenker would see the proairetic code, the sequence of actions that make up the *Ursatz*, as the primary structuring device of the piece, a Barthian reading would view it as just one among several equally significant codes. In fact, Barthes would claim that the proairetic code is precisely the one we are "invited to resist"; the other codes may actively work to obscure its pattern. In other words, the motivic structure of the piece might have a logic of its own, a narrative shape that may well work against that of the *Ursatz*. Thus, Barthes's notion of a plurality of structures acts as a corrective to the Schenkerian tendency to privilege the *Ursatz* and to subordinate other factors to it. By viewing musical works in terms of a multiplicity of narrative codes, the analyst is freed from having to account for motivic and other features in terms of one single, unified, hierarchically interrelated structure.

Part of McCreless's work deals with the issue of musical closure. In a literary work, closure is achieved when the codes which evoke the notion of time, the hermeneutic and the proairetic, are fully played out in the work. The ultimate resolution of an initial question or enigma represents completion of the "hermeneutic sentence" and the end of the

⁴⁰Patrick McCreless, "Roland Barthes's *S/Z* from a Musical Point of View," *In Theory Only* 10/7 (1988), pp. 1-29; and "The Hermeneutic Sentence and Other Literary Models for Tonal Closure," *Indiana Theory Review* 12 (Fall 1991), pp. 35-74.

proairetic sequence of actions signals syntactic closure. McCreless asks whether there might not also be a kind of syntax for the other codes that would permit, for example thematic closure, or rhetorical closure in musical works. This raises the general question of how musical works in which the proairetic and hermeneutic codes play a small role can *end*. In a piece of post-tonal music which does not have a proairetic *Ursatz*, what can signal terminativity? Leonard Meyer has argued that such pieces must rely on gestural closure, closure intimated through secondary parameters, rather than syntactical closure. McCreless proposes several alternative ways that closure might be achieved, for example, through the use of formal symmetry. These alternative closural devices can perhaps be taken as evidence of other codes that are unique to the medium of instrumental music.

It must be emphasized that the point of Barthes' system of narrative codes is not to establish one particular interpretation or meaning of a text, or even *a* meaning. The codes, he says "are simply associative fields, a supratextual organization of notations which impose a certain notion of structure: the instance of the code, for us, is essentially cultural: the codes are certain types of already-seen, of already-read, of already-done: the code is the form this *already* takes, constitutive of the writing of the world."⁴¹ Codes thus constitute a set of practices familiar to users of a particular medium situated within a broad cultural framework. They also tend to be inexplicit. What sets the notion of codes apart from more strict structuralist theories of narrative is the idea that the codes are not only situated socially and culturally, but also historically: they are dynamic systems which change over time. In fact, they are inclined to become overused and subsequently abandoned by users. The concept of narrative codes thus contrasts with structuralist accounts of narrative which tend to focus on invariant characteristics common to all narratives.

Further investigations of narrative's invariant characteristics have been taken up in the writings of Algirdas-Julien Greimas.⁴² Like Barthes, Greimas's work on narrative is

⁴¹Barthes, "Textual Analysis of a Tale by Edgar Allan Poe," in *The Semiotic Challenge*, p. 288.

⁴²Greimas's theories are developed in a series of books and articles written throughout the 1960s and 70s. Those currently available in English translation include: *On Meaning: Selected Writings in Semiotic Theory* trans. by Paul J. Perron and Frank H. Collins (Minneapolis: University of Minnesota Press, 1987);

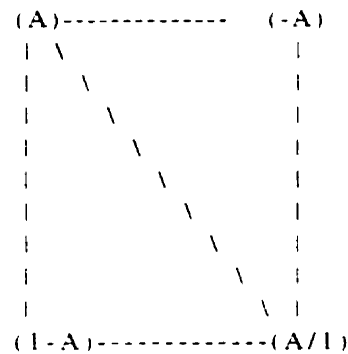
part of a more general project, that of semiotics. Greimas's semiotics represents the development of a method to analyze and account for meaning and to outline a grammar and syntax for signification itself. To that end he examines many kinds of discourse, including folktales, myths, and other types of narrative, as well as philosophy, history, and natural languages. His work draws upon Propp's functional model but also upon premises of Saussurean linguistics. From Saussure, Greimas takes the idea that the meaning of a sign inheres in its relationship to other signs with which it exhibits particular differences. In Saussure's "differential" definition of language, components such as words and phonemes, are not "substances" but rather "forms" which are generated out of opposition to other forms in a system of differences. In other words, no single element in the system is recognizable without other elements in the system. Since individual signs always signify according to relationships with other signs, Greimas argues that it is possible to model the elementary structure of signification itself by classifying all possible relationships of difference.

The logical possibilities of binary opposition can be demonstrated with phonological examples, such as the sounds of the English language.⁴³ Phonemes acquire signification from their position within a network of binary oppositions between pairs of sounds. One kind of relation of difference obtains when one term is marked while another is unmarked in some way: the phonemes "p" and "b" represent this opposition in that one sound is voiced and the other unvoiced. A different relationship obtains for the two vowels "e" and "i", where each phoneme exhibits differing degrees of some gradient property: in this case we infer a continuum of vowel sounds and isolate two points along the continuum. The difference between the consonants "p" and "t" represents a third type of opposition in which

The Semiotics of Passions: From States of Affairs to States of Feeling, trans. by Paul J. Perron and Frank Collins (Minneapolis: University of Minnesota Press, 1993); *Structural Semantics: An Attempt at a Method*, trans. by Danielle McDowell, Ronald Schleifer, and Allan Velie (Lincoln: University of Nebraska Press, 1984); A.J. Greimas and François Rastier, "The Interaction of Semiotic Constraints," in *Yale French Studies* 41 (1968).

⁴³The following explanation is based on an example given in Schleifer, Ronald, Robert Con Davis, and Nancy Mergler, *Culture and Cognition: The Boundaries of Literary and Scientific Inquiry* (Ithaca: Cornell University Press, 1992), p. 70.

each element has a unique distinguishing mark that is completely lacking in the other; here one is a "labial stop" and the other an "alveolar stop." Greimas formalizes these types of binary oppositions, positing three categories of logical relationships: relations of contrariness, of contradiction, and of complementarity. When the three relationships pertain to a single term, the resulting network of relationships can be represented by a Boolean matrix of functions, such as A , $\neg A$, $1-A$, $1/A$. They can also be represented by what Greimas calls the "semiotic square." Each of three logical relations corresponds to an axis in the square, the horizontal, vertical, and diagonal:



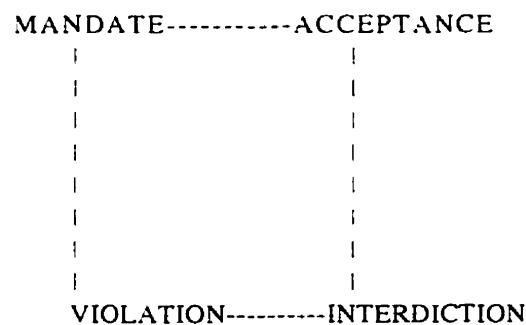
An element on the square signifies according to its relationship with three other elements along each of the three separate axes. Semiotician Nancy Armstrong explains the square this way: "Once any unit of meaning (s_1) is conceived, we automatically conceive of the absence of that meaning (s'_1), as well as an opposing system of meaning (s_2) that correspondingly implies its own absence (s'_2)."⁴⁴ Ronald Schleifer, another semiotics scholar, explains how the square can be used in analysis: "The semiotic square is a logical mapping out of structural possibilities: for any content which can be understood as itself analyzable into binary oppositions (S vs. non S), the square, repeated and superimposed, will exhaust the logical structural relations between its minimal elements."⁴⁵ The idea of

⁴⁴Nancy Armstrong, "Inside Greimas's Square: Literary Characters and Cultural Restraint," in *The Sign in Music and Literature*, ed. Wendy Steiner (Austin: University of Texas Press, 1981), p. 54.

⁴⁵Ronald Schleifer, "Introduction" to *Structural Semantics*, p. xxxiii.

the semiotic square is a central aspect of Greimas's work.⁴⁶ Greimas assumes that this model of signification pertains not only to elements of language, but to any system of signs. For Greimas, a narrative event constitutes a sign. Just as a linguistic sign is defined in terms of a system of differences, Greimas claims that narrative events function within a similar network of oppositions.

Briefly, Greimas understands narrative as a sequence of events oriented toward a particular goal. In *Structural Semantics*, Greimas reexamines Vladimir Propp's narrative model. He sets out to reduce Propp's model to a more general "actantial" model. First, by pairing off those functions which may be understood to presuppose one another (i.e., "struggle" and "victory"), he reduces Propp's 31 functions to 20. Now he further reduces these 20 functions, through a mapping, or "homologating," of these into semiotic squares. For example the pair of functions "interdiction/ violation" (Propp's functions number 2 and 3) and "mandate/hero's decision" (Propp's 9 and 10) are articulated as a new pair : "establishment of a contract/violation of a contract". The general category of "contract" might now be graphically represented in terms of a semiotic square:



Although the square itself is a paradigmatic construct, it becomes temporally actualized through a narrative manifestation. Essentially, the goal-oriented design of a narrative results from the fact that the narrative trajectory must trace a path around the semiotic

⁴⁶The idea of the semiotic square is most fully developed in A. J. Greimas and F. Rastier, "The Interaction of Semiotic Constraints," in *Yale French Studies* 41 (1968).

square.⁴⁷ It does this in order to exhaust the total network of relationships according to which the original concept is endowed with meaning. Therefore, the fundamental syntax of a narrative may be understood to correspond to movement around the semiotic square, a movement among opposing pairs of elements. The semiotic square models the way in which narrative creates a disturbance or disorder of some initial state of equilibrium--through the juxtaposition of opposites--and the promise of a return to the initial state or a synthesis of some kind.

Greimas focuses his attention on the *relationships between* functions. He claims that the functions, "although organized into narratives, could, at least in theory: (a) appear in a sufficiently reduced number to be grasped as simple structures because of the redundancy which characterizes any discursive manifestation, (b) offer at the same time, because of their sequence in the narrative, appreciable elements allowing us to explain the existence of models of transformation of the structures of signification."⁴⁸ Greimas is attempting to show how semantics and structure are connected at the deepest levels of signification. He sees the primary narrative functions as representative of basic volitional actions that are a necessary consequence of human social existence. Eventually, Greimas determines that the actions of narrative can be subsumed under four general themes or "modalities": the fundamental dramas of *desire*, of *obligation*, of *ability*, and of *knowledge*. Greimas also turns Propp's seven archetypical characters into a more generalized actantial model which can be applied to other narratives and other kinds of discourse. Ultimately, Greimas imagines a homologous relationship between the principal roles in a narrative and syntactical units of language: subject, object, indirect object, and so on.

⁴⁷Greimas's square bears a resemblance to David Lewin's notion of a "transformational network." In a sense it is the lines connecting the narrative functions that are the focus of analysis, just as in Lewin's networks he concentrates on the arrows connecting the nodes. See Lewin *Generalized Musical Intervals and Transformations*(New Haven and London: Yale University Press, 1987).

⁴⁸Greimas, *Structural Semantics*, p. 223.

An important consequence of Greimas's model is that the notion of action cannot be separated from that of *intention*. Changes in a narrative state take place because of the desires, obligations, etc. of the actors. This point can have an impact upon our understanding of musical actions. Fred Maus highlights this aspect of narrative theory in his analysis of Beethoven's Opus 14 no.1, final movement. A narrative action, he argues, is always understood to be intentional. Maus claims that the reason narrative is an attractive analogy for music is that it permits us to invest musical actions with anthropomorphic interpretations. It is not the fact that, in an encounter with music, events are matched against known patterns that makes music narrative-like; rather, it is the sense of a human presence within a work, human desires, obligations, etc.. The Rondo in Beethoven's Opus 14, Maus claims, may be understood as "a series of actions, repeated attempts to reach a state of affairs that requires no further action."⁴⁹ In order to achieve the desired outcome the opening thematic material must return in the opening key, a goal made difficult by the nature of the theme itself: "The attempts are defeated repeatedly, because satisfaction involves a return of the opening key *and* the opening thematic material, but the thematic material throws the pitch material off balance."⁵⁰ Maus argues that a narrative model characterizes our understanding of these musical events as volitional--actions undertaken by an imaginary human subject.

Recent work by Eero Tarasti explores more explicitly some of the musical implications of A.J.Greimas' semiotic account of narrative.⁵¹ Tarasti has made an analysis of the Beethoven's piano sonata Opus 53 in which he tries to identify musical passages which correspond to the basic modalities of Greimas's theory. Tarasti also incorporates some ideas of the turn-of-the-century music theorist Ernst Kurth. In addition to Greimas's themes of desire, obligation, knowledge, and ability, Tarasti adds Kurth's modalities of "being", "becoming", and "doing". In Tarasti's reading of Beethoven, each of these

⁴⁹Maus, Fred Everett. "Music as Narrative." *Indiana Theory Review* 12 (Fall 1991), p.13.

⁵⁰Maus, p. 13.

⁵¹Eero Tarasti, "Beethoven's Waldstein and the Generative Course." *Indiana Theory Review* 12 (Fall 1991), p. 99-140.

categories is correlated with particular musical factors such as consonance and dissonance, diatonicism and chromaticism, harmony and counterpoint.

Greimas's ideas have been taken up by a few literary critics, including Fredric Jameson who has employed Greimas's square in his analyses of the novels of Conrad, Balzac, and others.⁵² As a theory of the structure of signification itself, however, Greimas's semiotics covers a whole range of discursive phenomena, not just narrative as we ordinarily understand it. Greimas' work is extremely complex and his writing highly technical, so it is well beyond the scope of this chapter to provide more than a superficial account of his theories. But it is precisely because his semiotics is so broad, because it demonstrates connections among the discourses of narrative, ordinary language, and all manner of media of communication, that it is attractive for musical analysis. Greimas's theory reveals an underlying logic of signification that is shared among a multitude of sign-systems; the theory therefore provides justification for the application of a narrative model to a non-linguistic medium like music.

Cognitive Accounts of Narrative

Partly because semiotics itself explicitly sanctions the project, musical applications of narratology have primarily drawn upon semiotic and structural accounts of narrative. In contrast, music theorists have expressed considerably less interest in the kinds accounts of narrative have come from the field of cognitive science. This reluctance is perhaps symptomatic of a general uneasiness with cognitive sciences among humanities scholars. Literary critics, in particular, are often skeptical of cognitive science's ability to do justice to literature, to account for things like literary ambiguity, metaphor, and so on. Furthermore, if a scholar accepts the premises of semiotics--essentially, that language and discourse are *constitutive* of cognition--it is sometimes difficult for that scholar to also incorporate contributions of cognitive science. The idea, for example, that aspects of human perception

⁵²Fredric Jameson, *The Political Unconscious* (Ithaca, N.Y.: Cornell University Press, 1981).

and cognition are neurologically “hard-wired” leads to a host of problems for a semiotician, who can never assume that anything is simply “data.” As Stefano Franchi and Güven Güzeldere, scholars with an interest in both the cognitive and literary domains, point out:

Operational definitions and processes outlined by cognitive science . . . programmatically exclude, from the beginning, all aspects of language that really matter to literature: its essential instability, its performative aspects, etc. . . . [W]e have cognitive science on one hand, which offers to provide ultimate theoretical foundations for criticism, and expects to receive in exchange, a wealth of “raw data” on which to test its theories. Literary theory on the other hand, envisions something similar, but inverted in form: if what literature is will forever escape scientific reduction, then science (cognitive science, in particular) will always be in an ancillary position with respect to literary theory. From this perspective, it will be literature’s prerogative to provide the more general horizon of sense within which science in general and cognitive science in particular, are constrained to set their direction.⁵³

Research on the structure of narrative has engaged cognitive scientists for some time: in fact, the field in fact traces its lineage back to one of Vladimir Propp’s contemporaries, the Russian psychologist Lev Semenovich Vygotsky.⁵⁴ Vygotsky’s work deals with the development of conceptualization in children. Cognitive narrative theory tends to conceive of narrative as an elaborate “concept” which is gradually constructed in the mind of an individual as he or she matures. The manifested structure of a narrative, then, is really a projection of a cognitive structure that is to be attributed to the mind itself. Arthur Applebee’s work is representative of this approach: his book *The Child’s Concept of the Story* draws heavily on Vygotsky’s ideas to investigate the ways that children develop narrative competence.⁵⁵

Applebee begins by collecting a group of stories told by children of various ages. He then observes the different levels of organizational complexity that the children’s own

⁵³Stefano Franchi and Güven Güzeldere, Editors’ Preface to *Stanford Humanities Review*, Special Issue: “Bridging the Gap”, 4/1 (April, 1995) [Online]. Available HTTP: <http://shr.stanford.edu/shreview/4-1/text/front.html>. See also the target article of this issue, “Literary Criticism: A Cognitive Approach” by Herbert Simon, and the roundtable discussion which follows. [Online] Available HTTP: <http://shr.stanford.edu/shreview/4-1/text/toc.html>

⁵⁴Lev Semenovich Vygotsky, 1896 - 1934. See his *Thought and Language*, Trans. and ed. by Alex Kozulin (Cambridge Mass.: MIT Press, 1986).

⁵⁵Arthur Applebee, *The Child’s Concept of the Story: Ages Two to Seventeen* (Chicago: University of Chicago Press, 1978).

stories progress through between the ages of two and seventeen. Applebee characterizes these as discrete stages, each marked by certain aspects of their structure. The various categories are based on Vygotsky's recorded observations of children playing with blocks of different shapes and colours and the ways that they organized the blocks into groups. Using Vygotsky's grouping criteria, Applebee isolates six types of organizational strategies. He labels these as follows, arranged from least to most complex: heap, sequence, primitive narrative, unfocused chain, focused chain, and "true" or developed narrative. A *heap* is simply an arbitrary collection of objects or events linked by chance in a child's perception. This is the least complex strategy, in Applebee's view, one which characterizes a child's aimless recitation of unconnected words or sounds. At the next level of complexity, Applebee identifies the *sequence* in which objects or events are grouped according to concrete, shared attributes. Each element shares an attribute with the next, although the linking attributes can change throughout the sequence. In Vygotsky's terms, a child might link a yellow cube with another cube that is green, then join to that a green triangle, and so on. A series of rhyming words or alliterative words exhibits this kind of organization. Applebee contrasts this mode with a *primitive narrative* in which objects or events are grouped together based on logical or abstract bonds. The words "knife, fork, and spoon" form such a group, due to their shared function, rather than some concrete shared phonological feature.

Each of these modes of organization is characterized by what Applebee calls "sequencing," which is understood in comparison with the process of "chaining" exhibited by the remaining modes. The difference lies in the fact that, at the next level of organization, the role of temporality begins to become more significant. An *unfocused chain* is an organizational strategy similar to the sequence, but now the elements are understood as linked by cause and effect relationships. The idea of "before and after" now plays a part in the linguistic structure. A *focused chain* is organized like a primitive narrative, but with the addition of a consistent centre or core, as in, for example, a story

dealing with the continued adventures of a character. Finally, a *true narrative* is distinguished by features like "closure" and the development or transformation of the central core.

Applebee argues that a child's idea of the story parallels the development of other cognitive abilities. Cognitive aptitude is, in turn, a product of the particular social tasks that confront the child. Ultimately, story structures are a factor of intersubjectivity: the child's emerging concept of the story is associated with the development of an ability to adopt the perspectives of other human subjects, the different points-of-view of different subjects.

One of Applebee's criteria in constructing his six stages seems to be the increasing relevance of the relation of the organization of elements to some underlying schema. This is equivalent to saying that the child gradually learns to master various narrative codes, as defined by Barthes. But unlike Barthes, Applebee's theory offers a repertoire of finely differentiated and rigorously defined story-types. These can be of value for the analysis of literary narratives; some literary theorists have discussed these kinds of organizational strategies in analyses of poetry (although in literary accounts the organizational mode tends to be seen as an attribute of the structure of the poem rather than a strategy of the reader).⁵⁶ Applebee demonstrates that children gradually move from one mode of organization to the next over time, but it always remains possible for an individual to choose from among any of the previous modes; they continue to exist for the adult as a stored repertoire of organizational strategies. It is these alternative strategies that can be drawn upon for novel literary invention. Paradoxically, it is the heap-like structures associated with free association that are often considered as more sophisticated poetic devices. Like the more "highly developed" organization of a true narrative, the other strategies are always available for the creation and perception of texts. Applebee's developmental model does imply, however, that the individual will experience some of the modes as more simple or more "ancient" than others.

⁵⁶See for example Barbara Herrnstein-Smith *Poetic Closure: A Study of How Poems End* (Chicago: University of Chicago Press, 1968).

Recent psycho-linguistic studies of narrative confirm many of Applebee's conclusions. One study by Ruth Anderson Berman and Dan Isaac Slobin, *Relating Events in a Narrative*, looks at the development of narrative competence in several different languages.⁵⁷ The authors present and interpret the results of an experiment in which a series of drawings was shown to a group of children and adults who were asked to tell the story depicted in the pictures. The drawings represent what most adults would see as a "plot" that deals with a small boy's search for his pet frog. The pictures show the boy searching under his bed, around his house, in a tree, etc., and finally, in a pond, where he finds the frog. The subjects who participated in study included native speakers of English, German, Hebrew, and Turkish, so the results are assumed to be typical of all languages. The findings of the study support the idea that children gradually move towards a hierarchical conception of narrative:

The general developmental trend from 3-year-olds to adults involves a change in the type of discourse, from picture-to-picture description to narration. This is correlated with a change in the type of cohesion established in the texts from local (clause per clause, pairs of clauses) to global organization. This in turn implies the development of the ability to conceptualize a number of single states and events as part of one complex overall event on the basis of their temporal relations. The three- and four-year-olds' use of spatial deictics ('here/there') together with markers of sequentiality ('and then') strongly suggests that the shift is from a spatio-perceptually based to an abstract-representational conceptualization of time. We have seen that as soon as children are able to organize speech along a narrative thread they can move freely from a mere juxtaposition of equally weighted pieces of information to hierarchical structures in discourse.⁵⁸

These remarks recall Ricoeur's idea of configurational and episodic narrative dimensions. From a cognitive perspective, a child's development would represent a transfer of emphasis from episodic to configurational modes of attending. At the same time, however, the authors see a shift away from spatial models of temporal perception to what they deem more "abstract" ones, which is slightly different from the way Ricoeur envisions the internal representation of temporal phenomena.

⁵⁷Ruth Anderson Berman and Dan Isaac Slobin, *Relating Events in a Narrative: A Crosslinguistic Developmental Study* (Hillsdale, N.J.: Lawrence Erlbaum Associates, 1994).

⁵⁸Berman and Slobin, p. 451.

The increasing relevance of hierarchy in the child's conception of narrative closely parallels the development of hierarchical organization at the level of the sentence. Berman and Slobin focus on the development of these linguistic skills, usually acquired between the ages of three and nine.⁵⁹ They examine the growth of narrative competence in terms of grammatical syntax and ways of connecting and grouping narrative elements. They note that while different grouping structures are acquired at different ages in different languages, many of the structures do appear to develop in a particular order. New stages of cognitive development are marked by constructions such as: the linking of clauses joined by "and" ("Jane jumped up and caught the ball"); later, "verb-gapping"--in which a predicate or tense-bearing auxiliary is eliminated in one clause ("Jane jumped up and John did, too"); and finally, gerund and infinitive constructions ("Jane jumped up, catching the ball"). Narrative competence has to do with mastering these grouping techniques which allow the narrator to foreground or to subordinate certain events in subtle ways. Similar observations have been made by the linguist P.J. Hopper. Hopper has shown that the different levels of narrative hierarchy are reflected in the *aspect* of verbs.⁶⁰ In the texture of narrative language, the perfective forms of verbs, the forms that express completion of an action (i.e. "X happened"), tend to be used in connection with the most important narrative events. The imperfective aspect, ("X was happening") on the other hand, goes along with less essential, durative situations in the narrative. Different degrees of importance of narrative events are thus made apparent through difference in aspectual stress. The sentence: "Jane carefully considered her financial situation and then she threw herself off a bridge," does not differentiate between the two events in this fashion; but this sentence does so: "Having carefully considered her financial situation, Jane threw herself off a bridge."

A skilled narrator, however, will often manipulate aspectual forms to achieve a dramatic effect. A sentence such as: "Having recently thrown herself off a bridge, Jane

⁵⁹See the essay "Filtering and Packaging" in Berman and Slobin, p. 540.

⁶⁰P. J. Hopper, "Aspect and Foregrounding in Discourse," in T. Givón, ed. *Syntax and Semantics* Vol. 12 (New York: Academic Press 1979), p. 213.

pondered the colour scheme of the paint in her hospital room.” represents an inversion of the aspectual hierarchy which would normally foreground the significant narrative event (attempted suicide) and subordinate the less important element (wondering about paint). The sentence may be more interesting because of the dissonance between narrative stress and grammatical stress. The breaking of grammatical rules and the inversion of hierarchies, then, are an integral part of a skilled narrative. Skilled narrators will frequently subvert the rules of the system to achieve more memorable or individualistic results.

Increasing consciousness of the codes is matched by an ability to elude those codes. Breaking the rules of narrative convention can perhaps be thought of as an aspect of the growing sense of intersubjectivity that leads to narrative competence, since it signals an awareness of *others’ awareness* of the codes.

Further Issues in the Application of Narrative Theories to Music

It is clear that literary theorists and cognitive theorists are both struck by the same properties of narrative, and that they frequently arrive at very similar models of narrative structure. It is also apparent that there are many parallels between these theories of narrative and theories of music. Propp's functions, Barthes' codes, and Greimas's modalities have been shown to have musical applications by Newcomb, McCreless, Tarasti, and others. So far, however, narrative theory has only been brought into discussions of tonal music. Its utility for other styles remains to be shown. All of the narrative theories presented above have potential applications to analysis of non-tonal music, and to Debussy's music in particular. Barthes's distinction between indexical and function genres can be used to define features of Debussy's style, in terms other than the absence of tonal function. Debussy's colouristic use of sonority, for example, seems like an obvious counterpart to the literary index; and considering it as such suggests pursuing the question of the metaphorical functions of sonorities. Barthes's non-temporal codes can also be useful as musical constructs, as McCreless has shown. Greimas's claim for an

underlying network of oppositions and narrative transformations suggests that when conventions of tonal design are no longer operative, an underlying logic of transformation may still underlie Debussy's music. This might lead us to look for oppositional structures in the music, and to ask how Debussy's music might "actualize" the primary dramas of desire, obligation, knowledge, and ability that Greimas sees at the heart of all stories. Also, Greimas's claim for the interconnection, through this underlying logic of signification, among linguistic and non-linguistic sign-systems suggests that modes of succession and continuity could transcend individual media. This opens up a whole range of possibilities for models for Debussy's music: models could come not only from literary narratives, but also from dance or cinema or other visual forms. Finally, from the cognitive perspective, Applebee's theory of a series of intermediate narrative forms is especially suggestive of possible models for Debussy's idiosyncratic musical forms. And the ideas about the manipulation of linguistic packaging and foregrounding from Berman, Slobin, and Hopper can be used to elucidate some of Debussy's more "subversive" formal techniques, like *reiteration*. In the next chapter I will construct a musical model that draws on the theories of narrative that I have presented above, with a particular emphasis on the cognitive theories advocated by Applebee and others.

Before proceeding with a narratological investigation of Debussy's works, however, it is important to address some of the objections to this particular theoretical orientation that have been raised by music scholars. The arguments against the utility of narratology concern two main issues: first, the assumption that the practice of musical narratology circumvents the whole question of musical meaning, and secondly, the sense that there are crucial structural differences between the two media that preclude comparison. I will speak to these two issues in turn.

Carolyn Abbate has recently called into question the value of the whole enterprise of musical narratology.⁶¹ Abbate warns that the nuances of the literary application of narrative

⁶¹Carolyn Abbate, "What the Sorcerer Said," in *Nineteenth Century Music* 12, 1989, p. 222.

theory are in danger of being misunderstood or ignored entirely in the hands of music theorists, who are accustomed to thinking in terms of pure structure. She suggests that narrative theory, when applied to music, quickly collapses into a type of arid formalism. What music theory tends to take over from narrative is only its neutral structural aspects, and since many of us are accustomed to thinking of music as *equivalent to* its structure, we may conclude that music itself is neutral or meaningless.

We sense that casual analogies between literature and music may be forced, twisted to make closed systems, methods and answers. This gloomy noise echoes my uneasiness about the analogy between music and narrative, which I fear may be used unthinkingly to elude secret convictions that music has no meaning. More than this: if we fashion out of post-structuralist criticism a single explanation of how music narrates, we pervert the subtleties of the literary theory we have evoked by ignoring all the ways in which meaning can escape, and explanation fail.⁶²

Since almost all music necessarily engages referential "codes," preexisting practices and patterns, it readily lends itself to narratological explication's like Barthes' system of narrative codes. What Abbate finds disconcerting is that musical narratology might end up simply reducing the structure of music to the structure of narrative, thereby completely side-stepping the crucial issue of what is being told.

Any music with sequences of events--thematic ideas, harmonic processes, cadences, instrumental exchanges--in short, almost all music, can be said to be "narrative." The model borrowed from classical literary structuralism brings us to seeming absurdities, that "narrative music" could be so broadly defined that all music narrates, and without conveying any particular meaning.⁶³

This issue is key for Abbate, and for like-minded scholars who want to uncover some of the ideological underpinnings of musical works. She concludes:

...[if] a formalist/absolutist could analyze all music as narrative, yet still view music as void of specific expressive content (not to mention cultural or referential or ideological content), this hints that evocation of literary theoretical analogies is sterile.

Lawrence Kramer reiterates Abbate's point here when he remarks:

⁶²Abbate, p. 222.

⁶³Abbate, p. 227.

Drawing prevailingly from literary structuralism, the models of choice have understood narrative preeminently as a source of structure rather than as a preeminent means of resisting structure. Narratology has acted as a kind of methodological halfway house in which musical meaning can be entertained without leaving the safe haven of form.⁶⁴

And Jean Jacques Nattiez argues that structuralist narratology can not really bring anything new or relevant to the study of music:

In short, I do not think that it is in reducing the signification of instrumental works to the reductive model of the structural analysis of narratives that we shall succeed in defining what forms the specificity of this level of signification in a given epoch.⁶⁵

Each of these scholars assumes that in our application of narrative theory to music we are in danger of treating music as though it were a symbolic system that is somehow noncommunicative. Certainly, musical structure has often been treated as though it were ahistorical or universal or unconnected with the social world it inhabits: literature in music theory abounds with dubious assertions about music's autonomy. We must recognize, however, that music represents a discursive practice which is at least *relatively* autonomous, insofar as its practitioners regularly work at the immanent level of musical materials, codes, and conventions. Preoccupation with musical structure simply reflects some of the concerns of those who actually *do* music. This does not preclude the possibility that broader sociological and psychoanalytic elements work to shape our ideas about musical structure. If structure is a focus of analytical attention it is because structure is of interest, which is not to say that it is neutral, ahistorical, cognitively "hard-wired," or non-value-laden. Indeed, Greimas has shown how semantics and structure are inextricably linked at the deepest levels of signification. But he also shows that it is possible to explore the structure of a symbolic system in a formal way. Ideally, a discussion of musical

⁶⁴Lawrence Kramer, "Musical Narratology: A Theoretical Outline" in *Indiana Theory Review* 12 (1991), p. 142.

⁶⁵Jean Jacques Nattiez, "Can One Speak of Narrativity in Music?" in *Journal of the Royal Musical Association* 115/1 (1990), p. 250.

structure will ultimately reveal something meaningful, some connection between the notes and the cultural world in which the work is forged.

Nattiez is skeptical of narratology's ability to achieve this goal. He argues that the reduction of musical structure to narrative structure tells us little about the relationships between music and history. In my view, however, it is not a question of reducing one thing to the other: rather, it is an attempt to find shared aspects of narrative and music that can give us new perspectives on musical structure. Clearly, particular structures are often emblematic of particular historical and cultural periods: specific organizational strategies can be seen to characterize not only music, but also literature, dance, visual arts, and mass media in a given context. One example noted by many musicologists, is the characteristic tonal structure of 18th- and 19th-century instrumental music and its resemblance to that of the bourgeois novel. This is not to say that the 19th-century instrumental music can be reduced to 19th-century literature, but rather that the musical and literary forms amplify and derive meaning from one another, and that both may be connected with bourgeois notions of the individual.

Narrative theory need not be utilized to circumvent the question of musical meaning. On the contrary, it seems to me that a narratological approach to music can better show the ways in which meanings are constructed, by pointing out how meanings from one medium might be mapped onto another. Against the charge of reductive structuralism, I would argue that the sense of a significant intersection between stories, visuality, movement, social values, political apparatuses, etc., and music comes about precisely because of the shared aspects of their structures.

The second issue that confronts the construction of a musical narratology is the claim that, because of incompatible structural characteristics between the two media, narrative theory has limited explanatory value for music analysis. A model appropriate for one is simply not appropriate to the other. Aspects of narrative for which, it is argued,

there are no musical counterparts include the separation of narrative *events* from narrative *existents*, the distinction between *story* and *discourse*, and the utilization of the *past tense*.

Obviously there are certain attributes unique to narrative for which there are no musical counterparts. One that has been pointed out by music scholars critical of the narrative model is the distinction between events and existents, a distinction central to some theories of narrative. An event is some action in the narrative, expressed in terms of statement about process, such as "to do" or "to happen." An existent is a person or thing in the story, or some item in the story's setting. The distinction between events and existents corresponds to that between noun-phrases and verb-phrases at the level of the sentence. An argument against the utility of narrative models for music is that there is no corresponding distinction in music. Referring to this problem, Nattiez has argued that "it is not within the semiological possibilities of music to link a subject to a predicate. . . . A good number of 'narrative' approaches to music. . . retreat into metaphorical illusion."⁶⁶ Segmenting a musical work into discrete objects and processes is highly problematic, and presents practical difficulties familiar to music theorists. While common sense seems to dictate that there are musical objects, such as chords or pc-sets, and musical processes, such as chord progressions, the distinction between object and process quickly breaks down when we deal with, for instance, melody or voice-leading: if an analysis concentrates on segmenting a work into its constituent objects, it can quickly become over-laden with object-labels to the extent that the processive aspects are buried under pc-set descriptions. Eventually, the distinction between musical "events" and "existents" can seem largely irrelevant. In practice, musicians routinely refer to the same musical phenomena as both object and process; theorists will often use object- and process-statements interchangeably in their descriptions of music. (David Lewin's work, however, in *Generalized Musical Intervals and Transformations* represents, in part, an effort to disentangle musical events and existents.⁶⁷) An objection to narrative models for music arises from a concern that musical

⁶⁶Nattiez, p. 250.

⁶⁷David Lewin, *Generalized Musical Intervals and Transformations* (New Haven and London: Yale

elements such as "themes" will be glibly and misleadingly equated with the objects of a narrative, such as "characters." It will be seen, however, that the distinction between events and existents actually breaks down even in the analysis of narrative itself.

Analytical practice reveals that the division is less clear-cut than might be supposed. In the narrative theories of Vladimir Propp, Roland Barthes, and A. J. Greimas, for example, the distinction between objects and processes tends to become a question of analytical levels: either characters are delineated according to a set of actions, or else actions themselves are defined according to a set of actantial roles or persons who act. It is difficult, in other words, to separate action from intentional action, from the motivations of the characters. Rather than representing two independent, equally-weighted components of narrative, events and existents tend to stand in some sort of a hierarchical relationship to one another. In fact, the blurring of the distinction between action and actantial role in narrative quite closely corresponds to the difficulty of separating out object and process in music.⁶⁸

In addition to her misgivings about the issue of the neutrality of musical structure, Carolyn Abbate has argued that music lacks what she perceives to be an essential component of all narrative media: the *past tense*. Even if the issues of musical meaning could be resolved in a satisfactory way, there remains this fundamental distinction between the two modes of communication. Abbate points to the wide-spread use of the past tense in stories, by means of which the narrator marks off the special diegetic world--the world within the story--as separate from the world of reader. A story is always inscribed within this unique narrative domain. She claims that music, in contrast, has no past tense: it is not a *diegetic* medium like narrative, but rather a *mimetic* one. It performs itself, in the present, in the presence of the listener. Abbate also classifies theatre and "any temporal art" as mimetic media, media in which "the time of telling is the time being told about; there is no teller, only time itself."

University Press, 1987).

⁶⁸Roland Barthes notes that the notion of the character as a psychologically consistent individual in a story is a relatively recent one, peculiar to the bourgeois novel. In classical literature, the character is always subordinate to the action.

Certainly it can be argued that the use of the past tense is a medium-specific code. In fact it is one which Barthes identifies: he designates as the "narrative" code (not to be confused with the generic use of the term *narrative code*), the common "once upon a time" convention.⁶⁹ Along with the "topographical" code, this narrative convention situates the fictional world of the story in a remote time and place. The use of the past tense is less a defining characteristic of narrative than a framing device peculiar to narrative. This can be shown by the fact that a narrative may be relatively easily transformed from a diegetic into a mimetic medium. A novel may be adapted for the stage or produced as a film. As a medium-specific code, the use of the past tense is, at worst, simply irrelevant to a musical context. It does not, however, create an insurmountable barrier between the music and narrative, as Abbate asserts.

Nattiez raises a related issue in his critique of musical narrativity.⁷⁰ Nattiez argues that, in addition to the "past tense" issue, there are further intrinsic differences between musical and narrative structures that make a one-to-one mapping problematic. In particular Nattiez focuses on the distinction in narrative theory between *story* and *discourse*. In literature, it is possible to separate the "what" of the narrative, the diegetic world of the story, from the particular way in which it is narrated. The same story may be told in different words or in a different languages. In music, however, the "what" of the work is inseparable from the "how." Using the example of the symphonic poem, a genre that would seem to lend itself readily to narrative analysis, Nattiez argues:

The content of a [literary] narrative, the story which is told, can be 'unglued' from its linguistic support in order to be taken on by another medium, another kind of discourse, film or comic strip. ... The break with the symphonic poem is sharper. We cannot translate it. We can summarize it or translate the narrative by which the composer was inspired, which is quite a different matter. ... In music, connections are situated at the level of discourse, rather than the level of story.⁷¹

This is a significant property of narrative media, and Nattiez concludes that it creates a decisive separation between music and narrative. There are, however, alternative ways of

⁶⁹See note 39.

⁷⁰Nattiez, p.240.

⁷¹Nattiez, p. 244.

thinking about the difference between a story and its particular linguistic manifestation.

Lawrence Kramer reconfigures the story/discourse distinction in a manner that more easily translates into musical terms.

[It is] characteristic of literary narrative to foreground the process of narration--to tell, in effect, two stories: one referential, the other a story about story-telling. Common experience of canonical literary texts, especially those written since the eighteenth (sixteenth?) century, strongly tends to bear out this claim. The result is a certain dissonance between story and metastory. At its weakest, this dissonance simply enacts the familiar distinction between story and discourse, that is the distinction between what we construct as the story and the textual process of storytelling. But the dissonance is rarely so tame. So many canonical texts thrive on problematized acts of narration that it is almost fair to say that literary narrative is the art of *not* telling a story. The reader must wrest a tale from the text by contending *against* an array of narrative effects that may include limited, biased, or unreliable narrators; multiple narrators who recount or understand events in irreconcilable terms; instabilities and fluctuations in point of view; the narration of events that are imaginary, hypothetical, or indeterminate in relation to the story; patches of exegesis that claim to interpret the narrative, and more.⁷²

Kramer seems to view the story/discourse distinction as an aspect of the interplay of configuration and episodic dimensions, after Ricoeur. The story, in Kramer's view, is identifiable with an expected series of narrative events that the reader anticipates--the proairetic code, in Barthes's terms--while the discourse, the process of narration, is the instantiated sequence that the reader actually encounters. Conceiving of the story/discourse distinction in this manner makes it possible to render both story and discourse musically. The distinction is simply that between the abstract paradigmatic plot and the piece itself as it unfolds in time.

This whole issue of the story/discourse distinction has been called into question by some literary critics, such as Barbara Herrnstein-Smith, who claims that there can be no "privileged" position from which we can see the "true" or "pure" story, stripped of the discursive element.⁷³ Stories are only ever accessible through further discourse: such a thing as an "underlying" story could only be another *telling* of the story. Since it is never

⁷²Lawrence Kramer, *Music as Cultural Practice 1800-1900* (Berkeley: University of California Press, 1990), p. 186.

⁷³See Barbara Herrnstein-Smith, *Poetic Closure: A Study of How Poems End* (Chicago: University of Chicago Press, 1968).

really possible to separate our sense of the essence of narrative from the history of our actual encounters with narrative, the separation between the "how" and the "what" is ultimately specious. Put another way, a narrative is simply a "how", or a network of "hows."⁷⁴

The arguments that music lacks a past tense, a story/discourse distinction, or a separation between musical events and existents do not present unresolvable problems for the application of narrative theory to music. It seems to me that a more difficult problem that we encounter in adapting a narrative model for music lies in coming up with a musical equivalent for narrative *causality*. Causality is a central aspect of all of the narrative theories outlined in this chapter. It is the primary criterion by which both Propp and Barthes identify their cardinal functions: it is the events in a story which have *consequence* for the future course of the action that are accorded greater structural weight. Applebee invokes these same criteria when he looks for the presence or absence of *cause-and-effect* relations in order to classify his story-types. But what is causality in music? In what sense can we speak of musical events as exhibiting causal or enabling relationships? How can we define a musical goal?

Although we often distinguish tonal from post-tonal styles on the basis of the presence or absence of "goals," it is not entirely clear that we mean the same thing as a narrative goal. Earlier I showed how McCreless connected the idea of Schenkerian Ursatz with Barthes's proairetic sequence of cardinal functions. This would imply that the notion of narrative causality could somehow be linked with the playing out of the Ursatz in a tonal

⁷⁴This is essentially the premise of the field of discourse theory, as practiced by Michel Foucault and his followers. See Foucault, *Archeology of Knowledge* (London: Tavistock, 1972), p. 194, where he describes the analysis of painting:

...one can try to uncover the implicit philosophy that is supposed to form his [a painter's] world view. Archeological analysis would have another aim: it would try to discover whether space, distance, depth, colour, light, proportions, volume, and contours were not, at the period in question, considered, named enunciated, and conceptualized in a discursive practice; and whether the knowledge that this discursive practice gives rise to was not embodied perhaps in theories and speculations, in forms of teaching and codes of practice, but also in processes, techniques, and even in the very gesture of the painter.

work. Structural events would thus have the status of being "causal" in some sense. In effect, this equates the notion of causality with "correspondence to a schema." Events would be understood to be causally related when they conform to a previously-known serially-ordered pattern.⁷⁵ According to this view, causality is equivalent to the logic of the "already-read." This is the way Barthes seems to understand narrative causality. According to Barthes, narrative causality has to do with an exploitation of the confusion between consecutiveness and consequence--the fallacy denounced by scholasticism: *post hoc ergo propter hoc*.⁷⁶ Barthes suggests that causality is simply an illusion that narratives invite us to accept, a "systematic application of a logical error."⁷⁷ Certainly it is unclear exactly how causality could be innately inscribed in the syntax of a sentence, let alone in the syntax of narrative. It can be argued that our understanding of narrative causality arises from our general knowledge of social and physical interactions, and that we are simply predisposed to see certain connections as causal.⁷⁸

If causality is equivalent to the correspondence of events to an already-known musical schema, such as the tonal *Ursatz*, then what kinds of relationships can be understood as causal in non-tonal styles? In the next chapter I will argue that some early post-tonal music tends to rely on alternative schemata which can be linked with the intermediate story-forms that Applebee has described. At the very least, these narrative models provided by alternative story-types will make excellent analytical *metaphors*--a not inconsiderable contribution to post-tonal music theories. In their recent book about metaphor, Keith J. Holyoak and Paul Thagard write:

⁷⁵Cognitive scientists have proposed distinctions between types of schemata which involve time and those which do not. According to Robert de Beaugrande a *schema* is a serially ordered, temporally bound frame, while a *plan* is a goal-directed schema. See Beaugrande, *Text, Discourse, and Process: Toward a Multidisciplinary Science of Texts* (Norwood, N.J.: Ablex, 1980.) Marvin Minsky has used the term *frame* to refer to a set of related mental data representing various aspects of reality and enabling human perception and comprehension of these aspects. Narrative is a type of frame which allows organization and understanding of reality. But narrative is also a *schema* and can be a *plan*. See Minsky, *The Society of Mind* (New York: Simon and Schuster, 1986).

⁷⁶Barthes, *The Semiotic Challenge*, p. 108.

⁷⁷Barthes, *Ibid.*, p. 108.

⁷⁸It would be interesting to examine definitions of causality in legal practice: these can show just how thorny the issue of causality can become.

The erroneous idea that metaphorical interpretation is a fallback strategy, rather than an integral part of normal comprehension, is often accompanied by attempts to eliminate metaphor by reducing it to something else. That 'something else' is usually either some hypothetical set of equivalent literal statements or a simple comparison statement. . . . The problem is that a set of analogical correspondences, accompanied by metonymic associations, is richer and more flexible than any list of sentences.⁷⁹

Although Nattiez and others have cautioned against analytical approaches which "retreat into metaphorical illusion," musical narrativity hardly seems to be so perilous a venture as these scholars suppose. On the contrary, acknowledging music's narrativity can lead to interesting new ways of hearing and conceptualizing, new insights into the process of musical authorship, and new ways of construing the cultural work that music performs.

⁷⁹Keith J. Holyoak and Paul Thagard. *Mental Leaps: Analogy in Creative Thought* (Cambridge, Massachusetts and London, England: MIT Press, 1995), p. 219-220.

Chapter 3. Musical Narrativity: Kinds of Stories in Debussy's Late Style

Introduction

"I wish to write down my musical thoughts with the greatest self-detachment." Debussy remarks in a newspaper interview in 1911. "I wish to sing of my inner landscape with the naïve candor of childhood."¹ Thus the composer expresses a desire to "forget himself" and his self-censorship, and to become, musically speaking, like an untutored child. The year 1900 inaugurated what was called by at least one writer "the century of the child."² In an effort to escape the rigid habits of institutionalized formulae, many artists at the turn of the century took the unaffected and direct expression of children as a prototype for a more authentic kind of artistic expression. The new science of psychoanalysis portrayed the child as the embodiment of innate and instinctive proclivities, which, in socialized adults, become relegated to the margins of consciousness in dreams and parapraxes. Naïve art and the aesthetics of Primitivism reflect a desire to reclaim a childlike artlessness and simplicity in painting, sculpture, and music.

Debussy shares with his contemporaries an interest in the perceived ingenuousness of children's expressivity. In this chapter I argue that the kinds of musical forms that Debussy's late works exhibit are closely linked with the notion of children's artlessness. I claim that the narrative structures that are associated with stories told by children have musical counterparts in aspects of Debussy's musical language. The chapter begins with a discussion of a model of a "skilled" narrative, one that characterizes the standard plot of a classical narrative text. I contrast this model with a psycholinguistic model that attempts to account for the developmental stages of narrative competency through which children progress. From this second model I then derive a variety of musical organizational strategies that are representative of Debussy's late style. Finally, this connection between

¹ Claude Debussy, "M. Claude Debussy and *Le Martyre de Saint-Sébastien*," *Excelsior* 11 February 1911. Quoted in Lessure, p. 248-9.

² Ellen Key, *Das Jahrhundert des Kinds. Studien*. Berlin, 1902.

Debussy's music and children's narratives is shown to be especially appropriate when we situate Debussy's late works within the broader context of modernist primitivism and contemporary views about language and the discourses of children.

Cognitive Models for Narratives

Figure 1. Trabasso's Model of a Skilled Narrative.

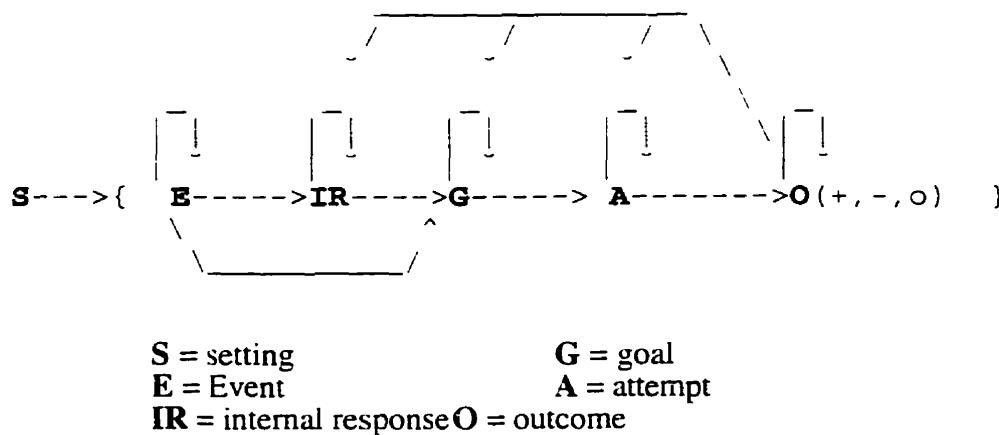


Figure 1 shows a model of a "skilled narrative," as conceived by the linguist Tom Trabasso.³ The letters in the diagram stand for the different functions within a narrative while the arrows connecting these represent "causal" or "enabling" relationships between the elements. The setting of the narrative, its diegetic time and space, is indicated by the brackets encompassing the configuration of nodes and arrows. The narrative trajectory, the course of action that a story takes, is represented by a path moving through the node/arrow configuration which can be traced along any of the many possible routes formed by the enabling arrows. Every skilled narrative, according to Trabasso, begins with an event (E), which generates a goal or a problem of some kind (G). This goal may arise out of the reaction (IR) of a main character or protagonist. The goal now motivates an attempt (A) to

³Tom Trabasso, "Logical Necessity and Transitivity of Causal Relations in Stories," in *Discourse Processes* 12 (1989), p. 1-25.

attain the goal or to resolve the problem in order to achieve a desired outcome (O+). If the outcome of the attempt is not the desired one (O-) this may generate new attempts or new goals. The model is hierarchical, reflecting the fact that a skilled narrative can maintain an overall goal and at the same time express other structurally subordinate goals. For example, an attempt might result in some desired outcome but one that does not serve the *main* goal of the narrative, and so require a new attempt. The superordinate goal thus motivates subordinate goals, and the global goal is maintained despite failed attempts. According to this model, a "skilled" narrative would be considered as such if it contained a minimum of five elements: a setting, an event, the establishment of some goal to be realized, an attempt at achieving the goal, and a resulting outcome. This minimal narrative would be represented: $S \rightarrow \{E \rightarrow G \rightarrow A \rightarrow O+\}$. This model matches the widely accepted picture of a classical plot structure in which some initial state of equilibrium is disrupted, motivating some action by a protagonist, which leads to a climax and some sort of resolution. Trabasso's model would also fit some unusual narrative structures. One possibility would be a story in which the main goal, or even the protagonist, changed several times during the narrative: by recursively tracing the path between "O" and "G" in Figure 1, we get: $E \rightarrow G \rightarrow A \rightarrow O \rightarrow G \rightarrow A \rightarrow O \rightarrow G \rightarrow A \dots \rightarrow O$. This structure obtains, for example, when the farmer in the dell takes a wife, who takes a cow, who takes a horse, etc. Another possibility would be a story in which a number of causally-related events occur prior to the establishment of a goal: the goal-oriented portion of the story, in other words, could be eccentrically skewed towards the end of the narrative: $E \rightarrow E \rightarrow E \rightarrow E \rightarrow E \rightarrow E \rightarrow E \rightarrow G \rightarrow A \rightarrow O+$.

What Trabasso's model does not account for, however, are narratives whose elements are not organized according to causal or enabling relationships. In Trabasso's model, the nodes must be connected by arrows. It is easy to think of examples of narratives that do contain such non-causal events. The kinds of stories that Roland Barthes calls "indexical--," as opposed to "functional" narratives, are characterized by *metaphorical*

rather than *causal* relationships: psychological novels, descriptions of dreams, much Expressionist and Symbolist literature, etc. To choose one example, in the libretto for Debussy's *Pelléas et Mélisande*, the central events in Act 4 do not arise out of causal relations with other events in the story. In scene 3, the child Yniold is seen trying to retrieve a ball from under a heavy stone; a flock of sheep pass by; Yniold asks the shepherd why the animals are silent and receives an ambiguous answer. These events take place immediately before what is usually considered the dramatic high point of the plot, the scene in which Pelléas and Mélisande declare their love, followed by the confrontation between Golaud and the lovers, where Golaud kills Pelléas and wounds Mélisande. The scene with Yniold and the shepherd is logically unconnected with these dramatic events: there are no causal or enabling arrows joining it with other scenes. The disembodied quality of this scene parallels the incorporeal nature of much of the dialogue throughout the libretto: the characters (all of whom lack the kind of volitional agency implicit in Trabasso's narrative model) frequently speak phrases and engage in exchanges that do not seem to have any obvious point or purpose. At the same time, however, the story unfolds on another level as a relentless progression toward the moment when Pelléas and Mélisande openly declare their love in Act 4. The inexorable impetus of the plot, in which the characters play out predetermined roles, is thus counterposed by a surface structure that is curiously lacking in cause-and-effect connections. The scene with Yniold and the shepherd in Act 4 momentarily highlights this aspect of the narrative structure. The presence of causally unconnected elements in a story which otherwise emphasizes inexorable striving toward a predestined goal creates a complex narrative structure that would be difficult to characterize in terms of Trabasso's model.

A story like *Pelléas et Mélisande* exhibits a narrative structure that shares some of the features of narratives produced by small children. Trabasso's model is meant to characterize stories which skillfully employ complex narrative syntax of the sort that is acquired only very gradually by children growing up within our literary culture. We

require other sorts of models to account for the stories told by children who have not yet acquired this competence. Studies of the development of narrative ability suggest that children tend to progress through a series of intermediate stages towards the acquisition of this complex narrative syntax. Rather than considering only those structures that resemble Trabasso's model as "stories" and all other structures as "non-stories," it is useful to think in terms of a broad range of possible story types. In the previous chapter I described Arthur Applebee's model of the different stages in the child's emerging conception of narrative. Applebee points out how, at the earliest stages, a child's stories are characterized by what linguists call "minimal event packaging": the child conceives of discrete events in an arbitrary succession, treating each one in isolation. A new stage is reached when the child begins to conceive of cause-and-effect relations between contiguous elements. At the next stage a child's narrative starts to have a "point" in the form of a global plan with a hierarchical organization. Eventually, children learn how to relate individual story events to both local and global goals of a plot. Applebee breaks down these different stages into six different story-types. These are summarized in Figure 2.

Figure 2. Applebee's Narrative Types.

<i>Type of Structure</i>	<i>Organizational strategy</i>
heap	an arbitrary collection of items connected by chance
sequence	a group of items sharing concrete attributes
primitive narrative	a group of items sharing abstract or complementary attributes
unfocused chain	a group of items in which cause and effect relations obtain between contiguous items
focused chain	cause and effect relations with a continuous central core
true narrative	development of the central core: closure

Other cognitive scientists have investigated the issue of emerging narrative competence and have arrived at conclusions similar to Applebee's. Keith J. Holyoak and Paul Thagard, writing about metaphor, note that the child's conception of causality emerges along with other cognitive skills. The authors argue that children's ability to comprehend and create analogies closely parallels their ability to infer cause-and-effect relations.

The development of system mapping appears to go hand in hand with the development of the capacity to think explicitly about higher-order relations. By about the age of five, children begin to be able to make analogical inferences that seem to depend on explicit knowledge about such higher-order relations as "cause."⁴

This ability to comprehend analogies might be viewed as an aspect of the "primitive narrative" stage, during which story elements are grouped according to shared abstract features. This would imply that the *primitive narrative* and the *unfocused chain* stages of Figure 2 develop in tandem rather than in succession as Applebee suggests. A psycholinguistic study by C. Glenn and Nancy Stein, however, published shortly after Applebee's, preserves the distinction between the analogical and causal phases. Glenn and Stein explore more closely the specific features of each of the individual stages through which a child passes in the gradual acquisition of narrative competence.⁵ They propose the continuum of narrative modes summarized in Figure 3. In some respects the Glenn/Stein model closely parallels Applebee's, but it adds some new features as well.

Glenn and Stein divide their story structures into two main categories: *sequences* and *episodes*. Sequences are structures that exhibit consecutivity: the events in these kinds of stories simply succeed one another; episodes, on the other hand, are goal oriented in some way, with the global outcome being relevant at each stage of the story. For Glenn and Stein, these different story-types are meant to characterize children's narratives at different ages, but they can also be understood to represent a variety of organizational

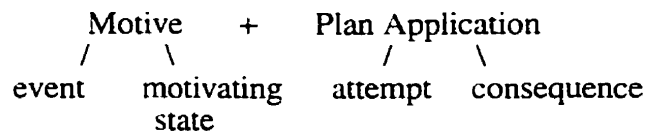
⁴Keith J. Holyoak and Paul Thagard, *Mental Leaps: Analogy in Creative Thought* (Cambridge, Massachusetts and London, England: MIT Press, 1995), p. 94-95.

⁵Nancy Stein and C. Glenn, "An Analysis of Story Comprehension in Elementary School Children," *New Directions in Discourse Processing*, R. Freedle, ed. (Hillsdale, New Jersey: Ablex, 1979). The examples given in Figure 3 are mine.

strategies that are available to adults as well. I assume that, while these narrative strategies are acquired in discrete stages throughout childhood, an adult retains competence in all the modes and can draw upon whatever strategy is appropriate for a task at hand. I also assume that these different narrative structures represent not only techniques of assemblage for the creation of stories, but also different perceptual strategies for the comprehension of stories.

Figure 3. Stein and Glenn: Narrative Structures.

<i>Type of structure:</i>	<i>Organizational Strategy:</i>	<i>Example:</i>
Descriptive Sequence	arbitrary collection of items	"A cat and a chair and a train."
Action Sequence	items related thematically but not causally	"The cat goes up a tree. The dog goes on the chair. The ball goes out the window. The train goes
Reactive Sequence	causal relations between adjacent elements	"The cat chased the bird. The bird flew to its nest in the tree. The nest was full of eggs which hatched. The baby birds went swimming in the pond."
Abbreviated Episode	an overall goal can be inferred, but the "point" of the narrative is ambiguous	<the above story, followed by> "The cat caught one of the baby birds." Does this represent closure, or is it merely another link in an unfocused chain?
Complete Episode	an explicit overall goal, relevant at each stage of the story	"The cat chased the bird, but the bird flew to its nest. But later the cat observed from behind a rock as the birds went swimming in the pond. The cat caught one of the baby birds."



Complex Episode hierarchical arrangement of any of the previous structures.

The simplest type of organization in Glenn's and Stein's model is called a *Descriptive Sequence*. It is identical to Applebee's *heap*, consisting of a series of items or events without any causal relations or shared attributes. A very young child's utterances exhibiting this kind of structure might be a simple recitation of the names of things arbitrarily chosen from the environment or from memory, or just simply "babbling." An older person who has mastered more complex types of organization might also employ the descriptive sequence for a variety of reasons. Stringing together nonsequiturs, for example, might serve some comical purpose and create a humorous effect. Heap structures can also be used to disorient or to startle, or to convey the idea of nonsense, as in Dadaist and Surrealist poetry.

A more sophisticated structure, the *action sequence*, consists of a series of items that are *logically* related to one another but not *causally* related. This structure characterizes stories in which objects or events are linked together according to shared attributes. Unlike Applebee, Glenn and Stein do not distinguish between "concrete" linking attributes (phonology) and "abstract" attributes (semantics). An example of shared attributes could be rhymes or alliterations: a child might enjoy creating or hearing a series of rhyming sounds. The Dr. Seuss story *Green Eggs and Ham* is based on the action sequence structure: "I will not eat them in a box, I will not eat them with a fox," etc.⁶ The recurring phrase "I will not eat them . . ." as well as the rhyming pairs, links together the series of statements throughout the story. The linking attribute in an "Action Sequence" could also take the form of some recurring action or object. In my example in Figure 3, "The cat goes up a tree; The dog goes on the chair . . ." the word "goes" serves as the linking attribute.

At the next stage in their model Glenn and Stein introduce a rudimentary cause-and-effect organization. In a *reactive sequence* contiguous elements of the story are linked together in causal or enabling relationships, but without asserting any long-term goal. Each element in the sequence links to its immediate neighbours through some causal relation

⁶Dr. Seuss, *Green Eggs and Ham* (New York: Random House, 1960).

which can change along the chain. Each event joins with the next, and there is a sense of "before and after," but the foregrounded features of the narrative constantly shift as the story progresses. The example given in Figure 3 begins as a story about a cat, but changes to a story about a bird, and so on. This type of structure is very close to Applebee's *unfocused chain*. It would seem to be a common structure employed in the everyday language of adults. The aimless "free association" that characterizes an ordinary conversation in a relaxed setting or a casual telephone exchange frequently exhibits this type of organization. A reactive sequence is essentially a free play of images or ideas that cohere on a local level, inasmuch as the individual elements logically proceed from one another, but is relatively unstructured macroscopically.

At the next level of complexity Glenn and Stein propose a structure called an *abbreviated episode*. This is a category not found in Applebee's model: here, the role of a narratee or perceiver of the story plays a part in defining the structure. Abbreviated episodes are stories in which a child will describe events chronologically in such a way that a listener can infer a global narrative goal or "point," although this goal is not made explicit by the narrator. These are ambiguous situations in which it is unclear whether the child intends to attribute any motivating purpose to an action.⁷ For example, in the statement: "Mary picked some flowers and then she gave them to John," it is unclear whether the narrator means to say that Mary picked the flowers with the intention of giving them to John, or simply that Mary happened to pick some flowers which she then happened to give to John.

⁷See Carole Peterson and Allyssa McCabe, *Developmental Psycholinguistics: Three Ways of Looking at a Child's Narrative* (New York and London: Plenum Press, 1983); Peterson and McCabe elaborate on this type of structure:

These are the most primitive structures that describe aims. They consist of only two units: a motive, given by either an environmental event or the internal motivating state (but not both), and a consequence. When a motivating state and a consequence are given (e.g., 'he wanted to go home so they left'), the goal is explicit and it is easy to characterize the episode as purposive, albeit rather impoverished. However when the episode consists of an event and a consequence, one must make a judgment about whether or not the consequence is planned. . . . When the child talks about being in a boat and running out of gas, is the subsequent action of rowing back to shore merely an accurate reporting of what occurred (and therefore part of a reactive sequence), or a recognition of the planful nature of the action (and thus part of an abbreviated episode)?

In contrast, a *complete episode* is characterized by an explicit overall goal that is relevant at each stage of the story. A goal can be made evident through the use of certain linguistic markers such as subordinate conjunctions: "Mary picked some flowers *so that* she could give them to John." Glenn and Stein describe the Complete Episode as having two main parts: a "Motive," which itself consists of an "event" plus a "motivating state," and a "Plan Application" which includes an "attempt" and a "consequence." The Complete Episode is thus roughly equivalent to the minimal conditions for a "skilled narrative" in Trabasso's model shown in Figure 1.

Finally, Glenn and Stein describe stories which they call *complex episodes*. In these stories any of the structures described above can be arranged hierarchically, with one structure functioning as a single unit at a higher level of structure. For example, a Reactive Sequence could function as part of a Complete Episode; or a Complete Episode may itself form a portion of a higher-level Action Sequence. A Complex Episode may also be characterized by multiple attempts to achieve a goal; in other words, the "plan application" portion of the narrative can be embedded recursively within the structure. The Complex Episode is potentially useful as a model for stories like *Pelléas et Mélisande* in which certain segments of the narrative are like Descriptive or Action Sequences while others are goal-oriented like the Episodes.

One way of understanding the organization of the narrative model proposed by Glenn and Stein is to note the relation of each stage of their model to some underlying schematic framework. Referential schemata become more and more determinant at each new level of narrative organization; furthermore, the structure of the underlying schema itself becomes increasingly complex.⁸ The organization of the *descriptive sequence*, for instance, depends upon a substructural understanding of shared phonological attributes, on concepts like "rhyme." The *reactive sequence* depends upon a more complex background

⁸My approach here closely parallels that of Edward Branigan, who has reconfigured Applebee's story-types in exactly this way. See Branigan, *Narrative Comprehension and Film* (London: New York: Routledge, 1992).

schema, the notion of cause and effect. Most importantly, the particular temporal ordering of events becomes increasingly consequential at the higher levels where a sense of "before and after" is invoked by the notion of narrative causality. What Glenn and Stein construe as more "mature" narratives are those that show an awareness of more complex kinds of schematic patterns or codes.

A Continuum of Musical Narrative Strategies

Understanding the organization of Glenn's and Stein's model in terms of the roles of various referential schemata enables a mapping of these narrative structures onto musical structures. It is possible to consider the different organizational strategies that characterize musical event-succession in terms of the corresponding contribution of referential schemata that govern the perception of musical continuity. In a sense, referential schemata become increasingly relevant at each stage of the model. For example, Glenn's and Stein's *descriptive sequence* might be identifiable with musical "moment form," in which a listener is invited to consider each musical event in isolation, that is, with minimal reference to a preexistent framework. At the other end of the spectrum, the *complete episode* has musical counterparts in more intricately schematic formal types, like "sonata form," or the system of functional relationships in tonality. Figure 4 presents a number of different musical situations arranged as a continuum something like Glenn's and Stein's narrative model. The different categories in Figure 4 are determined by the particular kind of referential schema that each organizational strategy brings into play; I have tried to give each category a mnemonic label. In the following discussion I demonstrate this model with examples from Debussy's late works. I apply the model to the organization of immediately contiguous pitch events, but also to the organization of larger formal units. As with the narrative situations described above in Figure 3, these different modes of musical organization can be attributed to the structure of the music itself or else considered as possible listening strategies employed by the perceiver.

Figure 4. A Continuum of Musical Organizational Strategies

<i>Name :</i>	<i>Type of organization</i>	<i>Example.</i>
1) Loop:	overt repetition	an ostinato
2) Heap:	non-schematic organization	"moment form"
3) Collection:	shared membership in a class	events X, Y, and Z are members of an octatonic superset.
4) Chain:	transformational relationships between immediately contiguous units	event $Y = T_5(\text{event } X)$
5) Conundrum:	ambiguous tonal/functional relationships	$\overset{9}{V} \overset{7}{7}$ or Whole tone scale? $\underset{b5}{b5}$
6) Progression:	explicit tonal/functional relationships	I - II ⁶ - V ⁷ - I
7) Complex Episode: Hierarchical Arrangements of 1-6		

The first structure, which I call a *loop*, has no correspondence with any of Glenn's and Stein's story-types. It refers to the straightforward repetition of a single musical element, as in an ostinato. A comparable "story" would simply be a repeated phoneme, word, phrase, or passage. Perhaps Gertrude Stein's "a rose is a rose is a rose" could be a literary example of a loop. Because of the predictability of the loop, a local-level formal organization characterized by "looping" typically suggests circularity, stasis, security, or equilibrium. Debussy begins the Etude "Pour les arpèges composés" in this manner, shown in Example 1. Example 2 shows the beginning of the "Finale" of the Sonata for Flute, Viola and Harp, where the loop functions as a stable background for the more dynamic events introduced by the flute.

The next category in Figure 4 corresponds to the *descriptive sequence*, although I am borrowing Applebee's more evocative term *heap* which refers to the most primitive linguistic mode in his model. I use the term to indicate what has been variously described as "moment form," "vertical time," or some such designation that emphasizes arbitrary or

indeterminate musical event-succession. Given Debussy's interest in the purely sensuous and colouristic qualities of musical sounds, we might expect to encounter such structures fairly often in his works. The opening measures of the Etude "Pour les sonorités opposées," shown in Example 3, exhibit this kind of inchoate organization. The opening measure presents three discrete elements which contrast on the basis of register and articulation: the G# octaves, the rolled A octaves, and the low staccato G#. New contrasting material begins in measure 4. By measure 6 a familiar sonority, the French augmented 6th sonority, begins to take shape, but the passage as a whole forms a heterogeneous group of pitches and gestures which succeed each other in an arbitrary manner. This is also the case in Example 4, the beginning of the second movement of Violin Sonata. Here, the violin's angular melodic leaps, the downward arpeggio, and the trills in measures 3 and 4 create a jumbled mixture of very loosely related gestures with uncertain tonal affiliations. Again, contrasting registers and articulations create a highly disjunctive surface.

In Debussy's music, "loop-like" and "heap-like" organization tends to function as inceptive markers, identifying the beginnings of sections or pieces, while more complex kinds of organization coalesce as the music unfolds. The Etude "Pour les 'cinq doigts'--d'après Monsieur Czerny" begins this way. Example 5 shows how in measures 1 to 4 Debussy creates a polyphonic *heap*, by combining a "looping" motive in the left-hand with an unrelated idea in the right. The contrasts in tonal orientation--black notes versus white notes--and in articulation strongly dissociate the two ideas. A more coherent theme emerges at measure 7, but the texture unravels again at measure 11, where the sharply contrasting articulations of the white-note and black-note-motives produce another contrapuntal heap. Then at measure 15, a new idea begins abruptly. In the passage in Example 5 Debussy creates heap-like structures in both the formal and contrapuntal domains, with marked formal disjunctions at measure 1, 7, 11, and 15, and contrapuntal juxtapositions in measures 1 to 4 and 11 to 15.

The way that I have arranged Figure 4 suggests that both the *loop* and *heap* make minimal reference to preexistent schemata. Of course these structures necessarily invoke some theoretical constructs according to which a musical "object" is defined, a means by which objects can be isolated and a musical surface parsed. In a loop, segmentation is fairly straightforward, in that the musical object will be defined by the point of disjunction created between repetitions. In a heap the segmentation process is less self-evident and the theoretical baggage more consequential. Here the definition of the musical object will depend upon what sorts of things we are inclined to give analytical labels: pitch classes, chords, motives, themes, technical gestures like arpeggios, trills, individual voices in a multipart texture, etc. The point is that in a heap the musical objects follow one another in ways that maximize their dissimilarities. The listener is thus inclined to attend to the particularities of the sound at the moment. In this sense, listening to "moment form" or to *ostinati* relies on less complex referential schemata than do the other listening strategies that I describe below.

The next mode of organization in Figure 4, the *collection*, corresponds to Glenn's and Stein's *action sequence*. In the case of children's stories Glenn and Stein claim that such structures are characterized by the presence of recurring phonological or semantic attributes among a group of elements. In other words, different elements, such as words, phrases, or statements relate to one another analogically, like a set of variations on a theme. In a musical rendering of this narrative structure, musical events may be thematically interrelated in a variety of ways. In what I am calling a *collection* successive musical events are understood to relate to one another in *metaphorical* ways rather than in *causal* or *transformational* ways. This implies that temporality is less consequential in a *collection* than in a musical situation where later events are understood as transformations of earlier ones. (In the Dr. Seuss story *Green Eggs and Ham* it is not crucial to the narrative whether the line "I will not eat them in a box" comes before or after "I will not eat them with a fox.")

In other words, the specific order in which the events occur is less crucial to the listening experience than are the shared characteristics of the events.

My idea of a *collection* alludes to and expands upon Richard Parks' notion of *referential collection*. Although Parks does not make any explicit cognitive claims, his analysis of Debussy's music in terms of cynosural supersets and referential collections seems to be based upon the assumption that the whole-tone, diatonic, octatonic, and chromatic scales act as schematic pitch-spatial catalogues that are brought to the music by the listener.⁹ The function of these collections differs from that of a "key" with its attendant hierarchy of scale-steps and chord-functional relationships. A collection, as opposed to a key or mode, lacks a referential tonal centre: it is simply an unordered set of equally weighted pitch-classes. This is a useful construct for analyzing passages like the one

⁹The kinds of collections that act as "schemata"--pitch-class potentialities supplied by the listener-- are obviously different for different post-tonal musical styles. Within the expanded harmonic vocabulary of pitch resources in twentieth century music, theorists have recognized that certain pc-setclasses seem to be more structurally significant than others. Some theorists have tried to justify the referential or "schematic" status of certain sets on the basis of the internal properties of the sets themselves. Robert Morris, for example, points out that the sets generated from interval cycles have a kind of schematic status. See Robert Morris, *Composition with Pitch-Classes* (New Haven: Yale University Press, 1987). Morris identifies five set-classes that can be generated through repeated transpositions of a pitch-class by a single interval-class. In Morris's notation "C1" indicates the cycle of transpositions by interval-class 1, resulting in the chromatic scale. C5, the cycle of perfect fifths or fourths, generates the same collection. C2 produces the whole-tone scale, C3 a diminished-seventh chord, C4 an augmented triad, and C6 a tritone. Partly because of composers' interest in pitch-spatial symmetry, the setclasses that result from these cycles have a special status in much twentieth-century music, and might be considered "schematic" for certain musics. Other pitch structures can be obtained by combining transpositions of these cycles, as Richard Cohn does in order to produce what he calls "Transpositionally Invariant Sets." See Richard Cohn, "Properties and Generability of Transpositionally Invariant Sets," *Journal of Music Theory* 35/1-2 (1991), p. 1-32. Cohn's "Tinv" sets result from Tns of Cns. In addition to Morris's cyclically generated setclasses, Cohn's Tinv sets include the 4-9 [0167] tetrachord, the octatonic scale, the hexachords 6-7 [012 678], 6-20 [014589], and 6-30 [013679] (the "Petrouchka Chord"). See also Richard Kaplan "Transpositionally Invariant Subsets: A New Set-Subcomplex," *Intégral* 4 (1990), p. 37-66. John Clough and Jack Douthett have developed another way of justifying the "schematic" status of particular pitch collections; they designate as "maximally even" those sets whose members are most evenly distributed over a 12-pc space. See John Clough and Jack Douthett "Maximally Even Sets," *Journal of Music Theory* 35/1-2 (1991), p. 93-174. The sets in this case are the tritone, augmented triad, diminished-seventh, whole-tone scale, pentatonic scale, diatonic scale, and octatonic scale. The diatonic set, Clough and Douthett point out, has an additional special property in that it can be generated from their algorithm that produces the property "cardinality equals variety." Some scholars have argued that the reason these evenly distributed, maximally symmetrical, or transpositionally invariant pitch entities have special status is because they take up "less neural space" than other kinds of structures. See for example Jay Rahn's "Coordination of Interval Sizes in Seven-tone Collections," *Journal of Music Theory* 35/1-2 (1991), p. 33-60. In any case, it is useful to consider some of these pitch structures as schematic alternatives to the notion of keys or scales. While some of these sonorities are not typical of Debussy's vocabulary, others occur regularly. Clough's and Douthett's "maximally even sets" come closest to the kinds of sonorities that may be thought of as schematic for Debussy. They are roughly equivalent to Parks' cynosural supersets.

shown in Example 6, the opening of the Etude “Pour les notes répétées.” Here the listener recognizes the assortment of pitches in measures 2 and 3 as forming a coherent group because of their shared membership in the whole-tone collection. Note that this type of organization emerges out of a more arbitrary, “heap-like” arrangement of elements in measure 1. Likewise, the pitch events in Example 7, from “Pour les quartes,” are all members of the diatonic collection {Db, Eb, F, Gb, Ab, Bb, C}. In both these cases, the musical events are presented without reference to hierarchical, functional, or “causal” schema, as would, for example, the claim that something is “in Db major” or “in the Lydian mode.”¹⁰

What Parks identifies as a kind of generative background or musical palette, I am considering as a schema, invoked by the music or imposed by a listener, according to which separate musical events become organized into non-hierarchical groups of like objects. Furthermore, I am expanding upon Parks’ idea in that what I am calling a *collection* may consist of objects other than individual pitch classes. For example, along with the diatonicism of Example 7, the passage may also be understood to represent a collection of instances of a particular interval-class, perfect fourths. This expanded notion of a collectional structure suggests a way of thinking about Debussy’s celebrated technique of “planing,” or “parallelism.” The passage shown in Example 8, from the first movement of the Violin Sonata, shows an instance of this technique. Planing can be understood as a collectional approach to sonority: A particular sonority, here the open-fifth chord {C, G}, is treated as a member of an object class. Other members of the same object class, {Bb, F}, {Db, Ab}, {Eb, Bb}, and so on, are presented in succession in such a way as to obfuscate a tonal centre, which serves to emphasize the homogeneous nature of the object class. The passage simply presents a collection of open-fifth sonorities.

¹⁰ As noted in chapter 1, Parks does not distinguish in his analyses between “collectional” passages, in which material is selected from an unordered setclass, and passages which do assert key-centres and scale-step hierarchy. My distinction between “collections” and other more complex structures attempts to redress this.

A *collection* may also consist of *strings* of events, like melodic motives or themes. The flute and viola parts in the excerpt shown in Example 9, from the Sonata for Flute, Viola, and Harp, illustrate this. The passage is based on the referential collection {C, D, E, F, G, A, Bb} which changes to {C, D, E, F, G, A, B natural} at the end of the example. Here, the harp's oscillation between C and F in the bass on beats 1 and 3 exploits the ambiguity of the perfect fifth relationship which prevents either pitch from asserting itself as a tonal centre. Meanwhile, the hocket in the viola and flute creates a disjunctive surface in which it is difficult to pick out the "tune" or to hear melodic connections beyond the level of the trichord. In the flute and viola parts, the musical objects are not individual pcs, but rather two- and three-note melodic packages. The particular order in which these motivic cells are presented is somewhat arbitrary: the diatonic trichords simply succeed one another without producing a sense of progression or development. In this technique Debussy shows his affinity with his younger colleague Stravinsky: an organizational strategy based on thematically related blocks of material that succeed each other in non-transformational ways is a technique frequently encountered in the *Rite*. (It is a device that also recalls the techniques of cubist painting, i.e., the reduction of representational forms to geometric solids that may be freely shifted about and reordered in space.)

Parks has claimed that Debussy's approach to pitch organization is intimately connected with the formal aspects of his works. To expand upon this assertion, if pitch-class- or sonority-class-*collections* govern local pitch organization in a work, then the collectional approach may characterize its larger-scale formal layout as well. Contiguous formal units can function in a manner equivalent to the pitch-class members of a referential collection, so that both the local and global structures may be viewed as manifestations of the same organizational strategy. For example, the passage in Example 10, from the Etude "Pour les sonorités opposées," is structured as series of variations on a two-measure idea. Each variant changes aspects of the registral deployment and alters the tail segment of the idea. However, the return to the G# minor-seventh sonority at the start of each new variant

at measures 17, 19, 21 and 25 works against any sense of progression or development in the passage. The pronounced static effect of this passage, I would argue, has to do with the fact that the formal segments are not transformations of one another, but rather analogues of one another, yielding a process of "non-developing variation."

The *collectional* narrative strategy may also be extended to the organization of counterpoint. For example, certain parts of the Sonata for Flute, Viola, and Harp are characterized by heterophony, in which the different voices in a texture simultaneously play variations of the same melody. Example 11, from the Sonata for Flute, Viola and Harp, shows an instance of this technique occurring in the viola and harp. Heterophony of this sort can be thought of as a *collectional* approach to the contrapuntal layers within a multipart texture: each voice forms a separate package that is analogically related to the other.

This *collectional* approach to pitch and formal organization is like the *action sequence* in that the members of the collection do not stand in a hierarchical or temporal relationship to one another, but rather represent equally weighted alternatives. To formalize the definition, a *collection* describes a passage containing two or more objects (such as pitch-classes, sonorities, contrapuntal voices, formal units, etc.) that are perceived as belonging to an unordered superset of objects. The listener intuits a particular referential musical space, and separately perceived objects are understood as belonging to that space.

This contrasts with the next mode of organization in Figure 4: the *chain* corresponds to the *reactive sequence* in the Glenn/Stein model. In this type of organization, successive musical events flow logically from one to the next. However, there is no overall unitary goal or long-term resolution implied by the series of events. While the previous type of organization involves a classification of the individual elements according to a schematic category of objects, this one focuses on the modes of succession and continuity between contiguous elements. Rather than hearing a series of musical events, x, y, and z, as members of unordered superset, the listener would instead regard later events as *transformations* of earlier ones: $x \rightarrow y \rightarrow z$, versus $\{x, y, z\}$. Here we rely on a listening

strategy in which events ensue from schematic *processes*, as compared with the schematic object-classes of the *collection*. This represents the perceptual difference between identifying a *collection* of instances of, say, sixths, and hearing a *stream* of sixths, linked each to each, as in Example 12, from the Etude "Pour les sixtes." In this example, the *chain*-effect arises from the sense of a melodic line--the long phrase-markings, step-wise motion with leaps followed by compensatory changes of direction, and so forth. These particular melodic qualities are chiefly matters of contour and phrasing and are not necessarily tied to tonal scale-degree tendencies. In other words, Example 12 does not instill an expectation of tonal closure in the sense of an implied melodic goal toward which the passage moves; rather, the passage meanders through a richly chromatic space with a continuously changing tonal focus. This kind of musical situation is closely analogous to the structure of the *reactive sequence* with its local-level cause-and-effect relationships and more haphazard global structure.¹¹

In his book *Generalized Musical Intervals and Transformations*, David Lewin addresses the perceptual difference between two ways of hearing: one way in which the listener focuses on musical objects and the intervals separating them, and another in which successive objects are understood as transformations of one another. Lewin writes:

To some extent for cultural and historical reasons, it is easier for us to hear "intervals" between objects than to hear transpositional relations between them: we are more used to conceiving transpositions as affecting Gestalts built up from individual objects. As this way of talking suggests, we are very much under the influence of Cartesian thinking in such matters. We tend to conceive the primary objects in our musical spaces as atomic individual "elements" rather than contextually articulated phenomena like sets, melodic series, and the like. And we tend to imagine ourselves in the position of *observers* when we theorize about musical space; the space is "out there," away from our dancing bodies or singing voices. "The interval from s to t" is thereby conceived as modeling a relation of *extension*, observed in that space external to ourselves; we "see" it out there just as we see distances between holes in a flute, or points along a stretched string. . . . [T]he historical development of harmonic theory has depended on such a projection of our intuitions into a geometric space outside our bodies, that is, the "line" of the stretched string, a space to which we can relate as detached observers.

¹¹I am alluding to the kinds of context-free rules for melody developed in the melodic implication and realization theories of Leonard Meyer and Eugene Narmour. See Meyer, *Explaining Music: Essays and Explorations* (Berkeley: University of California Press, 1973), and Narmour, *The Analysis and Cognition of Melodic Complexity: The Implication-Realization Model* (Chicago: University of Chicago Press, 1992).

In contrast, the transformational attitude is much less Cartesian. Given locations *s* and *t* in our space, this attitude does not ask for some observed measure of extension between reified "points"; rather it asks: "If I am *at s* and wish to get to *t*, what characteristic gesture . . . should I perform in order to arrive there?" The question generalizes in several important respects: "If I want to change Gestalt 1 into Gestalt 2 (as regards content, or location, or anything else), what sorts of admissible transformations in my space . . . will do the best job?" Perhaps none will work completely. . . . This attitude is by and large the attitude of someone *inside* the music, as idealized dancer and/or singer. No external observer (analyst, listener) is needed.¹²

Lewin proposes that we could understand melody in the way I have described it in connection with Example 12—as a transformational network in which earlier pitches are transformed into subsequent ones.¹³ For Lewin, the "characteristic gestures" that constitute transformations within melodies and other kinds of musical processes include the standard 12-tone operators: transposition, inversion, and retrograde. Additional operations are defined contextually, according to the particular intra-opus features of the works discussed in the book. In his analyses Lewin selects objects such as pitch classes, motives, and chords, and assigns these to the nodes in his transformational networks. The nodes are connected by arrows labelled according to the operations that transform one object into the next. Lewin adopts this transformational attitude in his analysis of a great variety of musical situations.

I would concede that certain musical situations do encourage this transformational manner of listening that Lewin recommends, but that others, such as the examples given above in the discussion of *collections*, are conducive to a more object-oriented manner of listening. Within a particular musical style or work it is often useful to make a distinction between these two kinds of organizational strategy. Certainly in Debussy's music there are often moments where the sense of a transformational process is subordinated to the intrinsic colouristic qualities of the musical objects themselves. In my model, *chain*-like organization obtains when contiguous elements are understood as linked together through

¹²David Lewin, *Generalized Musical Intervals and Transformations* (New Haven and London: Yale University Press, 1987), p.158-159.

¹³Lewin, p. 219.

transformations, but the "admissible gestures" available as transformations depend upon the sorts of things one is inclined to hear as processive within the context. The referential schemata operating here are not collections or spaces per se, but rather particular modes of *traversing* the musical spaces or ways of moving within and between collections. Thus, while the parallelism that characterizes Example 13, from the Violin Sonata, would initially mark it as a *collectional* structure, the consistency of the transformational process that is underway in this passage--transposition upward by semitonal increments--calls attention to the *way of moving*, so that a listener is inclined to attend to the transformations themselves. Parks alludes to something like this difference between *collectional* and *chain*-like structures when he contrasts Debussy's *kinetic* form--the sense of building towards and receding from, acceleration and deceleration--with *morphological* form--a spatially derived conception of formal design. As Parks describes it, kinetic form "directly confronts temporality."¹⁴ In my model, I attribute this sense of kinetic motion to particular transformational gestures that produces *chains* analogous to narratives based on local-level cause-and-effect.

Besides the wholesale transpositions exhibited in Example 13, other devices can function as transformational gestures. One characteristic means by which Debussy creates the impression of a transformational process is through semitonal voice leading and common-tone progressions--what Parks calls "kinesthetic shifts." An instance of this is shown in Example 14, a succession of two sonorities in which some notes are held in common while others move upward or downward by semitone. Example 15, from the Violin Sonata, shows another example; here the bass note G functions as a pedal point underpinning the semitonal-shifting of the right-hand chords above it. In Parks' view, this pitch-class invariance is one way in which Debussy links together different referential collections, or different transpositions of a collection. Certain pc-sets can serve as "pivot" sonorities which lead from one pc-set genera to another. These function, literally, as links

¹⁴Parks, p. 203.

in the *chain*. In the absence of such linking devices, as in Example 16 from the Cello Sonata, sharply contrasting referential collections can be understood to form a disjunctive *heap* structure.

Example 17 from the Sonata for Flute Viola and Harp, shows how a melodic string can function in a manner similar to the “pivot” within a kinesthetic shift. Here a motive is contextualized in two different referential collections and thus serves as a link between the two. This kind of shift can also happen over much larger time-spans. In the passage shown in Example 18, the violin’s theme at measure 88 and its transformation at 110 signal a larger-scale kinesthetic shift. The theme, originally played within the context of {E, F#, G#, A, B, C#, D#}, is recast in the new referential collection {C, D, E, F#, G, A, B}, while retaining the same starting pitch and contours as the earlier version. The emphasis on the notes F#, E, and A in the violin’s melody in measures 87-90 and 110-113 helps establish these pitch-classes as links between the two referential collections. The whole passage expresses a T_4 transformation, manifested in the piano part, while the violin’s theme undergoes a kinesthetic shift.

Closely related to this shifting technique is Debussy’s frequently employed device of duplication, in which an idea is nearly literally repeated, but with some salient alteration. William Benjamin gives the following formal description of duplication:

Duplication occurs where a time-span is partitioned into two subspans (not necessarily of equal length), and when the content of some initial portion of the second subspan (and possibly all of it) is a more or less literal repetition of the content of a corresponding (though not necessarily equally long) portion of the first span.¹⁵

While duplication is characterized by an explicit invariance between a contiguous pair of events, it tends to draw attention to the dissimilar portion of the reiterated segment--usually the tail-end of the segment. In Example 19, from the Sonata for Flute, Viola, and Harp, the event at the end of the second measure can be heard as a transformation of the corresponding event at the end of the first measure. The invariant material at the beginning

¹⁵William Benjamin, “*Pour les sixtes: An Analysis*,” *Journal of Music Theory* 22/2 (1978), p. 286.

of each bar links the two events in the same way that invariant pitch-classes link two harmonies in a kinesthetic shift.

Example 20 shows another instance of the same phenomenon in the etude "Pour les sixtes." Benjamin has remarked on this particular passage:

The two tail segments [of each measure] relate to each other as follows: the second is essentially a sequence of the first. Indeed, Wagner would have written [these measures] as a sequence.¹⁶

Benjamin thus contrasts the process of duplication with traditional tonal procedures that involve the scale-degree transfer of motives. He remarks:

It is true that the procedure is a hallmark of his [Debussy's] style and that his predilection for it must have been a part of his self-distancing from Wagner. Wagner's notion of transition was one of an almost imperceptible evolution from state to state, a notion to which the circularities and discontinuities implied in duplication could hardly accommodate themselves.¹⁷

As Benjamin suggests here, duplication is a complex phenomenon that engages time in a paradoxical way, expressing both a contrast and a connection between musical events.

Benjamin notes that:

the duplications in Debussy's music seem essential in that they serve as a rhetorical tool, one used to promote the reconciliation of conflicting values which that music expresses: of clarity in the establishment of goals, consistency in the definition of syntactic roles, and of hard-edged specificity in the assignment of roles to musical elements, on the one hand; of non-literality in the relationship between musical time and ordinary time (the latter has no "points of discontinuity"), of freedom to juxtapose heterogeneous materials, and, above all, of suppleness in the outlining of surface forms on the other. Basic to it is an iterative treatment of points of stability. . . Also part of it, however, is a flexible construction which encourages endless inventiveness in connecting these points.¹⁸

In the next chapter I return to a discussion of duplication and other of Debussy's characteristic transformational gestures. At present I am simply contrasting these gestures with other kinds of musical juxtapositions in Debussy's music.

As Benjamin points out, duplication is Debussy's answer to the traditional tonal sequence. Sequences are a defining characteristic of tonality, and when Debussy does treat

¹⁶Benjamin, p. 288.

¹⁷Benjamin, p. 286.

¹⁸Benjamin, p. 289.

a phrase sequentially, as in Example 21 from the Violin Sonata, he is careful to avoid tonal allusions by keeping the transpositions literal at the new pitch level. This represents a *chain* structure, in that events are understood to arise from a process of transposition--a localized cause-and-effect relationship. A special case of transformational gesture, however, occurs whenever the relationship between musical events is understood with reference to a tonal or functional framework, as in the descending sequence in Example 22, from the Cello Sonata. When the music expresses a key or mode in which functional relationships obtain, the referential schemata that such music engages have more complex hierarchical and temporal dimensions. In other words, when an event is given a Roman numeral designation, like V⁷ or flat II, or is described with a functional label like "the relative major of" or "the parallel minor of," we are invoking a referential schema qualitatively different from that invoked by a label such as "T₄ (X)." A label like "the dominant of" invokes a particular hierarchical arrangement of scale-degrees and, moreover, implies an eventual, forthcoming resolution to a particular tonic. These more intricately schematic cases are assigned to a separate category in the model in Figure 4, one that corresponds with the *complex episode* in the Glenn/Stein model. I label these cases *progressions*. This label can also be used when Debussy's music conforms to traditional phraseological and formal designs, such as antecedent/consequent structures, and the formal functions of a sonata. Such situations are, however, relatively rare in Debussy's late style, despite the appellation "Sonata" found in these works.

Glenn and Stein reserve a separate category, the *abbreviated episode*, for ambiguous structures that resemble both the *reactive sequence* and the *complete episode*. This suggests that there can be a special musical category representing something in between chain-like and tonal/functional organization. Such a category is useful for describing passages like those in Examples 23 and 24. In these examples, taken from the Etudes "Pour les arpèges composés" and "Pour les sixtes," the progressions are ambiguous. It is unclear whether we should identify these sonorities by labeling them with

Roman numerals, I - bVII - bVI - I, expressing movement to and from a tonic, or as T-2 transformations, projecting a large-scale whole-tone motion. The two ways of labeling represent two different ways of hearing: The former invokes a functional framework with an implied tonic and associated system of hierarchically related scale-degrees while the latter identifies a localized operation performed on pitch-class sets within a space. Both labels may be appropriate. My term for these situations is *conundrum*, the word for a riddle whose solution depends upon a pun. Certainly this is an organizational strategy that is encountered frequently in Debussy's music. Examples 23 and 24 are typical: the sense of "quasi-tonality" in Debussy's music frequently results from his tendency to stay within the range of tonal harmonies that can be interpreted both as literal T_{ns} of an initial sonority and as functional chords within a key. Sometimes, however, Debussy makes tonal functional relations explicit, as in Example 25, from "Pour les agréments," a passage that can be unequivocally labeled as a dominant-to-tonic progression.

The last category in my model corresponds to Glenn's and Stein's *complex episode*. This category describes combinations of any of the above modes of organization arranged in hierarchical structures. In analysis, this can be useful for describing the organizational structure of longer sections of works or of whole pieces. It allows the analyst to articulate the ways in which the music shifts from one type of organization to another within the course of a piece. In the Etude "Pour les sixtes," for example, we sometimes hear the music as two streams of sixths, one in each hand, and at other times as a succession of four-voice harmonies with tonal implications. Thus the music moves from chains to conundrums to progressions.

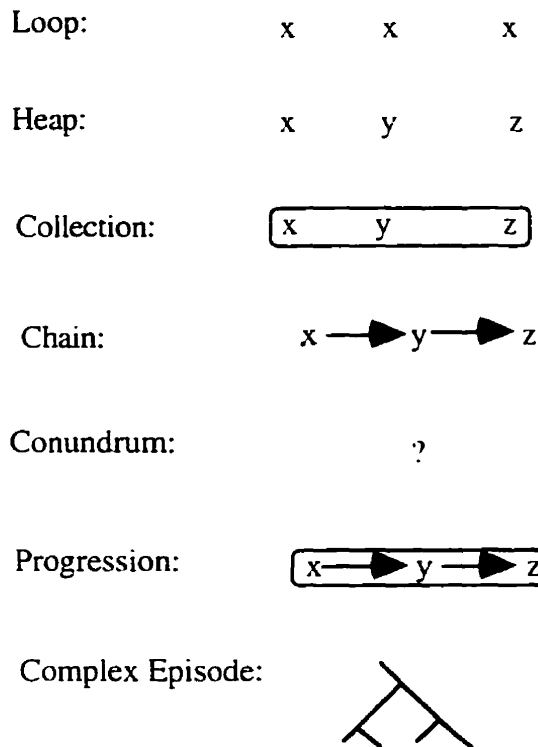
Example 26 shows the opening measures of the Etude "Pour les agréments." Here the mode of organization changes many times within the span of a few measures. The F in the bass in the first measure, the added-sixth-chord gesture in the right-hand, and the F major triad in the left hand on the third beat all contribute to an initially uncomplicated impression of F major tonality. The triad in left hand on beat five, however, introduces an

element from outside the key, B-natural. The three triads on beats 3, 5 and 6 of the first measure form a *collectional* group--three triads in second inversion--which contrasts with the tonal expectations set up at the beginning of the measure. Measure 2 resumes the F major tonality, and a diatonic sequence unfolds as the added-sixth-chord motive ascends step-wise through the F major scale. At the beginning of the third measure, this sequential progression metamorphoses, at the apex of the sequence, into a *chain*-like structure: the B⁷ chord arises out of a transformational gesture that is a kind of "false cognate" for the transpositions within the sequential process in measure 2. This event might even cause the listener to reinterpret the previous measure in hindsight as a *chain* rather than a *progression*. What is particularly interesting is that the two points in the piece thus far that mark a change in organizational strategy both involve the pitch-class B-natural. Measure 4 now continues the *chain*-like organizational mode, introducing a half-diminished seventh chord--a "Tristan" sonority--which is literally transposed by whole-steps. Again, the pitch-class B-natural is highlighted, this time by a cross-relation produced between the right hand's Bb on beat 3 and the B-natural in lowest-sounding voice on beat 4. As Example 26 indicates, the sonority on the first and last beat of measure 4 may also be interpreted as a half-diminished-seventh chord--a functional mixture chord, ii⁷, within the context of F major. This interpretation becomes the preferred one when the dominant of F occurs in measure 5. Thus these transformational or *chain*-like passages are parenthetically inserted within a larger tonic-dominant *progression* spanning measures 1 to 5. Within this passage, B-natural emerges as a significant object which marks shifts in the narrative mode. Subsequent B-naturals in the piece might now be grouped together into a network of associations. This would impart a special significance to the B chord in the passage shown previously in Example 25, which occurs about two-thirds of the way through the Etude. Here the note B-natural becomes unambiguously tonally grounded: this event points back to and completely inverts the situation in measure 1, where B-natural marked the first point outside a tonally organized space.

In Example 26, the *chain* structure in measures 3 and 4 is subsumed under a higher-level *progression*, tonic to dominant in F major. However, there is no reason to privilege tonal progressions over other kinds of structures in constructing hierarchies; a *progression* could as well be subsumed under a higher-level *loop*, *heap*, *collection*, or *chain*. The point is that a variety of organizational strategies can coexist within the same work: a listener is thus continually shifting among tonal, transformational, motivic, and object-oriented modes of listening.

I have described seven different ways in which a series of musical events may be organized. To summarize, I have reconfigured the layout of my Figure 4 as a series of simple diagrams in Figure 5. Here the letters x, y, and z denote musical units of any sort—individual pcs, sonorities, themes, formal units, etc. The *loop* is shown as a repeating letter, to indicate the overt, literal repetition of an event which characterizes this kind of organizational strategy. The *heap* is shown simply as a series of letters, indicating an arbitrary succession of musical units. The *collection*, in which successive events are analogically or metaphorically related to one another, is indicated by a box enclosing the units. A *chain* is represented by the addition of arrows connecting the units, to emphasize the transformational processes by which the events are linked. The *conundrum* is represented simply by a question mark, and marks an ambiguous intermediate stage between the *chain* and the *progression*. The latter, in which events unambiguously conform to traditional formal and tonal schemes, is represented by letters both connected by arrows and enclosed in a box; this characterizes the relatively determinate nature of tonality. Finally, the *complex episode*, a structure which combines different organizational strategies, is shown as an abstract "tree" denoting a hierarchical organization.

Figure 5.



Children's Narratives, Primitivism, and Modernism

I have tried to draw a parallel between different modes of musical organization in Debussy's works and the different stages of narrative comprehension that children experience as they gradually come to learn the codes and conventions of narrative syntax. I am thus implying that the musical strategies of *heap*, *collection*, and *chain* carry connotations of juvenility or artlessness, inasmuch as they revert to less sophisticated narrative conventions. If the first stages of Glenn's and Stein's model are indeed experienced by adults as more infantile or "archaic" than complete and complex episodes, then this sheds some light onto Debussy's choice of analogous musical forms. The broader cultural environment in which Debussy's late works were produced is characterized by a

widespread preoccupation with artlessness: that of children, but also of the *primitive* and of the *unconscious*. This preoccupation has to do with notions of truth, nature, and authenticity. For European modernists, the images of the primitive and of the naive child portray aspects of an ideal, ahistorical human essence, uncontaminated by the habits of socialization. Coemergent with the field of psychoanalysis, many artistic movements at the turn of the century share a belief in the truth-value of the unconscious: primitivism and artlessness were understood to represent the unrefined forms that expressions of the unconscious could take. Scientific authority was conferred upon these views of the child and the primitive through Freud's conception of the neurotic individual as one who has suppressed instinctive impulses to too great a degree, and his vision of modern civilization as necessarily repressive.

Although Debussy is not thought of as "primitivist" composer, many of the characteristics of his late works are emblematic of the style that came to be associated with primitivism, especially his collage-like formal layout and emphasis on repetition and reiteration over traditional developmental techniques. Debussy's cultivation of the "naïve" formal techniques I have been describing is consistent with the artistic aims of primitivism, and it is useful to position Debussy within this wider cultural context. Glenn Watkins observes that:

Characteristically, Primitivism tends to connote those tribal or folk expressions which carry the suggestion of the *unaffected* and the *unstudied*, the powerful and the essential, and which hint at communion with the primordium typically observable in art developed outside the system of patronage in Western culture.¹⁹

Primitivism is normally associated with a certain trend in painting and sculpture, found in representative works of Picasso, Gauguin, Klee, Rousseau, Kandinsky, and the Blaue Reiter group in Germany. In music, works that have been characterized as "primitivist" include Stravinsky's *Sacre du Printemps* and *Les Noces*, Milhaud's *La Création du Monde*.

¹⁹Glenn Watkins, *Pyramids at the Louvre: Music, Culture, and Collage from Stravinsky to the Postmodernists* (Cambridge, Mass: Harvard University Press, 1994), p. 64. My emphasis.

Bartok's *Allegro Barbaro*, and Prokofiev's *Scythian Suite*.²⁰ Satie's collaboration with Cocteau and Picasso for the theatrical production *Parade* is another primitivist, and specifically *naïf* work. What all these primitivist works share is what James Clifford has identified as a "cluster of qualities that at different times have been used to construct a source, origin, or alter ego confirming some new 'discovery' within the territory of the Western self."²¹ In his essay "Histories of the Tribal and the Modern," Clifford argues that the construction of the primitive is, in fact, "a relentless process" that has always gone on and continues to go on in the West. It is a process of self-defining and self-validating with respect to an "Other" which takes on a variety of forms: the tribal other, the archaic other, the naïve other, the exotic other, the feminine other, and so on. Clifford claims that the particular brand of primitivism that is such a defining feature of early twentieth-century artistic production is simply one manifestation of this on-going process. For many artists at the turn of the century, primitivism and naïveté provided a forum in which to explore artistic avenues not normally available to them within their own conceptions of themselves as modern Europeans. Frequently it is the perceived child-like qualities, an apparent guilelessness and lack of self-censorship, that attracts these artists to an imaginary primitive landscape peopled with non-modern, non-western persona.²² In music such fictional spaces provided an escape from the habits of a reified tonal practice.

One way in which the modernist composer could invoke the notion of the primitive was to revert to the archaic techniques of assembly associated with childhood. But how closely do the primitive narrative strategies described in recently-developed cognitive models, such as those in Figures 2 and 3, reflect a conception of children's artlessness that Debussy and his contemporaries would have shared? In fact, the notion of a continuum of intermediate narrative forms that we find in the cognitive models of Glenn and Stein and

²⁰For further discussion of musical primitivism see Watkins, pp. 63-163; and Nancy Berman, "Modern Primitive," Ph.D Dissertation, McGill University, forthcoming.

²¹James Clifford, *The Predicament of Culture* (Harvard University Press, 1988), p. 212.

²²For a thorough analysis of modernist primitivism see Marianna Torgovnick, *Gone Primitive* (Chicago and London: University of Chicago Press, 1990).

Applebee very closely resembles certain ideas about children and language that emerged at the turn of the century. Friedrich Kittler, in his book *Discourse Networks 1800/1900*, has closely investigated issues surrounding language and media in the early nineteenth and twentieth centuries.²³ Kittler shows how, beginning around 1900, language began to be understood in terms of a continuum of discursive styles that marked the intermediate stages between order and noise. Kittler explains how the distinctions between normal and nonsensical uses of language began to be conceived, not in terms of a binary opposition between order and chaos, as had been the case earlier in the nineteenth-century, but rather as different positions within a wide range of possible discursive forms.

Kittler identifies the beginning of this modernist notion of language in the development of “psychophysics” as practiced by the German scientist Hermann Ebbinghaus. In the 1880’s, Ebbinghaus conducted experiments in which he attempted to analyze the processes of human memory. These experiments were designed to measure the amount of time required to memorize sequences of data. The data used were nonsense syllables, chosen to eliminate as much as possible any semantic content that might influence the subject’s ability to recall the data. David E. Wellbury, in his introductory essay to Kittler’s book, explains:

In order to measure memory he [Ebbinghaus] has pass before his eyes a series of nonsense syllables and counts the number of passes required for the memorization of the combinations of these syllables. In this procedure Kittler discloses the complexity of a discursive beginning. There is first of all the body of the experimental subject: stripped of the cultural equipment of subjectivity, it has become a physiological surface upon which the syllables--once, twice, or several times--are inscribed. Secondly there is the source from which the syllables emerge: not books, not the material voice, but a mechanism for the production of random configurations. . . . Finally there is the form of language the system employs, a language without syntactic coherence or semantic content, mere letters in their materiality and in the differential pulse of their alternation. . . . Psychophysics takes language to a point where it stops making sense, or rather, it shows that all sense-making has its frontiers (and therefore its definition) in domains of nonsense and in automatized operations that no longer belong to a subjective authority. On the margins of language use there proliferate a host of breakdowns: dyslexias,

²³Friedrich A. Kittler, *Discourse Networks 1800/1900*. Trans. by Michael Metteer with Chris Cullens (Stanford: Stanford University Press, 1990).

aphasias, agraphisms, asymbolisms; the strict division between normal and pathological is transformed into a gradient of standards.²⁴

Kittler describes related experiments conducted at a Harvard laboratory by the German psychologist Hugo Münsterberg. These experiments were intended to measure the degree to which certain learned cognitive processes, such as reading and writing, could become automatic or involuntary. To conduct this research, Münsterberg enlisted the help of a group of students, which, incidentally, included Gertrude Stein. The results of the experiments were published in a psychology journal in an article by Stein and her colleague Leon Solomons:

This is a very pretty experiment because it is quite easy and the results are very satisfactory. The subject reads in a low voice, and preferably something comparatively uninteresting, while the operator reads to him an interesting story. If he does not go insane during the first few trials he will quickly learn to concentrate his attention fully on what is being read to him, yet go on reading just the same. The reading becomes completely unconscious for periods of as much as a page.²⁵

Münsterberg's experiments contrast a normal, purposeful, communicative kind of language with other sorts of language which are not simply "nonsense," but rather unconscious or automatic utterances. There thus appears, in addition to the normal discourse of a centred speaking subject, a series of subtly differentiated discursive possibilities. Kittler argues that the conception of language seen in connection with these kinds of research projects is radically new and that it is closely related to newly emerging technologies, such as the gramophone, that enabled the sounds of spoken language to be recorded and stored. Kittler writes:

The ability to record sense data technologically shifted the entire discourse network circa 1900. For the first time in history, writing ceased to be synonymous with the serial storage of data. The technological recording of the real entered into competition with the symbolic registration of the Symbolic.²⁶

²⁴David E. Wellbury, "Foreword" to Kittler, p. xxix - xxx.

²⁵Leon M. Solomons and Gertrude Stein, "Normal Motor Automatism," *Psychological Review* 3 (1896): p. 503. Quoted in Kittler, p. 225.

²⁶Kittler, p. 229-230.

Kittler argues that the new technologies made it possible for the ordinary linear flow of spoken language to be broken down into atomic elements which might then be taken apart and recombined in different ways.

Kittler notes that a particular interest in children's language coincides with the emergence of new technologies at the turn of the century. Edison's gramophone went into mass production in the late 1880's, and soon after this Edison began to market other products which incorporated his sound-recording technology. One item was a talking doll which contained a speech roll recorded by young girls. Kittler claims that the technology that permitted children's language to be recorded in this manner imparted a quality of *materiality* to that language which in turn gave it a kind of legitimacy it had not previously had:

Circa 1800 there was no children's language independent of pedagogical feedback. In the Edison talking doll, by contrast, real children sang children's songs about Marys and their lambs. . . According to Ellen Key, *The Century of the Child* brought an end to "soul murder" in school.²⁷ Instead of establishing pedagogical norms for what should be spoken by children, one gave free reign to language games. But these standards. . . were technological from the beginning. There cannot be any children's language unfiltered through the language of adults until discourses can be recorded in their positive reality. . . . Technologically possible manipulations determined what in fact became a discourse.²⁸

Thus one consequence of the new technologies was that previously unregarded discourses attained a new tangibility. The language of children had never before "passed a recording threshold" in the way that adult language had always been recorded in the form of the printed word. Children's language was now seen as a kind of dialect with its own particularities. This modern conception of children's language is evident in contemporary writings such as the following, excerpted from a speech given around the turn of the century by an educator in Weimar:

The school age child brings his own language to school, his native language, his family language, the language of his playmates, his own naïve, intuitive language: our task and our desire is to teach him our language, the language of poets and thinkers. . . . But isn't it asking a great deal when we demand that children, from the first day of school, speak nothing but school language?. . . It is not long before

²⁷See note 2, above.

²⁸Kittler, p. 232.

children will be overtaken by books and book language: a child learns to read. Reading, however, weakens and cuts across--it cannot be otherwise--the child's coherent, fluent speech, and book language begins more and more to influence and control school language; finally, in its often foreign and refined way, it creates a child who is now shy and monosyllabic.²⁹

The new scholarly interest in children's language is expressed in passages such as the following, written by the psychologist Stanley Hall in a book entitled *Contents of Children's Minds on Entering School*:

Words, in connection with rhyme, rhythm, alliteration, cadence, etc., or even without these, simply as sound-picture, often absorb the attention of children, and yield them a really aesthetic pleasure either quite independently of their meaning or to the utter bewilderment of it. They hear fancied words in noises and sounds of nature and animals, and are persistent punners. As butterflies make butter or eat it or give it by squeezing, so grasshoppers give grass, bees give beads and beans, kittens grow on pussy-willow, and all honey is from honeysuckles, and even a poplin dress is made from poplar-trees.³⁰

This kind of psychological interest in children's language conferred a legitimacy upon it, especially within the new field of psychoanalysis. What children say becomes the primary focus of psychoanalytic inquiry in Freud's writings, such as his "Little Hans" case history and in *The Sexual Enlightenment of Children*. In Freud's view, ordinary spoken language is thought to possess a manifest content which frequently conceals and disavows latent connotations. Adult language is self-conscious, laden with parapraxes and neurotic displacements, beneath which may be discerned covert meanings; children's language, on the other hand, is understood to represent a more immediate kind of expression. At the same time, however, language that is "childish," that is disjointed on the surface, that appears lacking in logical relationships, may mask deeper logical connections. In psychoanalysis, the nonsense and aimlessness of dreams, for instance, are understood to disguise deeper unconscious motives. In the same way, a narrative structure may conceal

²⁹ From a speech delivered on "Art Education Day" in Weimar 1904. Albert Hackenberh, "Der mündliche Ausdruck." In *Kunsterziehung. Ergebnisse und Anregungen des zweiten Kunsterziehungstages in Weimar am 9., 10., 11. Oktober 1903*. Deutsche Sprache und Dichtung (Leipzig, 1904), pp. 64-75. Quoted in Kittler, p. 233-234.

³⁰ Stanley G. Hall, *Contents of Children's Minds on Entering School* (New York, 1893). Quoted in Kittler, p. 235.

latent connotations. To return to the example of *Pelléas et Mélisande* with which I began this chapter, the loosely connected events and fragments of dialogue at the narrative's surface screen a deeper narrative level in which an elemental mechanics of "fate" governs the course of events. Pelléas and Mélisande, as Golaud remarks derisively at the end of the tower scene in Act 3, are just "like children"--naively unaware of the deep narrative syntax at work in their own love story.

Children's language presents an attractive model for musical formal organization: on one hand, it is seen as inartificial and sincere, and on the other hand its relative freedom from conventional syntactic structures means that it can be richly symbolic and alive with a multiplicity of meanings. Most importantly, it provides a source for alternatives to the ordinary syntax of "skilled" narratives, and new ways of conveying narrative continuity and succession. The modern notion of a multiplicity of discursive styles lies behind comments like the following, written by Debussy in 1913:

For many centuries we have been using the same sounds to express our innermost dreams, just as in writing we have been using the same words. There is very little difference. But when we realize that there are dozens of ways of writing or composing, there remain a hundred questions to be answered, and a further hundred posed by the answers themselves.³¹

Kittler emphasizes that technological developments played a major role in "rehabilitating" the discourses of children. As well, these developments fundamentally changed the way that language itself was perceived. The wide-spread use of the typewriter, the phonograph, and, eventually, film, Kittler argues, all had the effect of making language itself perceptible as a *medium*. And as a medium, it was now subject to a kind of manipulation that was previously impossible within a print-based culture where language could only be stored in the form of books and letters. Clearly the musical implications of this new conception of language are far-reaching. In his book, Kittler mentions Schoenberg's twelve-tone method, but I believe that Debussy's music, too, resonates with

³¹Debussy, "Precursors," *SIM Bulletin*, 15 March 1913. Quoted in Lessure p. 283-284.

these linguistic and technological issues; in the next chapter I explore some of the relationships between music and these emerging technologies.

Chapter 4. Debussy's Late Style and the Devices of the Early Silent Cinema

Introduction

When Anthony Newcomb refers to the paradigmatic plots of the nineteenth-century novel in his analysis of the instrumental music of Schumann, he acknowledges the novel as the dominant narrative form of the nineteenth century.¹ The "modes of continuation", as Newcomb calls them, specific to the bourgeois novel and play have musical counterparts in the forms of the instrumental works of the same period. With the development of a new narrative medium around 1900, the silent cinema, new paradigmatic modes of continuation emerge which stand out markedly in relation to those associated with nineteenth-century literature and theatre. Inasmuch as the ways of telling a story are determined by the techniques available within a particular narrative medium, cinema can be understood to exhibit markedly new narrative structures.

In the previous chapter I presented Friedrich Kittler's arguments that the entire discourse network of the early twentieth century undergoes a transformation as a result of newly emerging technologies, and I suggested that Debussy's music, in its varied and unconventional narrative structures, expresses something of the new, more inclusive conception of language that appears at this time, a conception that incorporates nonsense, unconscious speech, and the discourses of children. The present chapter situates Debussy's late works more specifically within the context of the technologies of the early silent cinema. The cinematic techniques that were developed by French film-makers during Debussy's lifetime can provide the basis for a model of continuity and succession in this music and suggest some new ways of approaching his late style. In the first part of this chapter I argue that the cinema was of considerable consequence in France during Debussy's mature career, and that the technical devices of the cinema constitute a markedly new way of representing time and space. Very few of the films from the late 1890s and

¹Anthony Newcomb, "Schumann and Late Eighteenth-Century Narrative Strategies," in *Nineteenth-Century Music* 11/2, p. 165.

early 1900s have survived, but the extant film reviews and contemporary criticism can provide a vivid sense of the early cinema, its reception, and its characteristic devices. In the second part of the chapter I select particular cinematic devices to serve as models for Debussy's own characteristic repertoire of musical devices. Finally, I discuss some of the connections between cinema, aesthetic theories, and French nationalism in the years surrounding the first world war.

The Early Cinema

It is a matter of some debate exactly who should be considered the original inventor of cinema, since a number of moving-picture technologies were developed independently at around the same time in different parts of Europe and America. Certainly ideas about motion-pictures were circulating in France from an early date. In the 1880s, for example, the British photographer Eadweard Muybridge had organized lectures in the Parisian salons to show his "motion studies," sequences of photographs taken in quick succession and then projected onto a screen using a device called a "Zoopraxiscope." This created the illusion of a moving picture. Meanwhile, in America, Thomas Edison had patented his "kinetoscope," a contraption which allowed a single spectator to view tiny projected moving images. It is Louis Lumiere, however, who is the generally credited with the invention of cinema. With his brother Auguste in Lyons, France, Lumiere made his living as a manufacturer of photography equipment. In the 1890s, he designed the "cinematographe," a machine that combined the functions of a moving-picture camera and a projector. On December 28, 1895--the date usually considered the birth date of cinema--Lumiere screened a number of short films before a paying audience.² One of these films, entitled *La Sortie des usines Lumiere*, is typical of these first works by Lumiere: a single shot of the outside of the factory shows the doors swinging open and workers emerging

² Although Lumiere is usually credited with developing the combined camera and projector, two Americans, Thomas Armat and C. Frances Jenkins had independently come up with a similar invention, called the "Phantoscope," some months earlier. They had used this device to project moving pictures for an audience at an exhibition in Atlanta in 1895, but did not meet with any commercial success at that time.

from inside. Lumiere went on to make hundreds of these short single-shot films. Another of the very first publicly screened films, Lumiere's *L'Arrivée d'un train a la Ciotat*, shows a steam train arriving at a station and moving towards the camera at an oblique angle; it is anecdotally reported that the members of the audience watching this film were compelled to duck out of the way, as though the train were coming right at them, so unprepared were they for the realism of the cinema.

The first cinema audiences were fascinated by the simple depiction of motion itself as viewers experienced a sort of defamiliarization of ordinary objects and events, like the movement of the train or the factory workers. Anything that moved could supply the subject for a film. Soon, however, the moving-picture camera was put to the more specialized use of bringing unusual scenes and images of remote places into the local theatre. Many of the first popular cinema productions were of scenic points of interest, like Niagara Falls, which has been called "the Mecca of all early motion picture camera men."³ Examples of these early "interest films" include those of James Freer, a Canadian farmer from Brandon who captured scenes of the wilds of Manitoba. Freer's films were shown throughout Europe during the late 1890s in a tour organized by the Canadian Pacific Railway Company. These kinds of nature films were enormously popular at the 1900 Paris Exposition. An example is Raoul Grimoin-Sanson's *Cinéorama* in which ten projectors were arranged in the middle of a spherical auditorium, offering the viewers the experience of the Sahara desert as seen from a balloon. Also shown at the Exposition was the Lumière Brothers' *Maréorama* which simulated the view from the bridge of a ship on the high seas. Similar films were popular across the Atlantic: in 1904 the American film-maker George C. Hale presented his *Tours and Scenes of the World*, which simulated the view one would have from the window of a train.

The film theorist Noël Burch has remarked on the unique sense of motion and space that is represented in these first cinematic events; the experience for the spectator is quite

³See Gordon Hendricks, *Beginnings of the Biograph* (New York: Arno, 1964), p. 38.

different from anything associated either with the traditional theatre or with an ordinary lived experience of space. Burch observes:

Although what is achieved here seems to be the almost literal absorption of the spectator by pro-filmic space and time, it is also a total rejection of any linearisation of iconic signifiers, of any centering of the picture. And . . . the ultimate goal sought by Grimoin-Sanson and his emulators, the insertion of the spectator-subject in an imaginary space-time, in fact demanded that linearisation, that centring, as its *conditio sine qua non*. With the Cinéorama, on the contrary, we are closer to the audio-visual 'environments' of modernism, which deploy a quite different kind of perception from the one the IMR [Institutional Mode of Representation] was to derive from the bourgeois theatre, the bourgeois novel and bourgeois painting.⁴

What Burch calls the "Institutional Mode of Representation" in this passage refers to the fully developed visual language of cinema to which all present-day spectators have been ceaselessly exposed through movies and television. It is a language that is in no way "natural," Burch emphasizes, but is rather a product of a particular history. While a modern film-maker can rely on spectators' ability to understand, for instance, that a juxtaposition of two views of a single object, shot from two different angles, both represent the same object, the first film-makers could not have assumed this. Such an instantaneous shift in perspective was not something spectators had had any prior experience with. Similarly, a modern film-maker can rely on certain cinematic visual conventions to convey temporal ideas, like "later" or "meanwhile," but these codes were unavailable to the first people working within this medium. To grasp the significance of early film, the modern spectator must try to imagine the early silent cinema as seen through the eyes of an audience unstudied in the various conventions that modern cinema audiences have internalized as a kind of film-reading competence.

The unique experience of space that Burch describes is a result of a variety of cinema-specific devices made possible by the flexibility of the camera's eye. A camera may record moving objects from a fixed position; it may pan across a static scene from a fixed point; it may also shift instantaneously to a new view or angle; and the camera itself may be

⁴Noel Burch, *Life to those Shadows*. Trans. Ben Brewster (Berkeley and Los Angeles: University of California Press, 1990), p. 39-40.

mounted on an object which moves in space. In the case of the tracking shot, a shot taken by a camera that is itself in motion, the cinematic spectator experiences a curious kind of motionless voyage. It is as though the camera itself has a sort of bodily agency. In a sense the mobile camera invites the viewer to consider the camera as the site of subjectivity, as if the spectator were moving through the landscape or scanning across it with his or her own eyes. On the other hand, the camera's eye may also represent some view as seen by some particular subject within the diegetic world of the film. Or the camera may function like an unmarked omnipresent narrator in a novel, seeing everything from all points of view. The silent cinema, lacking overt narration, creates a unique situation in which the spectator's location with respect to the imaginary space of the film is ambiguous. Vivian Sobchack has explored this issue of the subjectivity of the cinematic spectator, the different possibilities for what she calls the "site of sight" or the "viewing view":

...we know from our own lived experience what our bodily orientation, attention, and visual investment in the world 'look like' as they inform and play across our objectively visible bodily presence to others. We can *see* the visible and objective body of another who is *looking* at the world or ourselves, and understand that objective body is also a body-subject whose sight is as intentional and meaningful as our own. What is so unique about the cinema's 'viewing view', however, is that it presents and represents the activity of vision not merely as it is *objectively* seen by us, but also as it is *introceptively lived* by another. Thus the cinema's 'viewing view' is a model of vision as it is lived as 'my own' by a body-subject, and its uniqueness is that this 'viewing view' is objectively visible for us in the *same form* as it is subjectively visual for itself. . . . The structure and activity of the cinema's 'viewing view' are isomorphic with our own bodily experience of vision as we dynamically live it as 'mine.'⁵

What was so unusual about the early silent cinema, then, was the mobility and flexibility of the camera's eye and the new representations of space made possible by the multiplicity of shots and perspectives. As well, early film-makers frequently treated the cinematic frame itself as a flexible form by employing irises and masks.⁶ These are

⁵Vivian Sobchack, "The Active Eye: A Phenomenology of Cinematic Vision," *Quarterly Review of Film and Video* Vol 12/3, p. 25.

⁶The aspect ratio of the frame in the early cinema--the ratio of the frame's width to its height--was not standardized in the early days of the cinema. Unlike the later "talkies," no space was required along the side of the film strip for the band of sound; consequently silent cinema's screen was generally wider than the one we are accustomed to seeing today.

adjustable apertures of different shapes and sizes, which provide alternatives to the normal rectangular form of the cinematic frame.⁷ Multiple-frame imagery was also sometimes employed, in which the screen was divided into separate segments containing different images.⁸ While some of these framing devices can be understood as extensions of the lighting and staging techniques already available in live theatre or opera, other cinematic devices represent a more radical departure from traditional stage presentation. The juxtaposition of different camera angles, created by splicing together shots from different perspectives into a single strip of film, represents one such radical departure. The first spectators' lack of experience with this device is evident in the contrast with its utter transparency for the modern viewer. This can be demonstrated in a 1906 film called *La Danse du Diable*, produced by the Pathé-Frères film company. The film shows an elaborately costumed character who appears to be rolling around on the floor. The scene is filmed with the camera oriented in a downward vertical tilt. It is difficult for modern spectators to grasp the point of this peculiar film unless we realize that we are not supposed to recognize the downward tilt of the camera. Rather we are meant to perceive the actor performing his acrobatics within the traditional proscenium frame and thus witness a "magical", gravity-defying dance. Noël Burch remarks:

The effectiveness of this trick at the time undoubtedly lay in the fact that the clues to downward verticality were absolutely unrecognizable—it was an unthinkable angle never seen in a system whose basic reference point was a flat screen unfailingly perpendicular to the gaze of a spectator seated in a theatre.⁹

Another film of this type is *The Ingenious Soubrette*, produced by Pathé Frères in 1902, which shows a woman apparently walking straight up the side of a wall in order to hang a picture.

These rather simplistic examples aside, the technical sophistication of many early films was often quite remarkable, as film-makers rapidly began to take advantage of other

⁷ Examples of this occur throughout D. W. Griffith's *Intolerance* of 1916.

⁸ This technique reaches its zenith with the films of Abel Gance in the 1920s, but it already occurs in Phillips Smalley's *Suspense* of 1913.

⁹Burch, p. 228.

new devices made possible by the camera. A new kind of visual logic was expressed by a host of new techniques and special effects, many of them developed by the cinema pioneer George Méliès. Méliès was among the first to use film to tell stories. Between 1895 and 1914 Méliès made over a thousand fantasy films which exploit all types of cinematic devices. From 1888 to 1914, Méliès also worked as the director of the Théâtre Robert-Houdin, Paris's foremost magic theatre: he treated the cinema essentially as a sort of magic show and his work explores an array of cinematic illusions. It was Méliès who first used the uniquely cinematic technique of the *dissolve*, in which one image is seen to gradually fade away at the same time as a second image gradually appears. Adjustment of the film speed and direction, double exposures and superimpositions, stop-motion tricks, glass shots (in which camera shoots through glass on which a scene has been painted) and model animation were all used extensively by Méliès.¹⁰ Many examples of these camera tricks are found throughout his 1902 film *La voyage dans la lune*. The film tells the story based on Jules Verne's novel of the same name: a group of scientists travels to the moon in a rocket that is shot from a cannon; they have various adventures among hostile moon dwellers and eventually return to earth. Méliès employs every imaginable camera trick in the film; I will describe just a few examples. When the explorers first arrive at their destination, they are seen to lay down to sleep on the moon's surface: at this moment in the film Méliès has a long shot showing the actors lying down at the bottom of the frame while the upper portion of the frame remains completely black. Into this black area, Méliès inserts a second image--a process known as matting in which an additional image is produced either through reexposure of a selected portion of the film or by actually fitting a second piece of film into the space. At this point in *La voyage dans la lune* a series of dissolves now begins, with

¹⁰Variable film speed appears very early in cinema history, as represented by time-lapse experiments such as Muybridge's motion studies. The "normal" speed of early silent film is in the range of 16 to 20 frames per second, considerably slower than that of modern film. Because this rate is below the fusion threshold of about 24 frames-per-second, these early films had a pronounced flicker when projected--hence the term "flicker" or "flick" used to refer to movies. Today, in order to eliminate the flicker, silent films are sometimes projected at sound film speed which accounts for the fast motion that is erroneously associated with cinema of this period.

images of stars, celestial bodies, and a number of actors dressed as various mythological personae fading in and out of view in the space above the sleeping explorers. (This early example sets the stage for the later use of the dissolve as a signifier for dreaming or for the passage of time) Towards the end of the film, as the explorers try to make their escape with the moon men in hot pursuit, Méliès employs stop-motion camera tricks to produce explosions, disappearing acts, and other illusions. A scale model of the rocket plunging into a fish tank is used to show its return to earth.

Another early film-maker who brought to cinema his experience with the stage was André Antoine, director of the Théâtre Libre in Paris. Antoine was one of the first film-makers to advocate filming "on location" instead of using studio sets. He frequently used multiple camera set-ups, filming the actors from various angles and continuously changing the perspective in the editing. Antoine and other film-makers began to make extensive use of the "cut-in" or "close-up," an instantaneous shift from a distant framing to a closer view of the same space.¹¹ For modern cinema audiences, such devices have been internalized as part of our film-reading competence, but early film reviews reveal the extent to which cinema's first viewers were impressed by the shifting perspectives of the camera. While such images seem commonplace to modern viewers, it is important to realize how strikingly new they appeared in the early twentieth century. Contemporary accounts indicate that the shifting spatial orientation was so strongly marked in relation to normative proscenium staging that it could significantly impair the audience's ability to comprehend a narrative. For example, as late as 1912 a film critic known as Yhcam complained of the disrupting effect produced by the close-up:

¹¹ While it is sometimes reported that early French filmmakers used the long-shot almost exclusively, research by Noël Burch has shown that this is not the case. He argues that:

contrary to a highly tenacious myth, the medium close-up and even the true close-up are found in the very earliest stages of the cinema, in Europe and in the USA. They rapidly became an established presence in the first decade, so that it can be stated, with no wish to cultivate paradox, that the development of institutional editing among the Americans, the Danes, and so on, was to *reduce* the proportion of medium close-ups and close-ups in the cinema.

See Burch, p. 24.

[I]n order that their [the actors] facial expressions could be seen clearly by the spectators (in all corners of the hall), the director has had to project the actors in close-shots as often as possible. This method, which gives good results, has quickly degenerated into an excessive practice. . . . Naturally, little by little, this misuse has been pursued conscientiously by the directors of other companies. Now we have reached what could be called *the age of the legless cripple*. For three quarters of the time, the actors in a scene are projected in close shot, cut off at the knees; from an artistic point of view the effect produced is highly disagreeable and shocking. . . . the impression [is] of characters of unnatural grandeur. And when the aggrandizement diminishes and they return to normal, the same character seems too small; the eye takes a certain time to get used to this. . . . [T]he director should always begin by projecting the subject with a clear reference point, for example a dog with a man. If later he wants to increase the size of one or the other, in order to better capture details, he should announce to the audience that the subject is being projected in an enlargement of two, three, or four times.¹²

Well after the technique had become widespread, complaints about the close-up continued to be voiced: the film-maker and writer Henri Diamant-Berger felt it was much overused, and the celebrated writer Colette objected to "the technique that separates two speakers of a dialogue, that projects them in turn in huge close-ups, just when it is important to compare their faces together."¹³

While these instantaneous changes in the camera's view were sometimes experienced as disruptive, other critics were delighted by the same effect. One was Emile Vuillermoz, the student and biographer of Gabriel Fauré, who was well-known as a critic of both music and film. In his review of a 1915 film, *The Battle Cry of Peace*, he writes:

Here I touch on one of the most marvelous technical possibilities of the cinema art. This ability to juxtapose, within several seconds, on the same luminous screen, images which generally are isolated in time or space, this power (hitherto reserved to the human imagination) to leap from one end of the universe to another, to draw together antipoles, to interweave thoughts far removed from one another, to compose, as one fancies, a ceaselessly changing mosaic out of millions of scattered facets of the tangible world. . . all this could permit a poet to realize his most ambitious dreams—if poets would become interested in the cinema and the cinema would interest itself in poets! . . . More fortunate than painting and sculpture, the cinema, like music, possesses all the riches, all the inflections, and all the nuances

¹²Yhcam, "Le Cinématographe" in *Ciné-Journal* May 4, 1912, p. 16-17. Quoted in Richard Abel, ed. *French Film Theory and Criticism: A History/Anthology, Volume 1 1907-1929* (Princeton: Princeton University Press, 1988), p.72-73. The name Yhcam is believed to be a pseudonym but the author's true identity has never been discovered.

¹³Abel, *French Film Theory and Criticism*, p. 104. Colette's remarks are from "La Critique des films," *Le Film* 64 (May 28, 1917), p. 6. Diamant-Berger discusses interrelations between shots in *Le Cinéma* (1919).

of beauty in movement: cinema produces counterpoint and harmony...but still awaits its Debussy.¹⁴

This account is striking since it links Debussy's name with cinematic techniques: it also emphasizes the conspicuousness of film editing for this viewer (who barely even mentions the film's 'content' in the complete review). Whether viewers found these cinematic devices attractive or disruptive, it is certain that such techniques represented a radical departure from the temporal and spatial orientations to which traditional theater-goers were accustomed.

It is clear from the fact that prominent music critics like Vuillermoz were taking note that the cinema represented something much more than a fad or novelty, and that film was, in fact, a phenomenon of considerable cultural import. Certainly the cinema enjoyed a high public profile, not only as a fascinating new technology, but also as particularly French technology which occupied a relatively significant position within the national economy. In the first decade of the twentieth century, several large film companies with control over all levels of production, distribution, and exhibition began to replace the early artisan-based outfits like those of Lumière and Méliès. In the years before the outbreak of the first world war, the French film industry grew prosperous. Accepted statistics of the time claimed that ninety percent of the films seen around the world were produced in France. Between 1905 and 1914, the two largest French film companies, Pathé-Frères and Établissements Gaumont, produced films and film-making equipment on a large scale, and even conducted experiments with color processing and sound synchronization. These companies employed thousands of people in their studios and distribution centres throughout Europe and North America. At its height, Pathé-Frères employed around 5,000 people in France, while Gaumont, its largest competitor, had over 2,000 employees around the world. Chains of cinemas sprang up; Gaumont's chain included the grand Gaumont-Palace in Paris with seating for 6,000 spectators. At the same time, many smaller companies were able to

¹⁴Vuillermoz, "Devant l'écran", *Le Temps*, Nov. 29, 1916, p.3. Quoted in Abel, *French Film Theory and Criticism*, p. 131.

specialize within particular areas of the industry, like the production of news reels. A small but prestigious company Film d'Art produced films featuring Comédie Française actors and directors in original scenarios written by Comédie Française dramatists. A subsidiary company of Pathé-Frères called the "Société cinématographique des auteurs et gens des lettres" (S.C.A.G.L.) produced adaptations of literary classics for the screen--a sort of "Merchant-Ivory" of its day. In contrast to their American contemporaries who mainly targeted a vaudeville audience, the first French film-makers produced films for a wide variety of audience-types across the social spectrum. As well, French films tended to be more technically sophisticated than their first American counterparts: Noel Burch compares the early French and American cinematic styles:

For if ever there was a cinema that can be described as primitive in the pejorative sense of impoverished and crude, it is that of the USA before 1906: visual flatness (in both senses), poor composition. . . . In the same period, by way of comparison, French films, while just as primitive morphologically, had, even in their frontal long-shot pictures, produced plastic solutions such that films like [Méliès'] *Histoire d'un crime* or *Voyage dans la lune* seem very beautiful to us today.¹⁵

The quality of American films improved dramatically in subsequent years, however, and American films were soon circulating in French cinemas along side domestic products. The work of D. W. Griffith and other skilled American directors became highly influential among film-makers on both sides of the Atlantic.

As noted above, the first proponents of the cinema valued it most for its verisimilitude, its ability to depict "things as they really are," particularly things in the natural world. As well, a number of critics also saw great poetic possibilities in the cinema, a potential for a kind of *psychological* verisimilitude. Writers like Vuillermoz were interested in the way that devices such as the dissolve could evoke dreams, hallucinations, or imitate real perception. It was claimed that cinema could achieve this representation in a manner more compelling than could traditional painting or poetry. This opinion enjoyed the

¹⁵Burch, p. 113.

support of contemporary psychoanalysis: In 1914, the German psychoanalyst Otto Rank wrote that:

. . .representation in the movies, which is suggestive of dream technique in more than one respect, expresses in clear and sensual picture-language certain conditions and connections that the Poet cannot always express with words.¹⁶

The poetic potential of cinema was not lost on artists of the day. The writer Louis Aragon, a leader in the surrealist movement--whose first published essay appeared in the journal *Le Film*--credited cinema with introducing everyday objects as subjects worthy of artistic representation. He writes in a 1918 article:

Before the appearance of the cinematograph hardly any artist dared use the false harmony of machines and the obsessive beauty of commercial inscriptions, posters, evocative lettering, really common objects, everything that celebrates life, not some artificial convention that excludes corned beef or tins of polish. . . . [Films] manage to raise to a dramatic level a banknote on which our attention is riveted, a table with a revolver on it, a bottle which becomes a weapon.¹⁷

Aragon goes on to say how the techniques of the cinema suggest a way of seeing, a perception of the world that is like that of children. The following passage compares cinematic expression with children's perception, and thus recalls the connections between children's narratives and technologies I outlined in the previous chapter:

Poets without being artists, children sometimes fix their attention on an object to the point where their concentration makes it grow larger, grow so much it completely occupies their visual field, assumes a mysterious aspect and loses all relation to its purpose. Or they repeat a word endlessly, so often it divests itself of meaning and becomes a poignant and pointless sound that makes them cry. Likewise on the screen objects that were moments ago sticks of furniture or books of cloakroom tickets are transformed to the point where they take on menacing or enigmatic meanings. To endow with a poetic value that which does not yet possess it, to willfully restrict the field of vision so as to intensify expression: these are the two properties that help make cinematic decor the adequate setting of modern beauty.¹⁸

¹⁶Otto Rank, *The Double: A Psychoanalytic Study* Trans. and ed. by Harry Tucker, Jr. (Chapel Hill: University of North Carolina Press, 1971), p. 7. Originally published as *Der Doppelgänger*, Leipzig, 1914.

¹⁷Louis Aragon, "On Decor," *Le Film* 131 (16 September 1918), 8-10. Quoted in Abel, *French Film Theory and Criticism*, p. 165-168.

¹⁸*Ibid.*

Aragon's ideas here have musical counterparts: Debussy's Etudes, for example, are based on the premise of the "poetic value" of mundane musical objects: intervals (thirds, fourths, sixths, octaves), gestures (arpeggios, ornaments), and textures (repeated notes, chords). Likewise, each Etude represents a "willful restriction" of materials that heightens the expressive qualities of those materials. Film made the ordinary extraordinary and it radically changed what could count as a constituent of an art work.

While cinema's ability to depict reality was praised by writers like Vuillermoz and Aragon, at times it was found to be almost too real; sometimes the realism of the camera could contradict traditional codes of representation. Film legend has it that when Muybridge's first stop-motion analyses of race horses revealed that the positioning of the horse's legs did not correspond to the standard way of depicting this motion in painting, some people had difficulty believing that the photographs were real.¹⁹ This sort of contradiction would have delighted Debussy and other artists of the day who felt that real, "natural" representation had been hindered by academic formulae. For Debussy, nature is equated with suppleness, randomness, and the absence of such formulae. Music, he writes, "is a free art, a well spring, an art of the open air, an art comparable to the elements - the wind, the sea, and the sky!"²⁰ Elsewhere he writes:

We can be sure that old Bach, the essence of all music, scorned harmonic formulae. . . . That was the age of the 'wonderful arabesque', when music was subject to laws of beauty inscribed in the movements of nature herself.²¹

In another place, Debussy argues that music is better equipped than the other arts to depict the suppleness of nature, by virtue of its temporal dimension:

Music is the art that is in fact closest to Nature, although, it is also the one that contains the most subtle pitfalls. Despite their claims to be representationalists, the painters and sculptors can only present us with the beauty of the universe in their own free, somewhat fragmentary, interpretation. They can capture only one of its aspects at a time, preserve only one moment. It is the musicians alone who have the

¹⁹See Burch, p. 11.

²⁰Debussy, *Debussy on Music*, Trans. Richard L. Smith (New York: A.A. Knopf, 1977), p. 245.

²¹Ibid, p. 84.

privilege of being able to convey all the poetry of night and day, of earth and sky. Only they can recreate nature's atmosphere and give rhythm to her heaving breast.²²

What many artists found attractive in the cinema was its spatial and temporal flexibility, something which gave it the power to counteract the stiffness of rigid academic representational codes. It is not surprising, therefore, that Debussy considered the cinema as a possible model for music. In a 1913 S. I. M. bulletin Debussy writes:

There remains but one way of reviving the taste for symphonic music among our contemporaries: to apply to pure music the techniques of cinematography. It is the film—the Ariadne's thread—that will show us the way out of this disquieting labyrinth.²³

Musical Counterparts to Cinematic Devices

In the previous chapter I described a variety of different processive strategies and transformational gestures that Debussy employs in his late works: kinesthetic shifts, chain-like use of motives and themes, duplications, literal transpositions--various ways of following one musical event with another. I tried to construe these in terms of different narrative modes of continuation, ways in which music may proceed that need not be tied to internal repetition patterns and formal archetypes. I argued that a possible model for these modes of continuation is the narrative strategies of small children, whose discursive style was suddenly of considerable general interest at the turn of the century due to a number of factors, including the emergence of psychoanalysis and sound recording technologies. Another model for Debussy's modes of continuation can be found in the cinematic devices I have been describing: the dissolve, the juxtaposition of different camera angles, the direct cut or instantaneous shift to a new image, the close-up, adjustments to film speed and direction, double-exposure of the film, superimpositions and matted images. Given the conspicuousness of these techniques for the first spectators of cinema, it is reasonable to

²²Ibid, p. 295.

²³SIM bulletin, November 1, 1913. Quoted in *Debussy on Music*, Collected by François Lesure, Trans. by Richard Langham Smith (London: Secker and Warburg, 1977) p. 298.

assume that the formal disruptions represented by these filmic devices have musical applications to Debussy's own modifications to tonality and traditional form. It is possible to view cinematic devices as new formal options, models for continuity and succession that became available with the advent of a new narrative medium. Certain punctuation shots, like the dissolve and the direct cut, and other film editing practices can be seen to have musical counterparts in Debussy's transitional passages and patterns of succession. Moreover, the particular narrative situations that give rise to these devices in films may suggest specific formal functions and significations for the musical passages in which analogous devices occur. In the next part of this chapter I discuss a number of these cognate musical and cinematic situations.

The dissolve is one of the most salient devices specific to the cinematic medium. It allows the film-maker to make a perfectly smooth transition between any two shots. A comparable musical technique would link two musical events in a similarly seamless manner. A technique closely analogous to the dissolve is illustrated by the passage in Example 1. In the third measure of the Sonata for Flute, Viola, and Harp, the flute sustains the note E, effecting a diminuendo, while the viola enters quietly on the same pitch. When performed skillfully this passage creates the impression of a smooth dissolve from the timbre of the flute to that of the viola.²⁴

The dissolve also suggests a way that we might think about what Richard Parks calls kinesthetic shifts. When Parks demonstrates the linking action of subsets that are shared between two referential collections, these linking events function like the cinematic dissolve, where one image disappears as another emerges. For a brief moment, the cinematic spectator sees two images at the same time; similarly, the "pivot" sonority that links two referential collections momentarily implies two tonal spaces for the listener. Example 2 shows some instances of this type of transition in "Pour les Agréments": X

²⁴The popular 1969 recording of this work by Rog r Bourdin, Colette Lequin, and Anne Challan achieves this effect perfectly.

marks a transition from one diatonic referential collection to another--white notes to four sharps--and Y marks a transition from a diatonic collection to a whole-tone environment.

The type of smoothly graduated transition associated with the dissolve contrasts with the "direct cut", in which there is an instantaneous shift to a new shot. Likewise, the smooth modulations in Example 1 and 2 contrast with the abrupt changes of material shown in Example 3, another passage from "Pour les agréments." The segments marked W, X, Y, and Z here are linked by recurring motives, but these connections are overridden by the marked discontinuities in register, dynamics, and referential collection. These kinds of rapid changes between sharply contrasting events are precisely what Vuillermoz found so appealing and Yhcam so frustrating about early cinema. We might think of this passage as representing a series of direct cuts to a variety of different views of a some object whose unity is preserved in the motivic aspects of the example. Some of the abrupt transitions in the second movement of the Cello Sonata, shown in Example 4, also recall this cinematic effect. The alternations between pizzicato and arco, the sharp harmonic contrasts, and the sudden shifts in register here are reminiscent of the "shot/reverse shot" technique, in which the camera shoots from two angles 180 degrees apart in order to capture the facial expressions of two actors who are facing one another.

In his late works, Debussy often tends to eschew smoothness of continuity. Transition through smoothly graduated transformation is really a characteristic associated more with his earlier, so-called Impressionistic style, and his later reliance on sudden musical contrasts might be understood as a rejection of those Impressionistic ideals. It is interesting to note that cinema underwent a similar change in editing style during its early history: the earliest films of Georges Méliès in France and those of Edwin Porter in America regularly use dissolves to connect shots instead of having direct cuts.²⁵ After around 1903, however, direct cutting became standard practice, although, some film-

²⁵See Barry Salt, "Film Form 1900-1906", in *Early Cinema: Space, Frame, Narrative*, Thomas Elsaesser and Adam Barker, eds. (London: British Film Institute Publishing, 1990), p. 32. Another way in which the early filmmakers connected shots was to insert an appropriate intertitle, a bit of dialogue or text explaining the scene.

makers and critics continued to find this practice visually jarring.²⁶ For example, as late as 1914 the British film-maker Cecil Hepworth regularly inserted short pieces of blank film in between cuts in order to smooth over what he saw as a disruptive break.²⁷ Nevertheless, the wide acceptance of the direct cut as a viable and comprehensible means of linking different shots prefigures the kinds of abrupt formal divisions we find in Debussy's music.

Example 5 shows a passage from the first Etude, "Pour les 'cinq doigts' --d'après Monsieur Czerny" in which there is a sudden change of register, pitch collection, texture, and dynamics. In the segment marked X in this example, the left hand isolates a motive, M, from within the previous gesture marked Y. The way in which X is framed here by Y recalls a particular type of editing sequence in film: the "cut-in" is a close-up view, usually of a character's face, interpolated between two shots taken from a greater distance. Example 5 represents a musical device similar to the cinematic one that suddenly focuses attention on a detail within the space of the film. In the Etude, the equivalent of a cinematic background is suddenly removed at X and the motive, M, is brought to the fore of the listeners' attention. This detail is subsequently taken up as the theme of the passage beginning at measure 48. In film, the close-up frequently functions as an expression of interiority, revealing a character's subjective reaction to a situation in his or her facial expression. The audience is thus invited to read the thoughts written on the character's face, or even to feel the way that the character feels. When Debussy closes in on the motive M and subsequently develops that idea, the listener experiences a similar narrowing of focus.

The "cut-in" represents a simple kind of editing schema, a recurring pattern that becomes increasingly familiar to film-makers and spectators through continued use and exposure. It is a mode of continuation against which musical patterns might be matched. A more complex example of a schematic editing pattern is the procedure known as "cross-

²⁶Naturally a direct cut is less costly and time-consuming to produce than a dissolve, and this is likely an important reason for the change in editing style.

²⁷See Stephen Bottomore, "Shots in the Dark," in *Early Cinema: Space, Frame, Narrative*, Thomas Elsaesser and Adam Barker, eds. (London: British Film Institute Publishing, 1990), p. 105.

cutting,” or “parallel editing.” Most film histories identify this device as an American invention, first developed around 1905, although it also appears in French films around the same time. It was subsequently popularized by D. W. Griffith who used it extensively in his films, such as *Intolerance* and *Birth of a Nation*.²⁸ In this editing technique several shots are arranged repeatedly in alternation with one another, and their repetition is meant to imply a relationship of simultaneity between the scenes. A typical example is a scene in which images of a villain tying his victim to the railroad tracks are intercut with shots of a speeding train. The device is often used to generate suspense in ‘last-minute rescue’ situations and can involve an acceleration in the editing rhythm. It is also known as “switch-back” editing. Noël Burch refers to the device as the “alternating syntagm:” he emphasizes that it is a pattern signifying “meanwhile” rather than “next”. He explains:

[A] threshold was crossed when it became possible to ‘deduce’ from the relationship of succession between two tableaux in the time of the film (of its reading) the idea that they were deictically simultaneous. . . . [A] distinction began to be made between two meanings attributable to the transition between two biunivocally concatenated shots: in the first case, . . . what is signified is that the time of the second shot is linked to the that of the first by a relation of posterity; in the second, that a series of shots seen *repeatedly* in alternation with another series implies a relationship of simultaneity with the latter.²⁹

This filmic situation can inform our understanding of the passage shown in Example 6, from “Pour les ‘cinq doigts’”, where the alternating segments labeled A, B, and C recall the alternation of images in a film. As would be the case in a “rescue” or “chase” film, this passage occurs towards the end of the work. The duration of each of the separate “images” fluctuates in interesting ways in this passage: the “editing rhythm” accelerates as the music progresses, much the way it would in a Griffith film. Beginning in measure 91, the size of the grouping units is reduced to one beat, with beats 1 and 3 representing one tonal space (six flats) and beats 2 and 4 representing another (white notes). At the same time there is a more literal acceleration--*poco a poco accelerando e cresc.*, and the passage

²⁸Barry Salt notes that the device is already fully developed in the 1906 Vitagraph film *The Hundred-to-One Shot*.

²⁹Burch, p. 157-58.

culminates in a reprise of the etude's original tonality, C major, in measure 97. The analogy with cinematic cross-cutting suggests an analytical approach in which we could identify several different processes going on at the same time, all converging towards the same goal. For example, we catch intermittent glimpses of some on-going process in the events at measures 72, 79, 83, and 85, the segments marked B in the Example. This process may be further extended, via the T5 relation that obtains between measures 79 (an Ab chord) and 83 (Db), to the strong beats of measure 91 and following (Gb). At the same time, a second process may be represented by the intervening measures. It is, in part, the association between cinematic cross-cutting and the last-minute rescue that imbues this passage with its sense of urgency.

Other examples of musical "switch-backs" occur throughout Debussy's late works. Example 7 shows a passage from the Sonata for Flute, Viola, and Harp in which the alternating syntagm is invoked. In this case, the editing process eventually settles on one "image," the viola's tritone motive. Since this passage also constitutes a typical example of Debussy's technique of *duplication*, the practice of switch-back editing might be considered as a model for this technique more generally. The alternating syntagm, as Burch and other film theorists have shown, represents a solution to the problem of narrative simultaneity and spatial contiguity in film. Other solutions, however, were sometimes attempted, as the film theorist André Gaudreault has shown. Gaudreault has written about representations of time in early film, and he points out many instances of temporal overlap in silent films.³⁰ He explains that early film makers expressed time in two styles: continuous and noncontinuous; the latter Gaudreault compares to the expressions of time exhibited in medieval literature. He discusses numerous films in which the shots are arranged such that the viewer sees successive shots of the same single event from more than one view point: we "re-see" a scene so that some aspect of its spatial properties may be exposed. For example, in the 1903 Edison film, *Life of an American Fireman*, there is a dramatic rescue

³⁰André Gaudreault "Temporality and Narrative in Early Cinema, 1895-1908" in *Film Before Griffith*. John L. Fell, ed. (Berkeley, Los Angeles and London: University of California Press, 1983).

scene in which a fireman carries a woman out of a burning building. In the film, this event is shot both from the outside of the building looking in through a window and from within the room in which the woman is trapped. The viewer sees the rescue from both perspectives, in the form of two successive shots. As Gaudreault explains, "the shot's objective is to present not a small *temporal* segment of the action but rather the totality of an action unfolding in a homogenous space;" in this case, and in other early films, "spatial anchorage prevails over temporal logic."³¹ Likewise, in a musical passage characterized by duplication there is sometimes a sense that we are "re-hearing" the same event. In Example 7, the clock-work rhythm of the viola at the *un poco più mosso. poco a poco* at measure 48 creates the impression that ordinary time is resuming once again following the temporal back-tracking of the previous measures. Such moments of duplication frequently seem to "re-start" an idea: in Example 8, from the Etude "Pour les arpèges composés," the idea in the first measure seems to begin over again in the third measure following a kind of digression in the second measure of the example. The sense of temporal discontinuity in these examples is perhaps what distinguishes these and similar instances of duplication from the straightforward repetition of an idea in classical phrase structures.

Sometimes early film-makers were confronted with the inverse problem of representing two distinct spaces within a single shot. A favourite solution was the superimposition, in which a second image is inserted into a portion of the frame through a matting process or through double exposure of the film. This second image was often known as a "dream balloon," since its most common function was to represent a character's dreams, memories, or hallucinations. The convention began with films like Méliès' *La voyage dans la lune*, as I discussed earlier. Another early example of this use of matted images occurs in the 1902 Edwin Porter film, *Uncle Josh at the Moving Picture Show*. The film tells a story of about a man's first visit to the movies: "Josh" is seen watching a film, which appears to him so realistic and in which he becomes so engrossed that he

³¹Gaudreault, p. 322.

cannot distinguish between the film and reality. At one point the comical Josh becomes so involved with the scene he is watching--a woman in distress--that he actually lunges at the screen to intervene. When he attempts to duke it out with the image of the villain, convinced that he is actually confronting a real person, he has to be restrained by the projectionist. Throughout Porter's film a matted image is used to represent the movie within the movie. The function of the matted image here is to visually set off a fictional space within the diegetic space of the film, to circumscribe an illusion within the illusion. The same device is applied in more sophisticated ways in the films of D. W. Griffith. The last several minutes of Griffith's *Intolerance* contain a series of double-exposures, with the frame divided into separate segments representing illusion and reality. In one scene, the sky above a battlefield is transformed into a choir of angels, signifying a utopian vision of heaven that contrasts with the conflict below. Other ethereal images, fields of flowers bathed in light and playing children, hovering over scenes of chain-gangs, prisons, and warring armies, are meant to signify a hopeful future and a world beyond present misery. Again, these examples use the superimposition to set off a fictional or illusory realm within the film.

This cinematic device suggests a way of thinking about certain musical devices, coemergent with the cinema, such as polytonality and other situations in which contrasting musical materials are presented simultaneously. In Debussy's late works there are several examples of "superimposition" of materials that connote contrasting referential collections. The opening measures of the Etude "Pour les 'cinq doigts,'" shown in Example 9, exhibit such a superimposition--an intrusive Ab contrasts with the five white-notes in the left hand. In order to make sense of this superimposition, it is instructive to compare the first Etude with a well-known earlier work, the opening movement of the *Children's Corner Suite*, "Doctor Gradus ad Parnassum," given in Example 10a. Clearly, both of these works are intended to be rather humorous, and both evoke the image of a distracted piano student practicing tedious technical exercises. Each work concludes with an *accelerando* and final

presto section, signifying, certainly in “Doctor Gradus” but perhaps also in the Etude, the pupil rushing to finish her practice. In “Doctor Gradus” we understand the music as slipping out of the ordinary world of C major and into a day-dream world, and that the moment of deepest day-dreaming occurs with the arrival A flat in the bass in measure 37, shown in Example 10b. In the Etude, which is likewise grounded in C major, the other-world represented by A flat is present from the very beginning; the A flat interrupts the white-note world already in measure 2. This observation ties in with the “cross-cutting” idea outlined above: analytically, we can consider the white notes and the A flat within the black-note world as two starting points for two parallel, on-going processes that could be traced throughout the piece.

Another example of musical superimposition is shown in Example 11, a passage from “Pour les Sonorités opposées”. Here even the notation Debussy uses recalls the look of a cinematic “dream balloon”, off to one side of the frame. This passage can be viewed as representing two “opposed” tonal spaces that correspond to two diegetic spaces in a film, one “real” (the notes which accord with the notated key signature) and one “imagined” (the chords written in small notes on the upper staff). Such an analytical perspective has ramifications for how one might think about the resolution of “tonal problems” and “goals” later in the piece. For example, at the end of this piece, a series of chords is sounded in the same register as the earlier F major chord. Example 12 shows this passage. If these chords recall the “dream-world” represented by the earlier chords, they may point towards an *unattainable* tonal goal that remains unrealized at the end of the piece. This might explain why the D# major chord in measure 73 seems somehow unresolved, or perhaps to imply an impossible resolution.

The curious disembodied chords at the end of “Pour les sonorités opposées” recall another early cinematic device: Edwin Porter’s popular 1903 film, *The Great Train Robbery*, employs a device, copied in many subsequent films, known as the “emblematic

shot.”³² The film tells the story of the exploits of a band of violent robbers. The story concludes with a big shoot-out in which one group of robbers makes off with the spoils. Once the action has concluded, the very last image in the film shows a medium close-up shot of a cowboy who points and shoots a gun straight into the camera. This image does not represent any particular action in the film—the story has already concluded—but it simply suggests a general mood of danger or ominousness. Considering certain musical events as musical analogs for “emblematic shots,” images which do not advance the story in a film but rather set a mood, offers the analyst a useful alternative to the notion of “coherence” that compels us to account for the structural function of each event in a piece of music. A model that incorporates the structural “functionlessness” of the emblematic shot acknowledges the role of musical events beyond the scope of a strictly hierarchical or goal-directed design. This is especially crucial for post-tonal works in which the relations between musical events within the work tend to be more metaphorical and associative rather than causal or hierarchical.

Cinema, Symbolism, and Nationalism

The emblematic shot, the dream balloon, the dissolve, direct cutting and switchback editing constitute a panoply of compositional techniques that early film-makers developed for connecting different kinds of shots. These devices could be employed to convey temporality and spatiality in unique ways. Consequently, the cinema, with its ability to juxtapose disparate images in this fashion, was frequently seen as an exemplary medium for artists at the turn of the century, particularly those active in France, who were attempting new types of temporal and spatial representation. The enthusiastic Emile Vuillermoz, who urged poets to take an interest in the cinema, claimed that film could express a uniquely modern conception of space and time, comparable with and even surpassing the latest trends in painting and in poetry:

³²See Salt, “Film Form 1900-1906”, in *Early Cinema*, p. 32.

The cinema's miraculous gift of ubiquity, its power of immediate evocation, its wealth of interchangeable images are all needed to execute this tour de force. thousands of tiny frames in a moving filmstrip act like the cells of the human brain: the same overwhelming rapidity of perception, the same multiplicity of many-faceted mirrors which effortlessly juxtapose the farthest horizons, suppress distances, abolish the bondage of time and space, embrace all the cardinal points [of the compass] simultaneously, and transport us in a fraction of a second from one extreme point in the universe to another! . . . Here there are subtleties and ingenuities of editing that confirm the infinite suppleness of cinematographic technique and its astonishing attribute--which one could call 'symphonic'--of combining chords of impressions and writing a kind of visual counterpoint for several instruments. It's the plastic formulas of *simultanéisme* which torments Guillaume Apollinaire.³³

The term *simultanéisme* here refers to a concept used in connection with cubism: Vuillermoz seems to envision the cinema as a kind of quasi-musical rendering of this *simultanéisme*, a marriage of music's dynamism with visual forms. These remarks indicate how easy it would have been at this time for an artist to consider film, painting, and music as capable of expressing the same essential formal qualities. Indeed, the idea that a composer could translate cinematic devices into musical ones, or vice versa, is similar to the Symbolist poets' idea of mysterious correspondences among objects and images and musical sounds found in the writings of Mallarmé and Poe. The Symbolists, with whom Debussy was involved, tended to ascribe an abstract value to poetic images, as if these images were musical phenomena, and they cultivated a confusion among the perceptions of the various senses. One artist who actively sought to combine Symbolist ideals with cinema was Léopold Survage, a Russian-born painter who came to Paris in 1908. In 1913 and 1914, Survage exhibited his work with the Cubists at the Salon des Indépendents. His article entitled "Le Rythme coloré" published in 1914, outlines a project for a film based on animated abstract images. He writes: "The fundamental element in my dynamic art is *colored visual form*, which plays a part analogous to that of sound in music."³⁴ Like many of his contemporaries, Survage conceives of image, sound, and motion as inextricably

³³Emile Vuillermoz, "Before the Screen: *Les Frères corses*." *Le Temps* (7 February 1917), p. 3. Quoted in Abel, *French Film Theory and Criticism*.

³⁴Léopold Survage "Le Rythme coloré" *Les Soirées de Paris* 26-27 (July-August 1914), p. 426-427. Quoted in Abel, *French Film Theory and Criticism*.

linked with one another and with the psychological states of the artist. He goes on to say that these non-representational moving images, by virtue of the fact that they are *moving*, would somehow evoke the changing emotional state of the artist. For Surville, Vuillermoz, and others, music and cinema are distinguished by being temporal phenomena, and as such both cinema and music are thought to be "life-like," to express a kind of mutability comparable to the workings of real human perception and intra-psychic experience.

For many, the cinema was perceived as something particularly French, as a medium in which the French had a superior expertise, and thus was often invoked by artists and critics with nationalistic leanings. The cinema, it was thought, expressed some quality that was essentially French. Modeling one's art or poetry on the devices of the cinema represented a way in which artists could be "modern" and, at the same time, uniquely French. It was a matter of national disgrace, therefore, when, with the declaration of War in August of 1914, the lucrative French film industry immediately collapsed. As Richard Abel reports:

All branches of the industry immediately closed down. The general mobilization emptied the studios of directors, actors, and technicians. Even the French film star, Max Linder, although rejected by the army, left for the front to deliver military dispatches before going off to make films in the United States. The deserted spaces of the studios were requisitioned for military stores and horse barns, and Pathé's film-stock factory at Vincennes was transformed into a war plant. The cinemas, along with all other shows, closed their doors in the national interest.³⁵

Before the war it is believed that most of the films seen around the world were French films. With the outbreak of war, however, all the activity connected with the once thriving French cinema came to an abrupt halt. As the war dragged on, cinemas were eventually reopened, but, because the whole structure of French film production was no longer in place, it was largely imported American films that filled the theatres.

Abel notes that a sense of regret and defeat pervades the critical writing in many of the film journals at this time. Throughout 1917 and 1918, in the journal *Le Film* the film-

³⁵Richard Abel, *French Cinema: The First Wave, 1915-1929*, (Princeton University Press 1984), p. 9.

maker and writer Henri Diamant-Berger repeatedly complains of a crisis which threatens the existence of French cinema. At the same time, strong nationalistic sentiments surface in the writings of *Le Film*'s editor, the influential critic Louis Delluc, who, like many, looked to the great film-maker André Antoine to restore the splendour of the French cinema:

For if an artist as brave and all-embracing as he [Antoine] is can attain his aim, that means anything is possible. We will finally reach the threshold of a national art, an art which is more national than international and which has not yet--or scarcely--recognized how to be really French.³⁶

The French industry, however, never recovered its losses, and by 1919, at most only about 15 percent of the films seen in Paris were French-made. It was claimed in the journal *Mon-Ciné* in 1919 that "the French cinema is stripped of its glories, it will perish, and we will have to resign ourselves to being a country that no longer makes good films."³⁷

Nevertheless, the perception of the "Frenchness" of the cinematic medium persists for some time, as, for example, in Apollinaire's postwar crusade for a specifically French style of modern poetry that would take the cinema as its model for expression. Apollinaire writes:

It would have been strange if in a epoch when the popular art par excellence, the cinema, is a book of pictures, poets tried to compose pictures for meditative and refined minds that are not content with the crude imaginings of the makers of films. These last will become more perceptive, and one can predict the day when, the photograph and the cinema having become the only form of publication in use, the poet will have a freedom heretofore unknown. One should not be astonished if, with the means they now have at their disposal, poets set themselves to preparing this new art.³⁸

Debussy's own crusade for a *musique française* becomes most pronounced in his later career. His desire to express what he believed to be a uniquely French kind of lyricism is perhaps best achieved in his late works, which do appear to express something of the spirit of cinema. Perhaps Debussy's deployment of filmic devices, his cultivation of the modes of continuation of cinematic editing and its special qualities of motion and juxtaposition, was motivated by a sense of the cinema as a particularly French art. And this

³⁶Louis Delluc, "Antoine travaille," *Le Film* (20 August 1917), p. 5.

³⁷Quoted in Abel, *French Cinema: The First Wave, 1915-1929*, p. 6.

³⁸Quoted in Kittler, p. 251.

perception of cinema's "Frenchness" was perhaps most acutely felt after the demise of the film industry in 1914. Certainly as Debussy's work becomes more self-consciously French, the cinematic aspects of his style become more prominent. In any case, the cinema offered appealing new models of temporality and spatial orientation, and the development of motion pictures is clearly an important factor for an understanding of many early twentieth-century artistic ventures, musical or otherwise.

Chapter 5. A Narrative Approach to the Analysis of Debussy's "Serenade" from the Cello Sonata

Introduction

Debussy's letters written during the summer and fall of 1915 reveal the renewed sense of enthusiasm with which he approached the composition of his late chamber music. To his friend Bernardo Molinari he writes, in October of 1915 :

When I tell you that I spent nearly a year unable to write music . . . after that I've almost had to *relearn* it. It was like a rediscovery and it's seemed to me more beautiful than ever! [. . .] We're still in the age of 'harmonic progressions' and people who are happy just with the beauty of sound are hard to find. [. . .] I haven't written much orchestral music, but I have finished *Douze Etudes* for piano, a Cello Sonata, and another sonata for flute, viola, and harp, in the ancient, flexible mould with none of the grandiloquence of modern sonatas. There are going to be six of them for different instruments and the last one will combine all those used in the previous five.¹

Beyond the Sonata for Flute, Viola, and Harp and the Cello Sonata, Debussy went on to complete only one more chamber work, the Violin Sonata. The other projected works to which Debussy refers were to have involved some rather unusual combinations of instruments: a sonata for oboe, horn, and harpsichord, another for trumpet, clarinet, bassoon, and piano, and a final work in which a double bass was to be added to the whole ensemble. These combinations and subgroupings of instrumental forces are evidence of Debussy's keen interest in issues of timbre, and suggest that he was perhaps thinking about new ways of composing for contrasting sonorous blocks. The contrast, for example, between the sounds of the flute, viola, and harp ensemble and the oboe, horn, and harpsichord combination suggests a mosaic-like conception of timbre that might have been exploited when the full complement of instruments was brought together in the final work. Debussy was perhaps inspired by the kinds of contrasting instrumental textures and sonorous blocks employed by Stravinsky, especially in *Le Sacre du printemps*, a work which Debussy described as "extraordinarily wild. . . . you might say, it's primitive music

¹From a letter to Bernardo Molinari, 6 October 1915. Published in François Lesure and Roger Nichols, *Debussy Letters* (Cambridge, Mass.: Harvard University Press, 1987), p. 303-4.

with all the modern conveniences!"² Certainly the juxtaposition of heterogeneous materials that characterizes Debussy's late style recalls similar techniques used by Stravinsky. But Debussy's works show a concern for integration as well as contrast: in the Violin Sonata, for example, he strives for a kind of unity, and expresses this concern in a letter to Durand:

Going for a walk recently at Cap Ferrat, I found the 'cellular' idea for the finale of the Violin Sonata . . . Unfortunately, the first two movements don't want to have anything to do with it . . . Knowing myself as I do, I'm certainly not going to force them to put up with an awkward neighbour.³

Also clearly indicated in his letters is Debussy's feeling that he is creating something truly *new* in these late works. Following the completion of the Cello Sonata and the Etudes in September of 1915, he writes to his friend D. E. Inghelbrecht:

The reason I haven't written before is that I'm re-learning about music . . . It's good, even so. It's even better not to be thinking in terms of the various societies: Nationale, Internationale and other places of ill-repute . . . The emotional satisfaction one gets from putting the right chord on the right place can't be equaled in any of the other arts. Forgive me. I sound as if I've just discovered music. But, in all humility, that's rather what I feel like.⁴

At the same time, however, he imagines that he is recapturing a classical or timeless kind of compositional technique, an "ancient, flexible mould." To Durand he writes, in August of 1915:

The sonata for cello and piano will reach you, perhaps, before this letter. It's not for me to judge its excellence but I like its proportions and its almost classical form, in the good sense of the word.⁵

It is evident from these letters that in the late chamber works Debussy is occupied with issues of contrast and unity, of novelty and tradition, even primitivism and modernism. Debussy strives for a balance between "configurational" and "episodic" elements, by meeting some of the expectations of listeners accustomed to the conventions of the instrumental sonata and achieving at the same time a freshness of expression.

²From a letter to André Caplet, 29 May 1913. Lesure and Nichols, p. 270.

³From a letter to Jacques Durand, 17 October 1916. Lesure and Nichols, p. 319.

⁴From a letter to Inghelbrecht, 30 September 1915. Lesure and Nichols, p. 302.

⁵From a letter to Durand, 5 August 1915. Lesure and Nichols, p. 299.

Interestingly, what Debussy sees as "classical" or enduring about his cello sonata has to do with the plasticity of its form. Unlike the rigid schematic patterns of "modern" sonatas, Debussy feels that his own sonata has reanimated the formal mould. In this chapter I argue that this "reanimation" is accomplished through the combination of classical narrative principles with alternative narrative structures and with other new formal techniques that I identify as "cinematic." I discuss the second movement, the Serenade, from the Sonata for Cello and Piano, in order to illustrate some of the ways that Debussy employs these techniques. In this work, Debussy's habit of juxtaposing heterogeneous musical materials is taken to its greatest extreme, and as such, it presents an especially challenging puzzle for the listener or performer. My approach to this piece offers a new perspective that complements the more traditional analytical approach taken by Robert Moevs in his article "Intervallic Procedures in Debussy: Serenade from the Sonata for Cello and Piano, 1915."⁶ The first part of this chapter summarizes the main points of Moevs' analysis, one of the very few examples in the theoretical literature that tries to deal with this work. I then try to reconfigure some of Moevs' observations within a narrative perspective, one which views the Serenade as a kind of story with identifiable actantial roles and narrative functions. My analysis of the work draws upon ideas presented in the previous two chapters and attempts a practical application of some of the analytical ideas I have discussed therein.

Moevs' Analysis

Moevs begins his analysis with the claim that in the Serenade "it is the intervallic that is most significant."⁷ By considering the role of interval, separate from motive or counterpoint, Moevs hopes to elucidate a coherent structure in the work. This focus on the work's constituent intervallic elements is motivated by the mosaic-like quality of the music:

⁶ Robert Moevs, "Intervallic Procedures in Debussy: Serenade from the Sonata for Cello and Piano, 1915," *Perspectives of New Music* 8 (1969-1970), p. 82 - 101.

⁷Moevs, p. 82.

listening to the movement one has the sense of a gradual building up of small discrete components, that the overall shape of the work results from an accretion of tiny fragments. This constructivist style is, in part, what gives the piece a decidedly "modern" sound.

Example 1 shows the beginning of the Serenade. Moevs begins by drawing attention to the intervallic content of the first measure: the two consecutive semitones played by the cello constitute a "nucleus," a generative event from which all other events, he claims, grow organically. This nucleus is immediately transposed up a perfect fourth: Moevs highlights the minor-third gap that is formed between the last note of the initial presentation of the nucleus and its transposition. This interval class, he points out, also spans the gap between the cello's Eb and the piano's entrance on Gb at the end of the first measure. Here the piano plays what Moevs claims is another transposition of the nucleus but without its middle term. He considers that the transpositional process is otherwise the same as in the previous event, with the nucleus moving a perfect fourth higher. Thus, "the total distance covered in this systematic fashion is an octave: two successive presentations of the nucleus cover the distance of a fourth."⁸ The cello's part at measures 3 and 4 Moevs considers as forming a compound line that presents two interlocking forms of the nucleus: two sets of consecutive semitones are formed by the G, Ab, and A, in the cello's "upper voice" and Db, D, Eb in the "lower voice." Meanwhile the piano's A, Bb, and Cb represent a third form of the nucleus. Next, Moevs points out how the piano's bass note G in measure 5 and the high E in the cello each expand by one half-step the range of the previous four measures. In measure 6 new transpositions of the three-note nucleus are formed by the cello's E-F leading to F# and the F#-G-Ab at the end of the measure. Thus Moevs shows how the nucleus cuts a gradually widening band through pitch-space.

A descending whole-step separates the cello and piano at the beginning of the third measure. Moevs views this whole-step as an expansion of the initial half-step interval, a kind of transformation of the first idea. Throughout the Serenade, Moevs locates

⁸Moevs, p. 82.

prominent half- and whole-step intervals; in the contrast between these two intervals, Moevs sees a kind of theme for the whole piece: an expansion and contraction by half-steps of the objects in pitch space. The whole-step, Moevs claims, originally derives from the accretion of two half-steps, but later asserts itself as an independent and irreducible entity. In measure 7, for instance, the semitone interval is fully displaced by the wholetone: the pentatonic collection {C, D, F, G, A} played by the cello here represents a transformation of the initial chromatic accretions into diatonicism characterized by whole-tone spacing. The transformation of half-steps into whole-steps is made most explicit in measure 23 and 24 in the top line in the piano part, shown in Example 2: here the motive D, Eb, F in measure 23 maps onto D, E, F# in measure 24, preserving the original rhythmic values and contours of measure 23 while augmenting the constituent intervals.

Throughout the *Serenade* the contrast between whole- and half-steps is mirrored by a corresponding juxtaposition of the perfect fifth and the tritone. Example 3 isolates several places in the piece where perfect fifths contract into diminished fifths--retaining one common pc--and where tritones expand into fifths. Moevs argues that both the half-step and the tritone can be understood as chromatic alterations of normative diatonic intervals; in other words, the whole-step and the fifth are emblematic of diatonicism or pentatonicism, while the half-step and tritone represent deviations from diatonicism. Moevs sees the contrast between diatonicism and undifferentiated chromaticism as a recurring theme throughout the work. He attempts to account for much of the piece in terms of a process by which the fifth and the tritone are gradually built up through the accretion of half- and whole-steps. The tritone then associates with symmetrical subdivisions of the octave--hexatonicism and chromaticism, and therefore with tonal indeterminacy--while the fifth becomes associated with diatonicism and pentatonicism. Certain passages of the *Serenade*, then, are under the influence of the tritone, and others under the influence of the fifth. Moevs observes that the tritone itself acts as a "vehicle for the interaction" between the two systems:

At one extreme it [the tritone] may be integrated into tonal functions, as the second degree in the minor mode, and in the dominant seventh and ninth. Less a functional part of the process, it may be superimposed upon it as a melodic or nonharmonic element, such as an appoggiatura or échappée. Frequent or consecutive use of such devices can affect, and modify, the implications of the harmonic structure itself. Further intrusion of the tritone into the harmonic process from without can alter the functional components of that process, by modifying their intervallic organization or by adding further intervals to it. This coloration or expansion of the harmonic function softens its contour, lessening harmonic identifiability, particularization, and meaning, and increasing the multiplicity of harmonic interpretations, tending eventually towards a generalized harmonic vagueness. This extreme point is reached, or nearly, with the emergence of the tritone to an absolute ascendancy, correspondent to the total banishment of the fifth. . . . Movement back and forth across the fifth-tritone continuum is maintained at a fairly constant pace. Oscillations between extreme points occur infrequently; more normal is a fluctuation among intermediate stages of tritone infiltration, producing a smoother transition and greater continuity from one group of measures to the next.⁹

In Moevs' view the piece is essentially construed in terms of a binary opposition between tritone-based music and fifth-based music. While this view does capture an aspect of the work's formal fluidity, it also tends to oversimplify the form by forcing us to consider individual parts of the work as either tonal or "non-tonal." In order to better appreciate the particularities of these non-tonal moments in the work, moments that Moevs himself recognizes as "intermediate stages of tritone infiltration," Richard Parks' notion of referential collections can be helpful. Individual passages of the Serenade can be analyzed according to the pc-set genera from which the pitch material is drawn. Diatonicism characterizes measure 5 through 7, for example, while measures 10 through 17 are predominantly hexatonic, and an octatonic collection underlies the music in measure 28 to 34. Example 4 shows these excerpts from passages. Focusing on these referential collections brings to light further interesting relationships between parts of the piece. For example, each of these three pc-set genera is already present in the opening few measures of the piece in the form of an "emblematic" trichord: Example 5 isolates three sonorities that occur on the weak beats of measures 3 and 4. The first, Cb, Db, G, is a whole-tone trichord, [0,2,6] in setclass terms, arranged in an unmistakably hexatonic configuration:

⁹Moevs, p. 90.

the second Cb, D, Ab, is a diminished triad, a hallmark of octatonicism: finally, the last trichord, Cb, Eb, A, is, in setclass terms, another [0,2,6], but now deployed with distinct diatonic implications, enharmonically equivalent to the root, third and seventh of a dominant-seventh sonority. Moevs' view of the tritone as a vehicle for the interaction of tonal and nontonal organization meshes well with Parks' style of analysis in this instance: each of these emblematic trichords contains the tritone as a salient feature. To view the work in terms of the fluctuations between three referential collections throughout the piece grants more intricacy to form than does the strictly binary model in Moevs' interpretation.

It is also possible to reconfigure Moevs' observations about the oscillation between tritone-based music and fifth-based music in terms of contrasting "narrative strategies." For example, one strategy obtains in passages where the music is organized according to tonal or modal progressions, in which the ordering of events is partly determined by hierarchical pitch structures and temporal schema, while another strategy characterizes passages based on unordered referential collections, including octatonicism and hexatonicism. This approach could then lead us to assert the presence of a range of additional narrative structures within the work, such as those that I have described in chapter three. Certain passages in the Serenade could be said to be based upon paradigmatic tonal *progressions*, such as root motion by fifth between identifiable harmonies, while other passages rely on a *collectional* structure in which pitch materials are drawn from, for example, hexatonic or octatonic "catalogues" and in which the particular order of the pitch events is undetermined: still other passages exhibit a *heap*-like arrangement of elements where both the pitch materials and their temporal order are non-schematic. This narrative approach further complicates the binary opposition that Moevs posits between tritone and fifth, and allows for the possibility of a greater number of organizational strategies within the work.

For Moevs, the main goal in his analysis is to elucidate the work's coherence. The underlying assumptions of Moevs' analytical method are clear from the way that he

approaches the first few measures of the Serenade: in identifying a nucleus and its transformations Moevs' analytical point is to emphasize the "systematic" and "organic" aspects of these opening measures. However, the singular eccentricity of the passage is passed over without comment. Someone reading Moevs' analysis, without having heard the work, would not get the impression that the work is bizarre or bewildering in any way, whereas, it could reasonably be claimed, the opening measures only just barely cohere. Moevs even adjusts the musical "facts" somewhat to fit his organicist premise: what he calls an "octave span" in the first measure, the distance traversed between the cello's initial Ab and the piano's Ab at the beginning of measure 2, is not really an octave but a unison. The piano does not literally complete a cycle of transpositions of the nucleus: rather it interrupts this transpositional process by reasserting the starting pitch. This initiates a restatement of the nucleus at its original pitch level. Quite contrary to Moevs' assertion, measure 2 does not represent a moment of cyclic completion, a continuation of the logical growth of the nucleus, but is rather more like a disruption of a process. Measures 1 and 2 constitute an example of a *duplication*, a temporal disjunction in which an idea seems to begin over again in the second measure. It is perhaps more accurate to say that the movement begins in a fluttering or "stuttering" manner: to describe it as systematic or organic does not really capture the decidedly anomalous quality of these opening measures. Moevs' attempt to elucidate the organic quality of the Serenade means that he overlooks many of the points of discontinuity, the fractures, nonsequiturs, and logical gaps that play an essential role in this piece. What Moevs' analysis ultimately attempts to show is how an underlying principle of organicism knits together a discontinuous surface, and how a rich network of intra-opus associations may be grasped with repeated listenings. What Moevs' analysis leaves out is an account of the way that the music thwarts our sense of an overarching coherence, and what the role of these discontinuities might be. An analysis that approaches the piece as though it were a kind of *narrative*, in contrast, can address some of these structural anomalies.

Coherence and Heterogeneity: A Narrative Approach to the Serenade

In its broad formal outlines the Serenade exhibits some conventional features of a classical narrative design. The piece is in a ternary form that Richard Parks has described as a "rondo-derived morphological plan;" Parks represents this design as follows:

A----->reprise----->reprise----->|

where "A" represents a theme that returns at intervals following passages in which a process of developing variation occurs, represented by the arrows in the diagram.¹⁰ In his discussion of this formal design Parks does not discuss the Cello Sonata specifically, but mentions several other works that share this rondo-derived ternary structure: "Brouillards" from the second book of *Preludes*, "La danse du Puck" from the first set of *Preludes*, and "La flûte de Pan" from the *Chansons de Bilitis*. In the Serenade, the "rondo theme" delineates three large formal sections: measures 1 - 18, 19 - 53, and 54 - 64.¹¹ Example 6 compares the three rondo statements themselves. The content of measures 3 through 6 corresponds exactly to that of measures 19 through 22; in the third statement of the rondo theme measures 54 and 55 repeat the content of measures 3 and 4 but alter that of the two subsequent measures. The principal difference between the material in measure 5-6 and 21-22 and that in measures 56-57 is that the former constitute instances of duplication--in which the first halves of each of the two measures contain identical material while the tail segments vary from one measure to the next. Measures 56 and 57, on the other hand, dispense with the mechanical repetitions associated with duplication and present instead what would be better described as a reharmonization: i.e., the measure 57 essentially

¹⁰Parks, p. 222-3.

¹¹Arguably, tripartite structures are archetypal of classical narratives; from a Greimasian perspective, there are always three "left-turns" to make on the path around a semiotic square, so that a group of three events might be understood as a minimum number necessary for imparting a sense of completion or closure. It may be simply this tripartite structure that Debussy senses as the "classical" aspect of the work's form, rather than its correspondence to the three main sections of a classical sonata movement.

reharmonizes the material of 56. This represents a significant transformation of the rondo theme over the course of the work. Since a duplication takes place in the opening two measures of the Serenade, where it has the quality of a "double-take" or a stammer, that technique becomes associated with a "beginning function" within the work: an "ending function" is imparted to the final rondo statement through its treatment as a single continuous two-measure unit, its contextualization within a smooth progression of three harmonies that contrasts with the stammering quality of the duplications. Thus the final statement of rondo theme, by "overcoming" the duplications associated with the first two, imparts a sense of closure to the Serenade. This is something like classical closural effect described by Fred Maus in his analysis of Beethoven's Opus 14: the transformations of the rondo theme in that work, Maus claims, can be understood as "a series of actions, repeated attempts to reach a state of affairs that requires no further action."¹² In the Serenade, however, more music follows on the heels of this final reprise. This fact, along with many other aspects of the Serenade tend to offset its classical narrative characteristics like "closure." In the next part of this chapter I explore some of the more irrational qualities of the work and argue that these serve a particular narrative purpose.

It is notoriously difficult to establish precise "extra-musical" references in purely instrumental music, so that a narrative approach must often necessarily dispense with the whole issue of a composer's intentions when seeking some sort of "story" within the work. Conveniently, however, Debussy has provided a specific literary reference in connection with the Cello Sonata upon which a narrative analysis might be based. Based on the original descriptive title that Debussy gave to this Sonata, *Pierrot fâché avec la lune* ("Pierrot vexed with the moon"), I wish to approach the work as though it were telling a story about Pierrot, or more specifically, presenting a portrait of Pierrot in which he acts and speaks. Furthermore, this Pierrot may be understood as a particularly *cinematic* Pierrot, in that the music evokes the way that Pierrot might be portrayed in the silent

¹²Fred Everett Maus, "Music as Narrative," *Indiana Theory Review* 12 (Fall 1991), p. 13.

cinema, using the technique of rapid direct cutting between contrasting images. This interpretation seems especially appropriate when we consider some of the ways that the character of Pierrot was generally understood at the time of the cello sonata's composition.

To assert that Pierrot was a character of considerable significance at the turn of the century is hardly controversial: Glenn Watkins devotes a portion of his book *Pyramids at the Louvre* to the "Obsessions with Pierrot" that characterized late nineteenth- and early twentieth-century artistic production throughout Europe.¹³ The ancient *commedia dell'arte* tradition served as inspiration to a great number of poets, painters, musicians, and writers, and Watkins argues that it was the figure of Pierrot, in particular, that provided a rich source of expressive ideas:

Of all the figures in the *commedia dell'arte* it was Pierrot whose popularity was ascendant during the nineteenth century. A buffoon attired in a loose white tunic with huge buttons, loose sleeves, white pantaloons, and white face, he became increasingly subject to mood swings that emphasized a psychological fragility. Pierrot as portrayed by the mime Jean-Gaspard Debureau (1796-1846) became for Baudelaire "le vrai pierrot actuel, le pierrot de l'histoire moderne," and before long other Symbolist poets and musicians recognized his capacity for striking varied poses. The Belgian Albert Giraud wrote his *Pierrot lunaire*, subtitled *Rondels bergamasques* in 1884, and Debussy began his *Suite bergamasque* a few years later in 1890, capturing the moonstruck note of Pierrot from Bergamo in his renowned "Clair de lune." Similarly Verlaine's *Fête galantes* of 1864 conjured up the figure of Pierrot, and Debussy introduced Scaramouche and Pulcinella in the first line of "Fantoches" ("Marionettes") from his first set of *Fête galantes* of 1892. Debussy's fascination with Pierrot continued in the guise of a sonata for cello and piano as late as 1915, for which Debussy proposed the subtitle *Pierrot fâché avec la lune* (*Pierrot Vexed with the Moon*). The Decadent Pierrot of the late nineteenth century had always been a figure drawn to multiplicity rather than singularity, given to fusion as well as confusion, and assisted by Sarah Bernhardt as well as Félicien Campsur's *Lulu* published in 1901, he finally achieves a morphological rebirth as a *clownesse*.¹⁴

As a "figure drawn to multiplicity," Pierrot provided an ideal embodiment of the multiplicity of discursive styles that, as I have argued in previous chapters, were beginning to emerge around 1900. Pierrot's own broad expressive range and sudden changes of mood parallel the proliferation and diversification of narrative strategies that characterize

¹³Glenn Watkins, *Pyramids at the Louvre: Music, Culture, and Collage from Stravinsky to the Postmodernists* (Cambridge, Mass: Harvard University Press, 1994), p. 277.

¹⁴Watkins, p. 281-2.

early modernism. The image of Pierrot as a kind of emotional chameleon resonates with the major themes of psychoanalysis, such as the notion of ambivalence, the presence of powerfully conflicted psychological wishes within the individual psyche. Freud's understanding of neuroses as the expression of conflicts between the ego and whatever drive impulses seem to the ego to be "non-ego-syntonic" represents a compartmentalized notion of the mind that the character of Pierrot renders vividly.

Watkins argues that the widespread interest in *commedia dell'arte*, along with a concurrent fascination with puppetry, Japanese No drama, and other kinds of masked performance, all represent a reaction to the histrionics of the late nineteenth-century theatre: he claims that the attraction to these more impersonal theatrical techniques lies in "the power of the mask and the Orient to diffuse the heightened passions of *verismo* and at the same time support a nobility of expression."¹⁵ As well, Pierrot and the other *commedia dell'arte* characters provided fresh alternatives to the heroic characters associated with nineteenth-century epic narratives: Watkins argues that it is the Italian origins of the *commedia* that attracted artists who were anxious to distance themselves from the Teutonic mythology that had played such an important role in the nineteenth century. Watkins writes:

The French scholar Pierre Ducharte, in his *La Comédie italienne* of 1925, recognized with rare clarity the force of the tradition to which numerous contemporary artists were then making their contribution. Pointing to the painters as well as the poets, the Fratellini clowns, and the Ballets Russes, he concluded: "Poets, musicians, writers, painters of talent or genius, [otherwise] most strongly opposed to each other, meet in their common love for the *commedia dell'arte*." Even more fundamentally, however, owing to the Italian origins of the *commedia* it could serve in the immediate postwar period as an ideal forum for extolling Latin, non-Germanic virtues, and especially for claiming them as the source of a developing Neoclassicism. It was a claim that involved a healthy set of fictions, and one that did not go undisputed. But in some very important ways, it was honored, as Stravinsky became the embodiment of a Latin-based Neoclassicism with its love of eighteenth-century forms and manners, while Schoenberg, first adopting Pierrot and then reclaiming the classic forms of his own inheritance in the 1920's, denied his relation to the aesthetic altogether.¹⁶

¹⁵Watkins, p. 281.

¹⁶Watkins, p. 293-4.

Watkins' remarks here suggest that one reason why Debussy in particular might have found the character of Pierrot attractive has to do with its specifically non-Germanic origins.

Pierrot and the other commedia characters provided an set of narrative roles and functions that contrasted sharply with those associated with the Wagnerian idiom.

As Watkins points out, the cultivation of the stock characters of the commedia at the turn of the century points toward the aesthetics of Neoclassicism, with its more *ritualistic* use of tonality and classical formal schemes. In the Cello Sonata, tonality is treated in a "ritualized" fashion at least in the sense that it is "denaturalized." Tonal objects and paradigms are presented as one particular construct along side a variety of other possible organizational modes. Moevs' identification of a vacillation between points on a fifth-tritone continuum is an analytical response to this aspect of the music. Moments of unambiguous tonality in the cello sonata are brief and appear almost self-conscious. Like the breakdown of Pierrot's unitary ego, paradigmatic tonal progressions tend to give way to other organizational strategies, and tonality appears as merely one musical dialect among a plurality of dialects. This effect is achieved in the Serenade through the juxtaposition of tonal progressions with other techniques of organization. Several passages in the work can be understood in this way, such as the events in measures 3 and 4. This passage employs a familiar tonal paradigm: at the beginning of measure 3, the cello and piano create a two-voice counterpoint based on an ascending chromatic 5-6 sequence. Example 7 shows a reduction of this passage to its underlying sequential basis. It is possible to analyze measure 3 using roman numeral labels. The sonority on the first beat of measure 3 can be construed as a C minor-seventh harmony in four-two position, which resolves on the second beat to an F major chord in first inversion. This chord now functions as V6 of the Bb harmony on the following beat. The cello's G over the Cb in the piano implies a continuation of the sequence: the sonority can be understood enharmonically as a G chord in first inversion, pointing toward a resolution to C. What thwarts this interpretation is the intrusion of the note Db, which sounds in place of an expected D natural. Now the piano,

instead of ascending to an expected C natural, descends back to Bb; the Db has derailed the sequence, and the piano mechanically repeats the motion Bb to Cb two more times, while the cello continues to creep upward by half-steps.

I understand these measures as representative of a transition from a functional chord *progression* to a *chain*-like mode of organization. In other words, the music changes from an initial situation in which scale-degree hierarchies and attendant voice-leading probabilities obtain to a situation in which simple transformational gestures govern the course of events. The transition between these two modes can be thought of as a reduction in the level of complexity of the referential schemata that the music engages. Example 7 shows the roman numeral labels that may be placed under measure 3 and the transformational arrows that replace these in measure 4. The moment at which the passage mutates from a progression to a chain coincides with the cello's Db. The interval G - Db on beat 4 of measure 3 functions in two ways, both as a chordal component within an altered dominant-functioning chord, V -flat 5 of C, and as an object independent of a tonal context, that participates in a transformational network. This transition from progression to chain recurs in the reprise of this material at measures 19 and 20, so that the "slippage" between the two organizational modes becomes a kind of theme in the piece. It depicts the vacillations of Pierrot himself, his tendency to become "unglued."

Measures 5 through 9 also highlight the contrast between tonal progressions and alternative organizational strategies. The passage, shown in Example 8, begins precariously in G minor, where the tonal orientation is somewhat attenuated by the chromaticism in the cello. Measure 7, however, is unambiguously diatonic (Moevs says pentatonic) and a modal cadence occurs on beats 3 and 4, which may be labeled as VII - i in G dorian or natural minor. In measure 8 this modal organization vanishes. The cello's Es at the end of measure 7 and beginning of measure 8 provide a link between two organizational modes: the modal *progressions* of measure 7 and the *heap*-like arrangement of diatonic triads in

measures 8 and 9, where the C# minor, F major and D minor chords succeed one another in a relatively nonschematic or erratic fashion.

As Example 9 shows, the span separating the G minor chord at the end of measure 7 and the C# minor chord at the beginning of measure 8 recalls the tritone interval played by the cello in measures 3 and 4. The motion of the chord roots, G to C#, also repeats the pcs played by the cello on beat 4 of measure 3. It is significant that the same pitch-class, C#/Db, occurs at the moment of transition from one organizational mode to another, both in measure 3 and in measure 8.

Another shift from tonal to transformational organization occurs later in the piece, in measure 37, shown in Example 10. Measures 37 and 38 represent a tonic-dominant progression in C major: the piano's left hand provides a clear functional bass that grounds the complex harmonies of the upper parts. A much more tonally ambiguous passage ensues in measure 39 and 40, one which may be best characterized as a chain-like passage enacting a series of T₃ transformations. Here again, tonal functions are convoked and rapidly dissolved, suggesting Pierrot's destabilized ego, a personality comprised of unintegrated components and ephemeral affects.

Besides these shifts in narrative mode, another way that the music portrays Pierrot's mood swings is through sudden shifts in register. The break between the two organizational modes at measures 7 and 8 is, simultaneously, such a registral shift, with the cello suddenly soaring high above the pitch range hitherto established in the piece. These moments of sharp contrast in register occur many times in the Serenade and they serve to broadly delineate three different registers on the cello--the low, medium, and high ranges. From a narrative perspective, it is possible to consider these three separate ranges as representing three different persona or "voices," three singers of the serenade. Each has certain unique qualities, besides its particular registral deployment, so that the music of each voice differs from the others in certain ways. The Serenade enacts something like the interplay of the distinct voices of the father, the child, and the supernatural being in

Schubert's "Erlkönig," only here in the Serenade each voice is really Pierrot's own voice, the utterances of the different component parts of his conflicted "multiple personality"--perhaps even voices heard in his own head. What I identify as the first of these "voices" corresponds with the lowest range of the cello, heard in measure 1 to 4. Moevs' identification of an implied two-voice texture in the cello at measures 3 and 4 reveals a bifurcation of the line here, what I take to be a splitting-off of a second voice that is then fully accomplished when the higher register is introduced in measure 5.

This second voice emerges in an interesting fashion: Example 11 traces the path followed by the tritone motive that first appears at the end of measure 3. The cello's tritone moves upward by semitone: G - Db is followed by Ab - D, then A - Eb, a consistent pattern that creates the expectation of continuation. A fourth tritone, E - Bb, would continue this rising pattern. This expected dyad does come in measure 5, but here it is inverted and transposed up one octave: the cello's Bb - E, played as the top two notes of a rolled chord, signals a decisive registral shift which I interpret as the entrance of a second contesting voice. It is still Pierrot's voice, but this time it issues from another part of his conflicted personality. This is, so to speak, his first mood swing. The higher range of the cello, the more volatile rhythmic values--dotted quarters and sixteenth-notes, as compared with the less highly differentiated values of the first four measures--and the "hair-pin" dynamic markings contribute to a feeling of increasing anxiety associated with this second persona.

Measure 7 portrays a moment of outright disputation between the two voices. Moevs points out that measure 7 is the first unpaired measure in the Serenade, contrasting with the previous measures which fall neatly into three groups of two. The octave transfer of the falling whole-step motive, A - G - F, in this measure can be understood as an abrupt juxtaposition of two voices, the higher voice on the first beat, followed by a return to the low voice associated with the first four measures of the Serenade. The two are juxtaposed in the manner of a cinematic direct cut, an instantaneous shift from one octave to the other. Example 12 isolates these voices on separate staves and shows as well the entrance of a

third voice: the high E in measure 8, played as a harmonic, and, for the first time in the movement, with the bow. The piano imparts an unearthly quality to this pitch, surrounding it with the tonally remote C# minor chord.

Measure 8 and 9 enact what can be considered as a series of direct cuts between images of Pierrot's first and third personae, the low voice and the highest voice. Throughout the Serenade, Pierrot's three psychic personae are repeatedly juxtaposed through this kind of direct cutting. Octave transfer of motives happens frequently: Example 13 isolates these events, which are evocative of Pierrot's fitful temperament, and the sharp psychological boundaries that are driven between his unintegrated internalized personae. In measure 25, a juxtaposition of all three voices takes place, again within a single unpaired measure that follows a series of two-measure grouping units. This time all three voices are heard in the repetitions of the motive E - A - B - D, transposed across three registers. Here as in measure 7, the foreshortened hypermeter creates a frantic effect, a moment of confusion in which the three personae come in conflict. This correlation of rapid shifts across different registers with changes in hypermetric grouping is rendered more salient by the events that take place at measures 28 and following, shown in Example 14. The expansion of the pitch range to encompass three full octaves coupled with a reduction in the size of the grouping unit in measure 25 is counterposed by a narrowing of the melodic range and lengthening of the hypermeter in measures 29 and 30—a kind of inversion of the situation at measure 25. Here the cello's melodic line shrinks into the space of a minor third, while the grouping unit which begins with the down beat of measure 29 seems to stretch out for 8 full beats, an effect accentuated by the lack of any articulation in the piano at the beginning of measure 30 and the "Molto rit." marking at the end of the measure. It is as though Pierrot's middle voice, beset by its vituperative neighbours in measure 25, reacts by becoming utterly withdrawn at measure 30.

A final juxtaposition of all three voices occurs in measures 56 and 57, the final statement of the "rondo theme," shown in Example 13. Here the three voices seem to

achieve a limited degree of integration, inasmuch as they link together to constitute a single melodic idea--the same melody initially assigned to the middle voice alone at measure 5. This moment of integration coincides with the "closural" effect of the final rondo statement, although this proves to be an illusory kind of closure, given what follows.

Example 13 shows further instances of direct cutting between the low and middle voices at measures 27, 35, and 42 - 43; measures 48 to 51 contrast the high and low registers. The unearthly quality of the high voice at measure 48 is intensified by an incongruous chromatically ascending melody in the right hand of the piano. Incidentally, this tune, in both its rhythmic and intervallic contours, bears a striking resemblance to the second half of the motive of Desire or Longing from the Tristan Prelude, shown in Example 15. This provides a clue as to the possible identity of this high voice: it is perhaps the voice of Pierrot's (or Debussy's) internalized Wagnerian superego.

That this third, high voice is initially associated with the C# harmony in measures 8 and 9 is especially interesting when we recall that the same pc, Db, initiates the transition from a functional chord progression to a chain-like transformational series in measure 3. In this piece the C#/Db thus represents a kind of disintegrating agent. In the "flautendo" passages at measures 48 - 50 C# is again heard in connection with the third, voice, as Example 16 shows. Example 17 shows how this C# functions as the culminating point of a process spanning measures 28 to 48, a process by which C natural is converted into C#: the example compares the cello part at measure 48 with that at measure 28, highlighting two motives that share the same rhythmic figure. In measure 28, the dotted-eighth note value in the rhythmic figure is assigned to C natural, while at measure 48 the corresponding position in the figure is assigned to C#. Then in measure 49 and 51, the high voice's C# is counterposed by the C natural played in the low register of the cello, reenacting the oppositions between these two pcs that occur elsewhere in the work. Example 18 draws attention this moment and to the more subtle C/C# juxtapositions in the cello line at measure 13 and following, as well as the contrasts between B# and C# in the inner parts of the

piano's music at measure 15 and 16. The cello returns to the low C natural at measure 18, just prior to the first reprise of the rondo theme. The insistent repetitions of low C natural in measures 52 and 53, a moment formally analogous to measure 18--immediately preceding the rondo reprise--seem to resolve the C#/C natural opposition in favour of the C natural. Here the opposition is manifested in terms of the contrast between the high and low voices. It is as though the low voice is attempting to have the last word here. However, C# infiltrates this low register in measure 57: Example 18 highlights the emphatic repetitions of this pc in measure 57 and 58, and identifies one last moment of contrast between the two opposing pcs.

Pierrot is a figure who must battle continuously against his own psychic disintegration. His character, as it was conceived at the turn of the century, subsists in a state of permanent ambivalence. A musical portrayal of Pierrot, therefore, may likewise be expected to maintain a disunified quality or an open-endedness. If the Serenade presents a portrait of Pierrot's vicissitudes, then the listener need not expect to find a strong sense of closure within the movement. Real integration is never fully achieved. Rather the piece enacts over and over again Pierrot's disintegration. The oppositions between C natural and C#, between low voice and high voice, their presentation via the technique of direct cutting, constitute a musical rendering of Pierrot's perpetual nervous break-down. The tendency toward anatomization is a more general characteristic of the work, and can be seen to take place on a variety of different musical levels. The opening few measures of the Serenade may be interpreted as a manifestation of this tendency, as Example 19 shows. The T₁ transpositions of the cello's tritone motive in measures 3 and 4 in combination with the T₀ repetitions of the piano's half-step motive can be understood to represent a kind of "pulling apart", an unraveling of the work's constructional fabric, where one musical component strains in a direction away from another which remains stationary.

David Lewin's notion of a transformational network can provide a particularly useful analytical tool for describing this impulse toward disintegration. Example 20 shows

a transformational network that abstracts and generalizes the musical "dismemberment" that occurs in measures 3 and 4, and again in the reprise of this material at measures 19-20 and 54-55. The nodes in this transformational network may be labeled in a number of ways, and the network may be employed as a model for a variety of events throughout the movement. Example 21 uses the same transformational network to model events at measures 23-24, 31-35, and 44-48. Each of these passages features an expansion of the tritone to the perfect fifth, which may be understood in terms of a combination of T_0 and T_1 transformations of pcs. Measures 23-4 contain an additional manifestation of the transformational network: Example 22 shows the cello part in combination with the passage played by the pianist's left hand. Recall that Moevs draws attention to this particular passage because of the events in the right hand of the piano part, which he describes as a kind of mapping of half-steps onto whole-steps: the transformational network may be applied to these events as well, with the dyad $E_b - F$ moving up to $E - F^\sharp$ while D remains stationary. Ultimately, the notion of the displacement of half-steps by whole-steps and the tritone/fifth continuum that Moevs posits can be reconfigured in more precise terms through the model of this transformational network.

Another advantage of invoking this particular transformational network is that it becomes possible to reconsider Richard Parks' notion of "kinesthetic shift" as a more piece-specific technique, one that has a particular meaning within the context of this work. Rather than regard these distinctive common-tone chord successions as instances of a general Debussyist technique, it is interesting to consider the motivic significance of such events within the context of the piece. Example 23 shows the series of kinesthetic shifts that takes place in the piano part at measures 28 and 29: these may be understood as another manifestation of the T_1/T_0 combination. At the same time, the cello's melody at measure 29 actualizes the same network of relationships, as Example 23 indicates. Thus these kinesthetic shifts can be seen to play out the basic theme of the Serenade, the pulling apart of Pierrot's psyche.

Measures 59 through 64 present a final enactment of the transformational network. Here the cello undergoes the T_0 transformation, repeating the material from measure 59-60 in measure 61- 62, while the piano produces a tetrachordal melodic figure in eighth-notes, Eb - Fb Db - Eb Cb - Db, which creeps up a half-step in measures 61- 62 and then returns to the original pitch level in measure 63. The pulling apart and subsequent drawing together of the cello's A and the piano's tetrachord figure here achieves a limited degree of closure, which may be represented by the addition of a higher-level T_0 arrow in the diagram in Example 24. But the return of the tetrachord { Fb, Eb, Db, Cb } is incomplete--the figure lacks its final Cb-Db term. The piano's final gesture in the Serenade is an implicative event that points toward the expected dyad Cb-Db, which would replicate the figure heard in measures 59-60. The final few notes played by the piano in the Serenade thus create a link to the following movement. A measure of synthesis is achieved in the Finale when the tenor voice, produces the line played by pianist's left thumb, as shown in Example 25: this melody makes clear references to the preceding passage, in its contours and pitch material. The expected dyad (its enharmonic equivalent) B-C# that arrives in measure 3 of the Finale supplies the sense of closure that is denied within the boundaries of the Serenade itself. As well, the tenor-voice melody that begins the Finale represents a kind of fusion of the two preceding gestures, the tetrachordal figures at measure 59-60 and 61-62 of the Serenade, in that it combines pc elements of both: F, E, D, C from measure 61-62, and B (Cb) and C# (Db) from measure 59-60.

In contrast to the Serenade, the Finale is characterized by a relatively unambiguous tonal orientation, and opens with a paradigmatic sequential progression in D minor. The key of D minor here brings about a resolution to some of the "tonal problems" introduced in the Serenade. For example this key allows the coexistence of both pcs C natural and C#, which have been counterposed throughout the Serenade: the former as the subtonic in the natural minor, heard in the context of the VII chord at the beginning of measure 2 of the Finale, and the latter as the leading-tone component of the dominant triad, which occurs in

the third measure. Recollection of this former oppositional relationship occurs in measure 9-12 of the Finale, shown in Example 26. Later in the movement, each of these pcs will function as a tonal centre: Example 27 shows the beginning two passages at measure 23 and at measure 37, where C# and C natural, respectively, function as tonic. It is only in the Finale, then, that a kind of integration is achieved, while the Serenade itself remains open-ended.

The transformational network that models the various events of the Serenade described above is, in my view, representative of a particular organizational strategy or narrative structure: a *chain*-like transformational process that operates at the highest hierarchical level of the work. The tonal *progressions* that also occur in the Serenade, along with the *collectional* structures, such as the octatonic and hexatonic passages, and the heap-like passages, such as those at measures 8-9 and 48-51, are then subsumed under this chain structure as lower-level narrative structures. This way of construing the work meshes well with the actual "story" that I claim is being told, a story in which the moonstruck figure of Pierrot is irrevocably drawn into a state of psychological multiplicity. Inasmuch as this depiction of Pierrot embodies the proliferation of discursive styles that distinguish early modernism, the modes of continuation associated with the early cinema, and the newly emerging psychoanalytic vision of the compartmentalized mind, the cello sonata resonates with an array of cultural meanings. Many of these cultural resonances remain inaccessible so long as the analyst focuses only on the organic and coherent aspects of the music and its intra-opus relationships. A narrative approach, however, opens up the work to a wealth of possible extra-musical relationships which can illuminate many of the work's asystematic aspects.

Chapter 6. Summary and Conclusion

In the preceding chapters I have attempted to formulate an analytical method that takes into account some of the ways that Debussy's music participates within a broad network of relationships among various forms of narrative media. I have tried to adopt an analytical approach that acknowledges as much as possible the full range of compositional techniques that Debussy employs in late works. By considering the music within the context of the more general narrative reorientations characteristic of emerging modernism, it becomes possible to construct vivid and metaphorically rich interpretations of Debussy's music.

My efforts to create a model for Debussy's late works have been motivated by what appears to be a distinct style in these pieces: certain features of these works are, in many ways, prophetic of the compositional style of the succeeding generation of European composers. In his late compositions Debussy develops more fully many of the idiosyncratic devices already present within his earlier works: the devices which evade cadential closure, like modal cadences and subtonic nullification; devices which serve to dissipate tonal functional propensity such as "planing," or harmonic parallelism, pentatonicism and hexatonicism; other techniques that disrupt normative harmonic syntax, including non-functional chord successions and kinesthetic shifts; and formal idiosyncrasies, like duplication, collage-like designs, and "additive" forms. Inasmuch as the traditional tonal idiom may be equated with the structure of a classical narrative text, I believe that the purpose of many of these devices is to reconfigure and expand some of the restrictions inherent in classical narrative structures, structures characterized by the binary oppositions which are defining features of the tonal idiom: tension and resolution, structure and ornament, departure and return, consonance and dissonance. At the same time, aspects of functional tonality continue to exist along side the new devices within Debussy's music, and the shapes of familiar tonal objects remain recognizable within this radically

reconfigured narrative mode. In Debussy's music, then, the destabilization of a unifying referential tonality is accomplished not simply through a monolithic "non-tonality" or "anti-narrativity" but rather through the presentation of a variety of intermediate narrative forms ranging from a kind of nonschematic "moment form" to full-fledged functional tonality.

I have argued that the analysis of Debussy's music has remained problematic because music theories have inherited a binary conception of pitch organization--tonal versus atonal. Because of this binary conception, theorists have employed one or another of two analytical paradigms, Schenkerian analysis and atonal pitch-class set theory. The Schenkerian approach, represented for example by the work of Matthew Brown, focuses exclusively on tonal features in the music while accounting for the non-tonal events simply as parenthetical interruptions which delay the arrival of anticipated functional harmonies. The set-theoretical approaches of Allen Forte and Richard Parks, on the other hand, provide an intricate and precise system of labels for the non-tonal musical pitch resources, but overlook the music's tonal aspects altogether. One goal in this study has been to arrive at an analytical method that would take into account both the tonal and nontonal aspects of the music, and to achieve a more subtle means of differentiating among the different pitch resources that Debussy employs.

The problem is, in part, a pedagogical one: it is often difficult to teach students about this music in a way that is meaningful for more than the few specialists who are well acquainted with the terminology of Schenkerian analysis and atonal pitch-class set theory. A more accessible terminology, one that incorporates, for example, well-known or easily apprehended literary and technological concepts, could be useful for drawing students' attention to the full range of compositional techniques in these works. Debussy's position in music history is widely acknowledged to be crucial by scholars, teachers, and performers, but the body of pedagogical and scholarly discourse that deals with his music is not proportionately significant in scope or in depth. I believe that the lack of analytical attention accorded this music has largely to do with the difficulties inherent in formulating

an analytical language that can deal with the nebulous and anomalous aspects of Debussy's style. New unconventional approaches, such as the narratological one I have proposed, can at least go some way toward improving the state of Debussy analysis in classrooms.

The problems with existing analytical tools have also to do with issues of *value*: inasmuch as traditional musical analysis privileges the notion of coherence over heterogeneity, it inevitably tends to devalue music in which such criteria are subordinated to other musical values. The immanent critical method that characterizes traditional music analysis cannot really address the aspects of Debussy's language that seem to escape logical systematicity. Analytical methods which focus exclusively on the internal structure of the artwork, which see the internal relationships of the artwork as the sole source of the work's meaning, are destined to fall short when the work in question is one which problematizes these very relationships. Debussy's music calls for a different approach, one that takes into account the role of disruptive and disunifying factors, the asystematic elements in his language.

In chapter two I have argued that a narratological approach to Debussy's music has a number of advantages over other approaches. These include its shift in emphasis from the features of a rule-governed *system*--like the generalized "laws" governing tonality or counterpoint--onto the features of the *work*. By equating a piece of music with a story or a literary text, a narrative approach can deal more directly with musical form, with the shape of a whole piece. This eliminates the need to maintain consistent reduction criteria up through a series of hierarchical levels in which surface events are grouped with other musical levels in strict tree-structures. There is a certain looseness to a narrative, in that its syntax is not a direct extension of sentence syntax, and this is an attractive analogy for musical works that do not make use of conventional tonal organization.

Another advantage of a narratological approach is that it encourages the analyst to look for musical equivalents of literary features such as ambiguity and metaphor. These asystematic aspects of literary language can provide a model for musical events that

transgress the logic of various musical systems. In Debussy's music, tonal anomalies and eccentricities can be understood to play a role similar to that of the logical anomalies found in literature, such as the subversion of normative grammatical rules of syntax that the license of literary language permits. Narrative theory attempts to go beyond the reduction of language to its purely systematic aspects, and a musical application of narrative theory can do the same with respect to musical systems.

Further aspects of narrative theory are attractive for music theorists. Since one of the aims of narratology is to investigate the ways in which events experienced separately are comprehended as a unified whole, it immediately suggests some interesting ways of thinking about the perception of musical time. Both narrative theory and music theory confront the issue of temporality, the ways that listeners and readers grasp the unfolding of a series of events in time. Ideas that narrative theorists have proposed can contribute much to music theoretical discussions. Particularly suggestive is Paul Ricoeur's identification of two dimensions, the *configurational* and *episodic*, his conception of narrative as a situation in which a reader processes information in terms of an expected overall pattern of events on one hand and as a scattering of discrete moments on the other. Roland Barthes' categories of the *readerly* and *writerly* likewise address those features of a text that either conform with or confound our expectations. By conceiving of narrative in terms of the expectations brought to the text by the reader or narratee, and how these expectations interact with the actual instantiated events, narrative theory provides a sophisticated tool for the investigation of other temporal phenomena like music.

Narrative theory thus also suggests ways of thinking about music that involves both tonal configurations and atonal, "intra-opus" processes. Inasmuch as tonality is identifiable with a set of expectations--as in the playing out of an *Ursatz*, or the probabilistic progressions and resolutions of functional harmonies, for example--and atonality represents a corresponding negation of expectations, it is useful to construe the interaction of tonal and nontonal elements within a piece of music in terms of the interplay of configurational and

episodic dimensions. This interplay is especially characteristic of Debussy's style, where a variety of tonal and nontonal organizational strategies obtain within a single work.

In chapter three I proposed a range of narrative structures, or organizational strategies, defined according to the different sorts of referential schemata which each invokes. Some of these referential schemata, I argue, have complex hierarchical and temporal dimensions, while others are relatively less complex. What I call the *progression* structure, for example, invokes a schema in which musical events are understood according to a pattern of scale-degrees of differing structural weights: here a tonic acts as a unifying point of reference and also as a pole of attraction toward which other pitches progress. The *chain* structure evokes a different kind of referential schema, one which governs the progression of events only within localized temporal spans. I have described this as a kind of localized cause-and-effect relationship, in which events proceed logically from point to point, but without reference to a hierarchy of pitches. The notion of a transformational network that has been developed by David Lewin offers a useful system of labels for such a structure. My use of the network idea differs from Lewin's more inclusive application, however, in that I reserve the transformational labels for cases which I view as non-tonal. I am distinguishing between music that evokes a system of hierarchically interrelated tonal functions and music that simply enacts transformations that turn one musical object into another within a given space. Unlike Lewin, I maintain that not all music is best described according to transformational processes. Tonal music, for one, I exclude because of what I see as its multiply-determined nature. For another, what I call *collectional* structures do not necessarily imply motion from one object to another, a transformation of earlier events into later ones; rather, collections evoke schema that lack a temporal dimension. The idea of pitch space "catalogues" and other unordered classes of musical objects is useful for describing music that presents the unfolding of events in a homogeneous space, as compared with a succession of events related by cause-and-effect. The *loop* and *heap* structures that I describe in chapter three represent the lower limit of nonschematized

organization, in which a musical object is simply reiterated, or an unstructured assortment of objects is presented.

Each of these different narrative structures or organizational strategies can be used to model different kinds of musical passages within Debussy's music. This continuum of narrative modes provides a way of characterizing some of the subtle variations in the tonal and temporal qualities of the parts of a work. It permits finer differentiation in the analysis. Authors have sometimes described certain passages of Debussy's music as "circular" or "static" and alternatively "fluid" and "shifting," but without explaining precisely how these effects are produced. What accounts for the impressions of stasis and of motion in Debussy's music, I believe, is the variation in the types of narrative mode that occur within pieces: progressions and chains contrast with collections, heaps, loops, and the fluctuation between these different organizational strategies impart a continually changing quality of movement.

Drawing on the research of Arthur Applebee and other psycholinguists, I have argued that each of these different organizational modes corresponds to a particular narrative strategy that is adopted by children in the development of their cognitive capacity to comprehend and create stories. I therefore imply that these different narrative strategies are closely related to more general cognitive skills. Here I am adopting the attitude of some narrative theorists, according to whom narrative competence represents a fundamental aspect of human cognition: narrative, it is argued, is essentially a basic "mode of knowledge." The story is the primary vehicle through which people construct, maintain, and apply knowledge about their world.

This view gains some support from within the field of cognitive psychology. At least one theory has it that personality characteristics develop according to the stories that individuals choose to create out of the raw data of their perceptions. The psychologist Silvan Tomkins, in his study *Affect, Imagery and Consciousness* has argued that what he

calls the "script" forms the most basic component of all human experience.¹ A "script" is defined by Tomkins as an internal representation of a lived experience that contains at least one event and one "affect" or basic emotion (such as "fear" or "joy"). A script is like a very primitive narrative that contains an event and an outcome, i.e., an event which brings about a change in the affective state of the individual.² According to Tomkins, experiences are stored in the memory in the form of these scripts which may then be elaborated and combined in innumerable ways. Tomkins' theory of personality assumes that humans continually create, modify, vary, analogize, and concatenate these scripts or stories about themselves and their environment, and that this process of self-story-telling is ultimately inseparable from cognition itself. Recently, many scholars have begun to explore the implications of the notion of narrative as a fundamental attribute of cognition. The idea has found applications in education, psychology, literary theory, even in business and advertising. The musical implications of this notion remain to be explored more fully, and the present study raises just a few of the issues that arise when we try to conceive of music in terms of narrative.

In chapter four I have tried to relate Debussy's characteristic organizational strategies to the development of cinematic devices. I am suggesting that the more abstract narrative structures that I describe in chapter three can be manifested in different ways within different narrative media. Each narrative medium exhibits different kinds of conventions, or *modes of continuation*, different ways of following one event with another. With the emergence of the new technology of the silent cinema at the turn of the century new kinds of modes of continuation became possible. The silent cinema began to present new kinds of story-structures at a time concurrent with the composition of Debussy's mature works. These new filmic devices and film-editing practices, such as the "fade," the

¹Silvan Tomkins, *Affect, Imagery, and Consciousness* (New York: Springer, 1962).

² Tomkins' script can be modelled according to Gerald Prince's description of the "minimal story" which consists of two states and one event: S-E-S'. S is the initial affective state, E is the event which precipitates S', the new affective state. See Gerald Prince, *A Grammar of Stories* (Bloomington: Indiana University Press, 1973).

"dissolve," the "cut-in," the juxtaposition of different camera angles, superimpositions and other special effects, represented a radical departure from the temporal and spatial orientations associated with traditional proscenium staging. These devices, these new ways of seeing, I believe have musical counterparts in Debussy's musical language. Friedrich Kittler has argued that the development of cinema, along with a host of other new technologies that emerged at about the same time, substantially altered the relationships among language, narrative, information, and reality. I claim that the ways that cinematic devices disrupted existing narrative conventions are closely analogous to the ways that Debussy's formal and harmonic practices disrupted musical conventions.

If technological developments like the cinema can radically alter the "modes of continuation" of narrative, then one is naturally led to wonder what sorts of narrative structures are presently emerging along side the development of new technologies in the late twentieth century, especially the current developments in computer technologies. How do the increasingly familiar technological devices like "hypertext" and increasingly common activities like "Web-surfing" affect our relationship with language, information, and narrative? Do things such as interactive computer games and virtual reality represent a new form of fiction? If so, what are their attendant "modes of continuation" and what is the potential for the exportation of these modes to other forms of media? What would a music based on these modes of continuation sound like? Are we already hearing it?

In this dissertation I have dealt exclusively with a small body of music, the late works of Debussy, but I believe it is possible apply many of my ideas to other musics. A cinematic quality, it could be argued, pervades the music of many composers in the early twentieth century, and it may be interesting to look for musical-cinematic cognates within these other works. The relationships between emerging technologies and music is, in all likelihood, a more generalized phenomenon. As well, the music of many of Debussy's contemporaries could be analyzed in terms of its multiplicity of narrative modes--progression, chain, and so on. Various broad musical trends and styles throughout the last

century might even be characterized according to the predominance of one or another of the narrative modes: for instance, I have already suggested a relationship between "moment form" and the heap structure, and Minimalism comes to mind as an example of loop-based music. Such a general theory of musical narrative strategies, one that could be applied to any sort of music, is beyond the scope of this study, but the ideas presented herein may prove useful for formulating such a theory in the future.

Musical Examples for Chapter 3

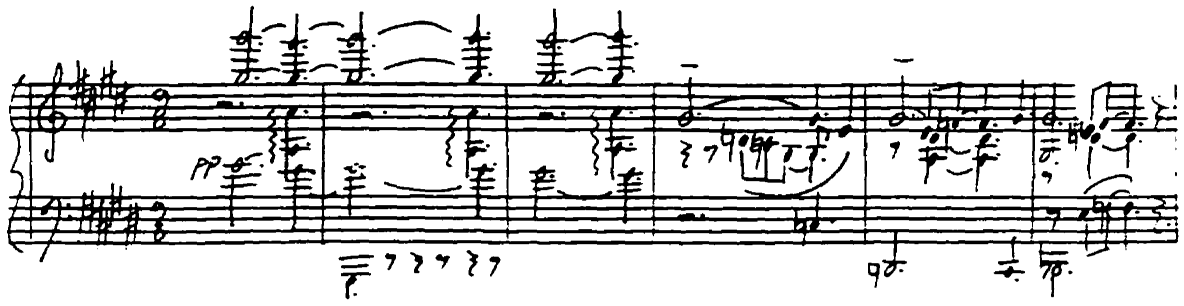
Example 1. "Pour les arpèges composés," opening measures: *Loop*.



Example 2. Sonata for Flute, Viola, and Harp; beginning of the "Finale:" *Loop*.

The musical score is written for three instruments: Flute, Viola, and Harp. The key signature is three flats (B-flat, E-flat, A-flat) and the time signature is 4/4. The score consists of three measures. The Flute part (top staff) begins with a whole rest in the first measure, followed by a half note G4 in the second measure, and a half note A4 in the third measure. The Viola part (middle staff) begins with a half note G4 in the first measure, followed by a half note A4 in the second measure, and a half note B4 in the third measure. The Harp part (bottom staff) begins with a half note G4 in the first measure, followed by a half note A4 in the second measure, and a half note B4 in the third measure. The Harp part features a series of sixteenth notes in the right hand, starting on G4 and ascending to B4. The left hand of the Harp part features a series of sixteenth notes, starting on G3 and ascending to B3. The score is marked with a forte (f) dynamic and includes a 'pizz.' (pizzicato) instruction for the Viola part in the first measure.

Example 3. "Pour les Sonorités opposées," opening measures: *Heap*.



Example 4. Violin Sonata, beginning of the second movement: *Heap*.

Handwritten musical score for the beginning of the second movement of a Violin Sonata. The score is written on three staves (Violin, Piano, and Cello/Double Bass). The key signature is one sharp (F#) and the time signature is 4/4. The first staff (Violin) begins with a forte (f) dynamic and features a melodic line with a trill. The second staff (Piano) also begins with a forte (f) dynamic and provides harmonic support. The third staff (Cello/Double Bass) begins with a forte (f) dynamic and provides a bass line. The score includes various musical notations such as notes, rests, and dynamic markings. A handwritten annotation "Ritardando - - - - ad lib. quasi cadenza" is written above the first staff, indicating a tempo change and a quasi-cadenza section. The score ends with a double bar line.

Handwritten musical score for the beginning of the second movement of a Violin Sonata. The score is written on three staves (Violin, Piano, and Cello/Double Bass). The key signature is one sharp (F#) and the time signature is 4/4. The first staff (Violin) begins with a forte (f) dynamic and features a melodic line with a trill. The second staff (Piano) also begins with a forte (f) dynamic and provides harmonic support. The third staff (Cello/Double Bass) begins with a forte (f) dynamic and provides a bass line. The score includes various musical notations such as notes, rests, and dynamic markings. A handwritten annotation "Lento" is written above the first staff, indicating a tempo change. The score ends with a double bar line.

Example 5. "Pour les 'cinq doigts'--d'apres Monsieur Czerny," opening measures.

Handwritten musical notation for measures 1-4. The piece is in 4/4 time. The right hand (treble clef) has a whole rest in measure 1, followed by eighth notes in measures 2-4. The left hand (bass clef) plays a continuous eighth-note pattern throughout. The dynamic marking *p* and the instruction *sen legato* are written above the first measure.

Handwritten musical notation for measures 5-8. Measure 5 is marked with a '5' and the instruction *Accelerando*. Measures 6-7 are marked with a '(2)' and a repeat sign. Measure 8 is marked with a '(6)' and the instruction *Allegro (Mouv. de Gigue)*. The right hand plays eighth notes, and the left hand plays a continuous eighth-note pattern.

Handwritten musical notation for measures 9-13. Measure 9 is marked with a '9' and the instruction *molto dim.*. Measures 10-11 are marked with a '(4)' and the instruction *Tempo*. Measure 12 is marked with a 'p' and the instruction *brusquement*. Measure 13 is marked with a 'p' and a question mark. The right hand plays eighth notes, and the left hand plays a continuous eighth-note pattern.

Handwritten musical notation for measures 14-17. Measure 14 is marked with a '14'. Measures 15-17 are marked with *af e cr c*. The right hand plays eighth notes, and the left hand plays a continuous eighth-note pattern.

Example 6. "Pour les notes répétées," opening measures: *Collection*.

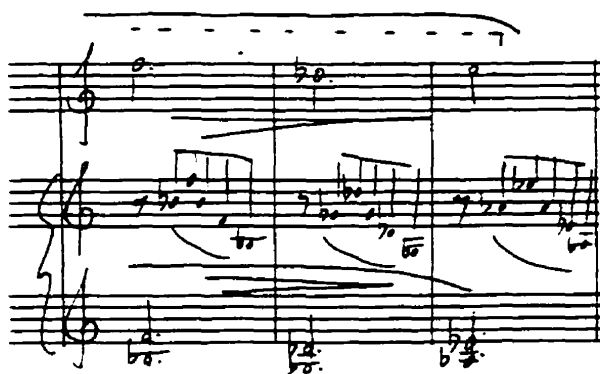
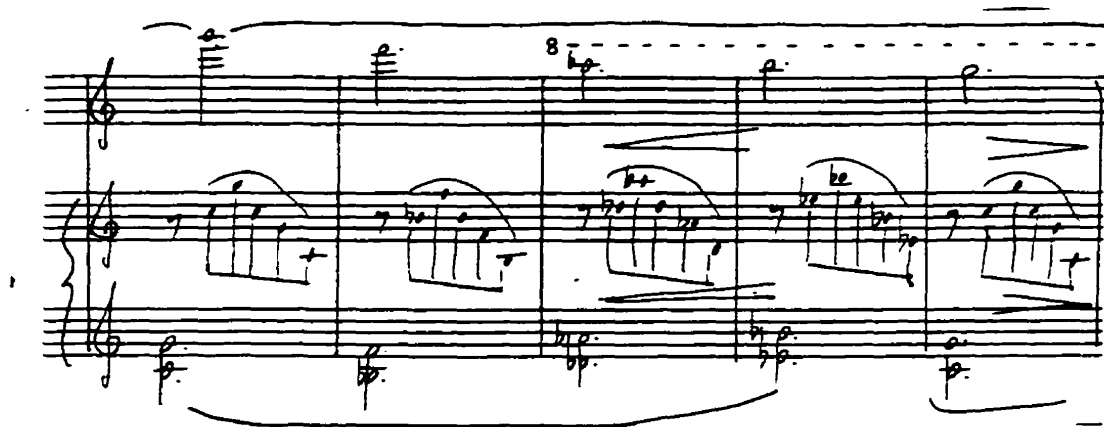
The image displays two systems of handwritten musical notation. The first system consists of a grand staff with a treble and bass clef, a key signature of one sharp (F#), and a 4/4 time signature. The tempo marking "Scherzando" is written above the treble staff. The music features a complex, rhythmic melody in the treble staff and a more active bass line. A bracket above the staff indicates a phrase spanning several measures. The second system continues the piece, showing further melodic and harmonic development. The notation is fluid and characteristic of a working draft or a composer's sketch.

Example 7. "Pour les quartes," measures 7-12: *Collection*.

Handwritten musical score for measures 7-12. The score is written on two staves (treble and bass clef) with a key signature of one flat (B-flat). The music features a series of chords and melodic lines. The first staff has a dynamic marking of *f* (forte) and the instruction "sonore martelé" (sonorous, staccato). The second staff has a dynamic marking of *f* and a crescendo hairpin. The music concludes with a final chord marked with a fermata and a dynamic marking of *pp* (pianissimo).

Handwritten musical score for measures 7-12. The score is written on two staves (treble and bass clef) with a key signature of one flat (B-flat). The music features a series of chords and melodic lines. The first staff has a dynamic marking of *f* (forte). The second staff has a dynamic marking of *f* and a crescendo hairpin. The music concludes with a final chord marked with a fermata and a dynamic marking of *pp* (pianissimo).

Example 8. Violin Sonata, first movement, measures 120-127: "Planing."



Example 9. Sonata for Flute, Viola, and Harp, "Finale," measures 58-61.

The musical score is presented in two systems, each containing four staves. The top two staves of each system are for the Flute and Viola, and the bottom two are for the Harp. The key signature is one flat (B-flat major or D minor), and the time signature is 6/8. The first system (measures 58-59) includes the instruction *leggiere* above the Flute staff and *leggiere* above the Viola staff. The Harp part in the first system is marked *sempre p in poco marcato*. The second system (measures 60-61) continues the melodic lines for the Flute and Viola, while the Harp part features sustained chords in the right hand and a moving bass line in the left hand. The notation includes various note values, rests, and phrasing slurs.

Example 10. "Pour les sonorités opposées," measures 15-22.



Example 11. Sonata for Flute, Viola, and Harp, "Pastorale," measures 14-15: Heterophony

Handwritten musical score for measures 14-15 of "Pastorale" from Sonata for Flute, Viola, and Harp. The score is written on five staves. The top staff is for the Flute, the second staff is for the Viola, and the bottom three staves are for the Harp. The key signature is one flat (B-flat). The time signature is 3/4. The score shows a heterophonic texture where the instruments play variations of the same melodic line. The Flute part is marked *p dolce*. The Viola part is marked *p* and *sul ponticello*. The Harp part is marked *p* and *pp*. The notation includes various musical symbols such as notes, rests, beams, and dynamic markings.

Example 12. "Pour les sixtes," opening measures: *Chain*.

Lento

mezzo voce, dolce sostenuto

(3)

rit.

calando

Mouvement

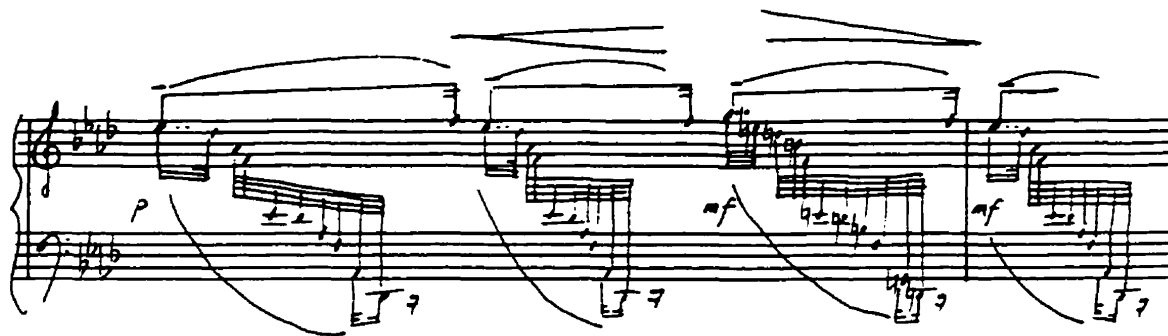
p sempre dolce

piu p

Example 13. Violin Sonata, third movement, measures 51-54.

The image shows a handwritten musical score for measures 51-54 of a Violin Sonata, third movement. The score is written on three staves: Violin (top), Piano Right Hand (middle), and Piano Left Hand (bottom). The key signature is one sharp (F#) and the time signature is 4/4. The score includes dynamic markings 'pp' (pianissimo) and 'f' (forte). Handwritten annotations include a long slur over the top staff, a slur under the bottom staff, and arrows indicating phrasing or articulation.

Example 14. "Pour les arpèges composés," mesures 14-15: Kinesthetic Shift.



Example 15. Violin Sonata, first movement, measures 64-71.

Handwritten musical score for measures 64-71 of a Violin Sonata, first movement. The score is written on three staves: Violin (top), Piano (middle), and Cello/Double Bass (bottom). The key signature is one flat (B-flat major or D minor). The time signature is 4/4. The score includes dynamic markings such as *pp* (pianissimo) and *ppu* (pianissimo). The notation features various musical symbols including notes, rests, and slurs. The handwriting is in ink on a white background.

Example 16. Cello Sonata, second movement, measures 48-53.

Handwritten musical score for measures 48-53 of the Cello Sonata, second movement. The score is written on three staves: Violin (top), Piano (middle), and Cello (bottom). The key signature is D major (two sharps). The time signature is 4/4. The score includes various performance markings such as *pizz.* (pizzicato), *arco* (arco), *Frustrando* (Frustrando), *p* (piano), *pp* (pianissimo), *p dolce* (piano dolce), and *3* (triple). The first staff has a bracket above it labeled "Figure 10". The second staff has a bracket above it labeled *p dolce*. The third staff has a bracket above it labeled *p dolce*.

Handwritten musical score for measures 48-53 of the Cello Sonata, second movement. The score is written on three staves: Violin (top), Piano (middle), and Cello (bottom). The key signature is D major (two sharps). The time signature is 4/4. The score includes various performance markings such as *ten.* (tension), *ren.* (release), *sf* (sforzando), *cresc.* (crescendo), and *pp* (pianissimo). The first staff has a bracket above it labeled *ten.* and *ren.*. The second staff has a bracket above it labeled *sf* and *cresc.*. The third staff has a bracket above it labeled *pp*.

Example 17. Sonata for Flute, Viola, and Harp, "Interlude," measures 28-31.

Handwritten musical score for measures 28-31. The score is written for four staves: Flute (top), Viola (second), Harp (third), and a fourth staff (likely Cello/Double Bass). The key signature is B-flat major (two flats). The time signature is 4/4. The Flute and Viola parts feature a melodic line with a crescendo marking and a 'ten' (tension) marking. The Harp part features a complex, arpeggiated texture with a crescendo marking. The fourth staff has a simple bass line. A bracket above the first two staves indicates a phrase spanning measures 28-31.

Continuation of the musical score for measures 28-31. The score is written for four staves: Flute (top), Viola (second), Harp (third), and a fourth staff (likely Cello/Double Bass). The key signature is B-flat major (two flats). The time signature is 4/4. The Flute and Viola parts feature a melodic line with a crescendo marking and a 'ten' (tension) marking. The Harp part features a complex, arpeggiated texture with a crescendo marking. The fourth staff has a simple bass line. A bracket above the first two staves indicates a phrase spanning measures 28-31.

Example 18. Violin Sonata, first movement: a) measures 87-92, and b) 110-115.

a)

[87] *sur la touche*

Handwritten musical score for measures 87-92. The score is in G major (one sharp) and 4/4 time. It features a violin part and a piano accompaniment. The violin part starts with a melodic line in measure 87, marked 'sur la touche' and 'p'. The piano accompaniment consists of a steady eighth-note pattern in the right hand and a bass line in the left hand. The measures are grouped into two systems of three measures each.

b)

[110] *Sempre p*

Handwritten musical score for measures 110-115. The score is in G major (one sharp) and 4/4 time. It features a violin part and a piano accompaniment. The violin part starts with a melodic line in measure 110, marked 'Sempre p'. The piano accompaniment consists of a steady eighth-note pattern in the right hand and a bass line in the left hand. The measures are grouped into two systems of three measures each.

Example 19. Sonata for Flute, Viola, and Harp, "Pastorale," measures 26 and 27:
Duplication

Handwritten musical score for measures 26 and 27 of the Sonata for Flute, Viola, and Harp, "Pastorale". The score is written on four staves. The first staff is for the Flute, the second for the Viola, and the third and fourth staves are for the Harp. The tempo/mood is marked "Vif et joyeux". The key signature has two flats (B-flat and E-flat), and the time signature is 18/16. The score includes dynamic markings such as *f* (forte), *sf* (sforzando), and *pp* (pianissimo). The notation includes various musical symbols such as notes, rests, and slurs.

Example 20. "Pour les sixtes," measures 26 and 27: Duplication.

Handwritten musical score for measures 26 and 27 of "Pour les sixtes". The score is written on two staves, treble and bass clef, in 6/8 time. The key signature has one flat (B-flat). The notation includes various musical symbols such as notes, rests, and dynamic markings. Above the first staff, there are four slanted lines (two pointing left, two pointing right) and the marking "poco rit. - //". Above the second staff, there are two slanted lines pointing left and the marking "poco rit. - //". The score ends with a double bar line and repeat dots.

Example 21. Violin Sonata, second movement, measures 79-82: Literal Transposition,
or *Chain*

Handwritten musical score for measures 79-82 of a Violin Sonata, second movement. The score is written on three staves: Violin (top), Piano (middle), and Cello/Double Bass (bottom). The key signature is D major (two sharps). The time signature is 4/4. The tempo marking "Rit." is written above the first staff. The dynamics "p" (piano) and "piu p" (pianissimo) are indicated. The score shows a literal transposition of a melodic line from the violin to the piano and cello/bass staves, with the piano part playing the transposed line and the violin part playing the original line. The piano part has a "piu p" marking above it. The cello/bass part has a "p" marking below it. The score is annotated with "Literal Transposition, or Chain" in the title.

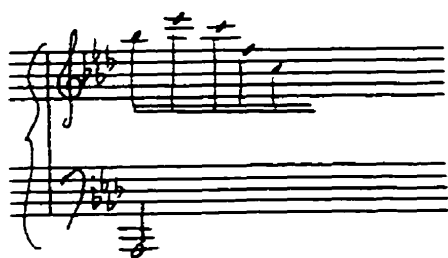
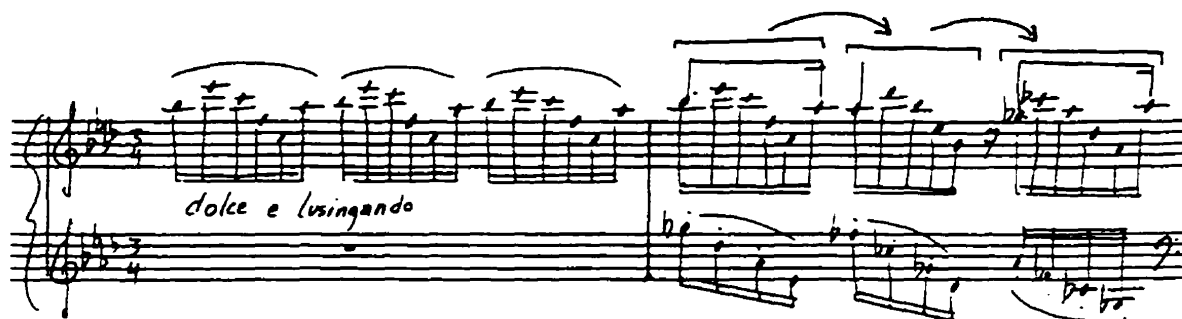
Example 22. Cello Sonata, beginning of the third movement: *Progression*.

The image displays a musical score for the beginning of the third movement of a Cello Sonata. The score is written for a cello and piano. The key signature is one flat (B-flat major or D minor), and the time signature is 2/4. The tempo/mood is marked "Animo" (Allegro). The piano part features a series of chords, with the first measure marked "p" (piano) and "arraché" (arratched). The cello part has a melodic line with triplets. The progression of chords is indicated by Roman numerals below the piano part: i, VII, VI, and V#.

Animo *p* *arraché*

i VII VI V#

Example 23. "Pour les arpèges composés," measures 1-4: *Conundrum*.



Example 24. "Pour les sixtes," measures 27-29: *Conundrum*.

more^t *rubato* *poco rit. - - //*

G^b: I VII "VII"

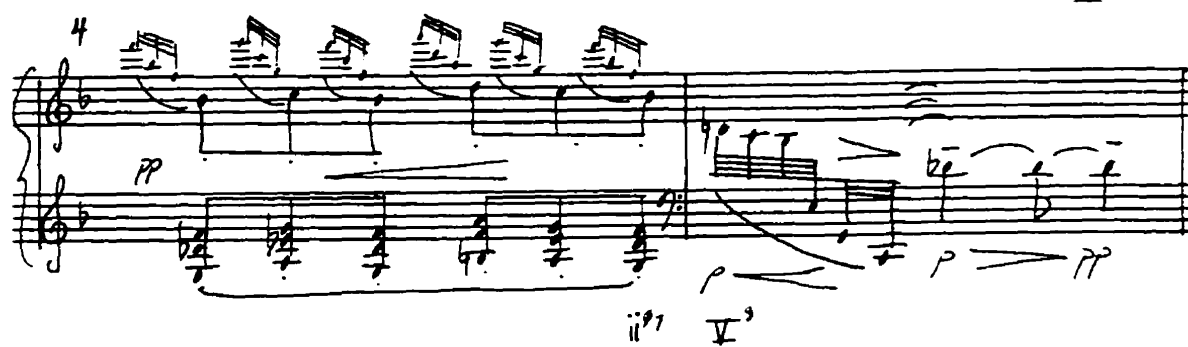
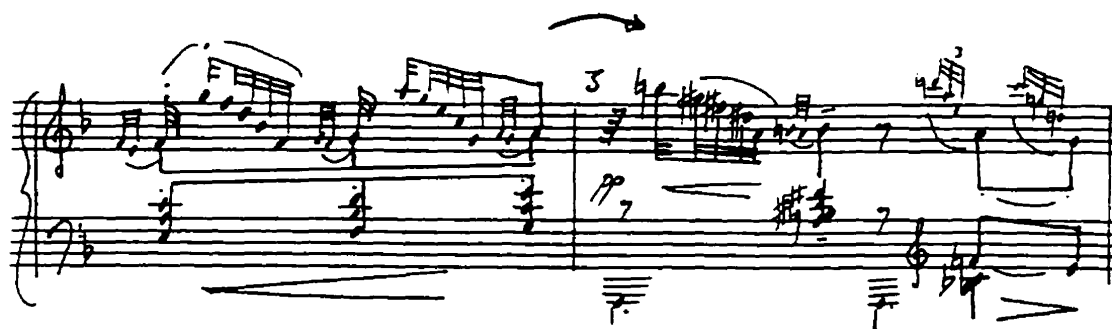
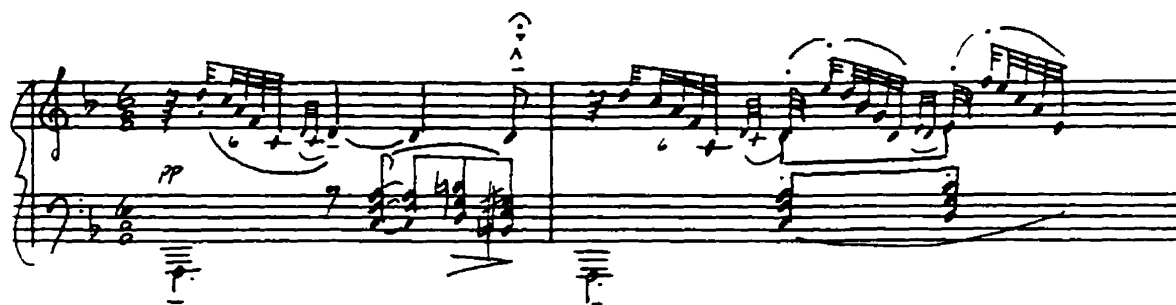
I ?

Example 25. "Pour les agréments," measures 33-34: *Progression.*

Handwritten musical score for measures 33-34, labeled "Progression". The score is written on two staves. The top staff has a treble clef and a key signature of one sharp (F#). The bottom staff has a bass clef and a key signature of one sharp (F#). The music features a complex melodic line in the right hand and a more rhythmic, arpeggiated line in the left hand. A double bar line with a repeat sign and the number [34] is present. Below the staves, the chord progression is indicated as E+: V⁷.

Handwritten musical score for measures 33-34, labeled "Progression". The score is written on two staves. The top staff has a treble clef and a key signature of one sharp (F#). The bottom staff has a bass clef and a key signature of one sharp (F#). The music features a complex melodic line in the right hand and a more rhythmic, arpeggiated line in the left hand. Below the staves, the chord progression is indicated as I.

Example 26. "Pour les agréments," mesures 1-6.



Musical Examples for Chapter 4

Example 1. Sonata for Flute, Viola, and Harp, "Pastorale," measures 1-4:
A *Dissolve-like* transition.

Handwritten musical score for measures 1-4. The score is written on four staves: Flute (top), Viola (second), and Harp (bottom two). The key signature has one flat (B-flat) and the time signature is 3/8. The Flute part begins with a melodic line marked *p* *mélancoliquement*. The Viola part has a long, sweeping melodic line. The Harp part features a series of chords and arpeggios. A measure rest is indicated in the Flute part at the end of measure 4.

Handwritten musical score for measures 5-8. The score continues on the same four staves. A measure rest is indicated in the Flute part at the end of measure 4, marked with an asterisk (*). The Flute part begins measure 5 with a melodic line marked *p* *doux et pénétrant*. The Viola part continues with a melodic line. The Harp part features a series of chords and arpeggios.

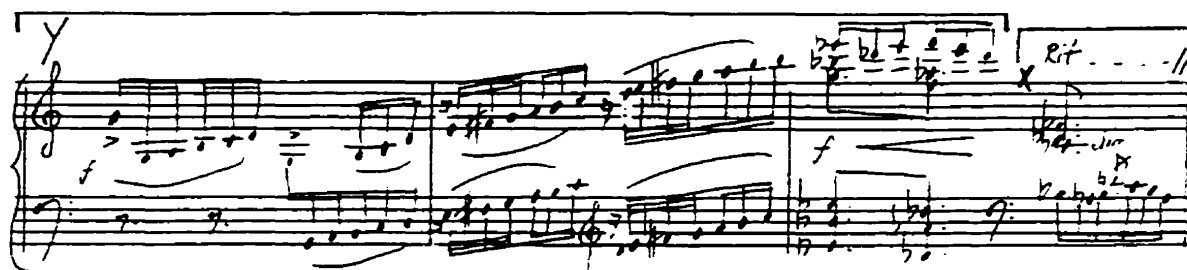
A handwritten musical score for the song "The Rose Tree". The score is written on two staves. The top staff is in treble clef and the bottom staff is in bass clef. The key signature is one sharp (F#) and the time signature is 3/4. The music begins with a piano (p) dynamic and a triplet of eighth notes in the bass staff. The melody in the treble staff is marked with a forte (f) dynamic. There is a section of the score enclosed in a box with an 'X' above it, which appears to be a repeat or a specific performance instruction. The score concludes with a piano (p) dynamic and a series of eighth notes in the bass staff.

Handwritten musical notation for the song 'The Rose Tree'. It consists of two staves. The top staff is in treble clef with a key signature of one sharp (F#) and a common time signature (C). It contains a melody with a long note at the beginning, followed by several eighth and sixteenth notes, and a final long note. The bottom staff is in bass clef with the same key signature and time signature. It contains a bass line with several eighth and sixteenth notes, and a final long note. The notation is written in ink on a piece of paper with horizontal lines.

Example 4. Cello Sonata, second movement, measures 8-9.

Handwritten musical score for measures 8-9 of a Cello Sonata, second movement. The score is written on three staves. The top staff is in bass clef and contains a melodic line with a slur over measures 8 and 9. The middle staff is in treble clef and contains a melodic line with a slur over measures 8 and 9. The bottom staff is in bass clef and contains a melodic line with a slur over measures 8 and 9. The key signature is one sharp (F#). The time signature is 4/4. The score includes dynamic markings: *arco* (arco) in measure 8, *pp* (pianissimo) in measure 9, and *p* (piano) in measure 10. There are also some handwritten notes and markings, including a question mark in measure 8 and a double bar line in measure 9.

Example 5. "Pour les 'cinq doigts'—d'après Monsieur Czerny," measures 43-50:
The *Cut-in*, which focuses on a detail within the frame.



Example 6. "Pour les 'cinq doigts'—d'après Monsieur Czerny," measures 71-100: *Cross-Cutting, or "Switchback" Editing.*

The musical score is divided into four systems, each illustrating a different editing path (A, B, C) for measures 71-100. The notation includes treble and bass staves with various musical symbols like notes, rests, and dynamic markings.

System 1 (Measures 71-100): Path A is marked *Ritato* and Path B is marked *Mouv^t*. The score starts at measure 70.

System 2 (Measures 71-100): Path A is marked *Ritato* and Path C is marked *Mouv^t*. The score starts at measure 73. Dynamic markings include *p* and *pp sempre*.

System 3 (Measures 71-100): The score starts at measure 76. Dynamic markings include *p scherz.* and *Celer.*

System 4 (Measures 71-100): Path B is marked *mpo* and Path C is marked *pp*. The score starts at measure 79.

Example 6, continued.

Handwritten musical score for Example 6, continued, showing measures 82 through 91. The score is written on four systems of grand staves (treble and bass clef). It includes various musical notations such as notes, rests, slurs, and dynamic markings like *Cresc*, *Tempo*, *piu pp*, *sff*, *p*, *pp*, and *poco a poco accelerando*. Measure numbers 82, 85, 88, and 91 are clearly marked at the beginning of their respective systems.

Example 6, continued.

93

molto cresc



95

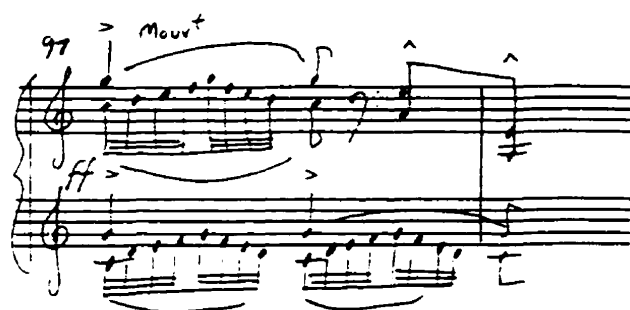
f



97

Mouv⁺

ff



Example 7. Sonata for Flute, Viola, and Harp, "Finale," measures 43-50: *Cross-cutting and Duplication.*

Handwritten musical score for measures 43-44. The score is written for Flute (top staff), Viola (middle staff), and Harp (bottom two staves). The key signature is one flat (B-flat).

Measure 43: Flute has a melodic line starting on G4. Viola has a melodic line starting on D4. Harp has a bass line starting on G3. Dynamics include *f* and *pp*.

Measure 44: Flute has a melodic line starting on A4. Viola has a melodic line starting on E4. Harp has a bass line starting on A3. Dynamics include *p* and *pp subito*. There are handwritten notes: "c. solo" above the Viola staff and "c. solo" above the Flute staff.

Handwritten musical score for measures 45-46. The score is written for Flute (top staff), Viola (middle staff), and Harp (bottom two staves). The key signature is one flat (B-flat).

Measure 45: Flute has a melodic line starting on B4. Viola has a melodic line starting on F4. Harp has a bass line starting on B3. Dynamics include *f* and *pp*. There are handwritten notes: "(c. solo)" above the Viola staff and "(c. solo)" above the Flute staff.

Measure 46: Flute has a melodic line starting on C5. Viola has a melodic line starting on G4. Harp has a bass line starting on C4. Dynamics include *p* and *pp*. There are handwritten notes: "(c. solo)" above the Viola staff and "(c. solo)" above the Flute staff.

Example 7, continued.

47

Un poco piu mosso

f *mf* *dim.* *p*

50

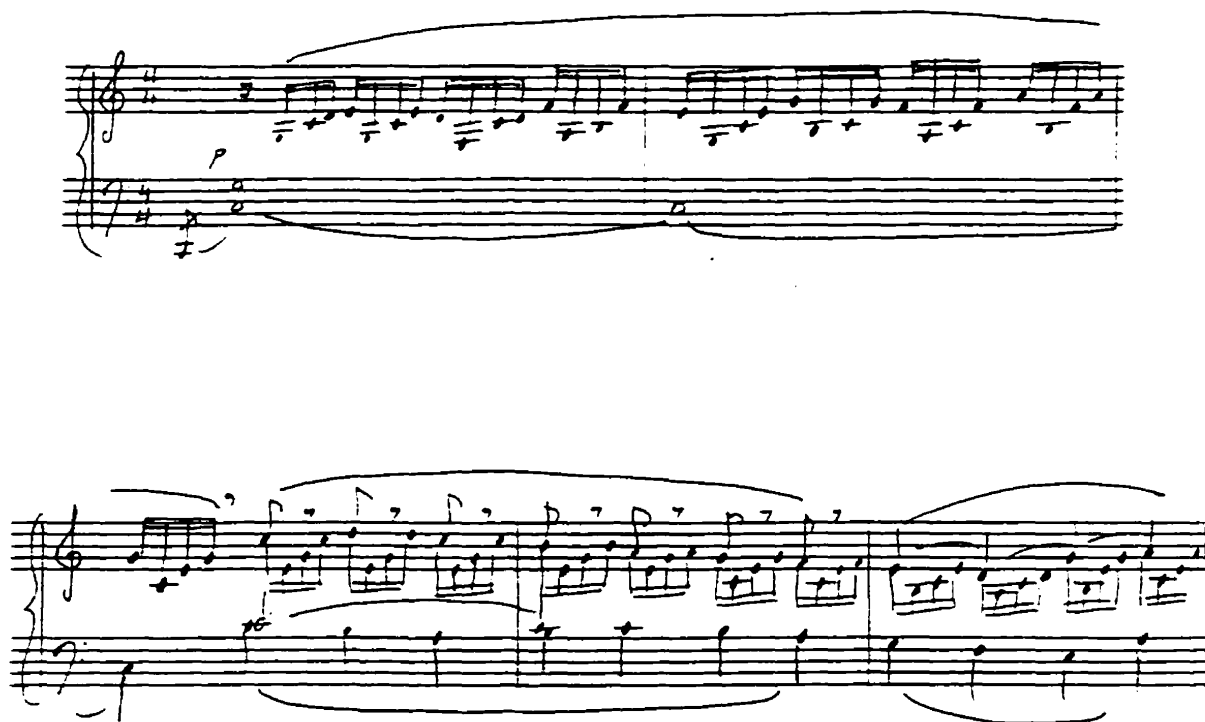
3

Example 8. "Pour les arpèges composés," measures 40-43: Duplication.

The image displays two systems of handwritten musical notation, likely for piano, spanning measures 40 to 43. Each system consists of two staves. The top staff of each system contains a complex, rapid arpeggiated figure, often written in a shorthand style with many beamed notes. The bottom staff contains a more melodic line with various dynamic markings. In the first system, the bottom staff begins with a *p* (piano) marking, followed by a crescendo hairpin, and ends with an *sfz* (sforzando) marking. The second system's bottom staff starts with an *sfz* marking, followed by a *p* marking, then a *piu p* (pianissimo) marking, and concludes with a *pince* (pinch) marking. The notation is in a key with two sharps (F# and C#) and a 2/4 time signature.

Example 9. "Pour les 'cinq doigts'—d'après Monsieur Czerny," opening measures:
Superimposition of two different tonal worlds.

Example 10a. *Children's Corner Suite*, "Doctor Gradus ad Parnassum," opening measures.



Example 10b. "Doctor Gradus ad Parnassum," measures 30-40: the "dream-world."

The image displays three systems of handwritten musical notation for measures 30-40 of "Doctor Gradus ad Parnassum." The notation is written on grand staves (treble and bass clefs joined).

- System 1 (Measures 30-32):** Measure 30 is marked with a bracketed "[30]". The music features a complex, flowing melodic line in the right hand with many accidentals (sharps and naturals) and a more rhythmic, chordal accompaniment in the left hand. A "Retenu" marking is present above the right hand in measure 32.
- System 2 (Measures 33-35):** Measure 33 is marked "Tempo". The right hand continues with a melodic line, while the left hand has a more active, rhythmic pattern. Dynamic markings include "p expressif" in measure 33 and "piu p" in measure 35.
- System 3 (Measures 36-38):** Measure 36 is marked with an asterisk and "[37]". The right hand has a melodic line with "An. acc" (Andante accelerando) written above it. The left hand has a rhythmic pattern. Dynamic markings include "pp" in measure 36 and "expressif" in measures 37 and 38.

The notation is highly detailed with many accidentals and slurs, indicating a complex and expressive piece of music.

Example 11. "Pour les Sonorités opposées," measures 54-56: *Dream Balloons*.

Handwritten musical score for measures 54-56 of "Dream Balloons". The score is written on three staves. The top staff is in treble clef with a key signature of one sharp (F#) and a time signature of 7/8. The middle and bottom staves are in bass clef. The music features complex, dissonant chords and melodic lines. Above the first staff, there are handwritten notes: "Calmato" above measure 54, and "8" above measures 55 and 56. The notation includes various accidentals, ties, and dynamic markings such as "ppp". The score is divided into measures by vertical bar lines.

Example 12. "Pour les Sonorités opposées," measures 70-75, recalling the "dream-world" of the *calmato* section.

Handwritten musical score for measures 70-75. The score is written on two staves. The top staff begins with the instruction "de plus loin." and a slur over a triplet of eighth notes. A bracket above the staff spans measures 70-75, with the number "8" written above it. The bottom staff features a triplet of eighth notes in measure 70, followed by a series of chords and single notes. The dynamic marking "pp" (pianissimo) is written above the staff in measure 71. The instruction "smorzando" (diminuendo) is written above the staff in measure 72. The score concludes with a final chord in measure 75.

C

219

Example 2. Measures 23-24.

Handwritten musical score for measures 23-24. The score is written on two staves: a piano (p) staff on the left and a violin (v) staff on the right. The piano part features a series of chords and single notes, with dynamic markings *p* and *mf*. The violin part features a series of eighth notes and sixteenth notes, with dynamic markings *p* and *mf*. The score is divided into two measures by a double bar line. Above the violin staff, the word "Cédez" is written twice, followed by a double bar line. The piano part has a long horizontal line across measures 23 and 24, indicating a sustained chord or a specific performance instruction.

Example 3. a) Measures 9-10; b) m. 23-24; c) m.33-36; d) m.46-48:
Expansion and contraction of tritones and perfect fifths.

a)

Handwritten musical notation for measures 9-10. The piano part (bottom staff) shows a tritone interval (marked with a sharp sign) and a perfect fifth interval (marked with a natural sign). The violin part (top staff) also shows a tritone interval (marked with a sharp sign) and a perfect fifth interval (marked with a natural sign). Dynamics include *p*, *pp*, and *pp* with accents.

b)

Handwritten musical notation for measures 23-24. The notation shows a tritone interval (marked with a sharp sign) and a perfect fifth interval (marked with a natural sign). The intervals are labeled "5" and "p5".

c)

Handwritten musical notation for measures 33-36. The notation shows a tritone interval (marked with a sharp sign) and a perfect fifth interval (marked with a natural sign). The intervals are labeled "5" and "p5". A dashed line indicates a continuation of the interval.

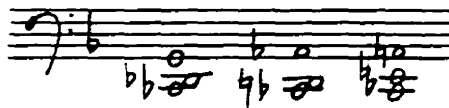
d)

Handwritten musical notation for measures 46-48. The notation shows a tritone interval (marked with a sharp sign) and a perfect fifth interval (marked with a natural sign). The intervals are labeled "5" and "p5".

2)

b)

Example 5. "Emblematic" sonorities at measures 3 and 4.



Example 6. "Rondo" statements at measures 3-6, 19-22, and 54-57.

Handwritten musical score for measures 54-57. The score is written on four staves. The first staff contains a treble clef and a key signature of one sharp (F#). The second staff contains a bass clef. The third and fourth staves contain a treble clef and a key signature of one sharp (F#). The music is written in a complex, rhythmic style with many beamed notes and rests. The number 54 is written above the first staff.

Handwritten musical score for measures 3-6. The score is written on four staves. The first staff contains a treble clef and a key signature of one sharp (F#). The second staff contains a bass clef. The third and fourth staves contain a treble clef and a key signature of one sharp (F#). The music is written in a complex, rhythmic style with many beamed notes and rests. The number 3 is written above the first staff.

Example 7. Measures 3-4: *Progression to Chain.*

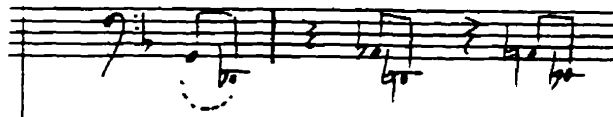
The image shows a handwritten musical score for measures 3-4, titled "Example 7. Measures 3-4: *Progression to Chain.*". The score is written on a grand staff with a treble clef and a bass clef. The bass line is marked with a 7/8 time signature. The music is in a key with one flat (B-flat). The progression is marked with T_1 and T_2 above the staff, indicating a transition. Below the staff, there is a figured bass line with figured bass notation: $8\flat$, $\frac{4}{2}$, 6 , and 6 . The progression is also marked with V^6 and $V^6?$ below the staff, indicating a progression to a chain.

Example 8. Measures 5-9: *Progression to Heap*.

V i

VII i

Example 9. Tritones.

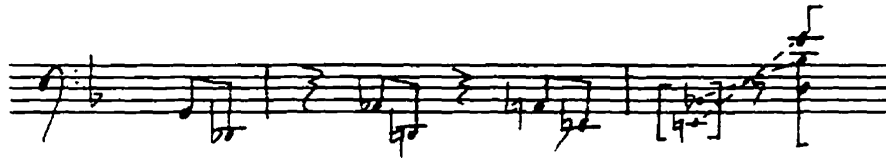


Example 10. Measures 37-41: *Progression to Chain*.

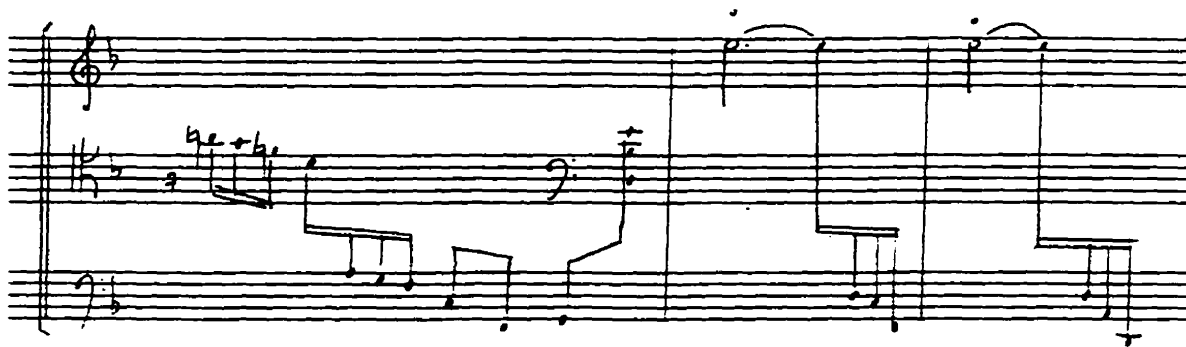
Handwritten musical score for measures 37-41. The score is written for a vocal line and a piano accompaniment. The key signature is C major (one sharp, F#). The time signature is 4/4. The piano part features a bass line with sustained notes and a treble line with chords. The progression is labeled as C+: I (C major) and V⁶ (E minor). A T₃ interval is indicated with an arrow pointing from the V⁶ chord to the next measure.

Handwritten musical score for measures 40-41. The score continues the progression from the previous system. The piano part features a bass line with sustained notes and a treble line with chords. A T₃ interval is indicated with an arrow pointing from the previous measure to the first measure of this system.

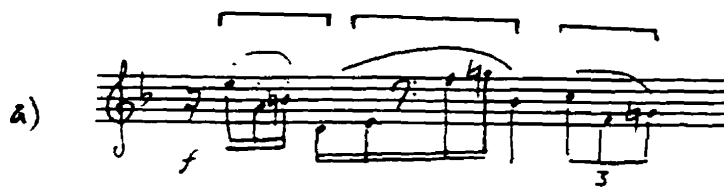
Example 11. Cello line from end of measure 3 to 5.



Example 12. Three voices in the cello at measure 7-9.



Example 13. a) Measure 25; b) m.27; c) m.35-6; d) m.42-3; e) m.56-7:
Direct cutting between registers.

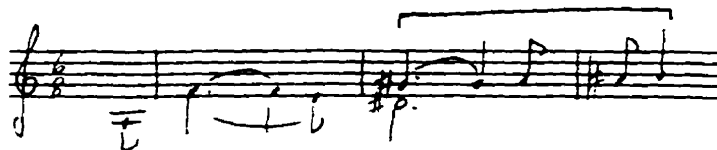


Example 14. Measures 28-30: Narrowing range and expanding hypermeter.

Handwritten musical score for measures 28-30. The score consists of two systems. The first system has three staves: a vocal line (treble clef) and two piano staves (treble and bass clefs). The vocal line contains eighth and sixteenth notes with various accidentals. The piano accompaniment features chords and single notes. The second system continues the vocal and piano parts. Below the piano staves, there are handwritten notes: "2", "4", "7", "2", "6", "7", and a horizontal line.

Handwritten musical score for measures 28-30. The score consists of two systems. The first system has three staves: a vocal line (treble clef) and two piano staves (treble and bass clefs). The vocal line contains eighth and sixteenth notes with various accidentals. The piano accompaniment features chords and single notes. The second system continues the vocal and piano parts. Above the vocal line, there is a handwritten note: "molto rit. //". Below the piano staves, there is a handwritten note: "4 7".

Example 15. Motive of Desire from the *Tristan* Prelude.



Example 16. Measures 48-53.

Handwritten musical score for measures 48-53. The score is written on three staves (treble, alto, and bass clefs) in G major (one sharp). The notation includes various musical symbols and performance instructions:

- Measure 48:** Treble clef staff starts with *Flauto no.* and *pp*. The alto and bass staves have *p dolce*.
- Measure 49:** Treble clef staff has *pizz.* and *3*. The alto and bass staves have *pp*.
- Measure 50:** Treble clef staff has *arco* and *Frattendo*. The alto and bass staves have *p*.
- Measure 51:** Treble clef staff has *pizz.* and *3*. The alto and bass staves have *pp*.
- Measure 52:** Treble clef staff has *pizz.* and *3*. The alto and bass staves have *pp*.
- Measure 53:** Treble clef staff has *pizz.* and *3*. The alto and bass staves have *pp*.

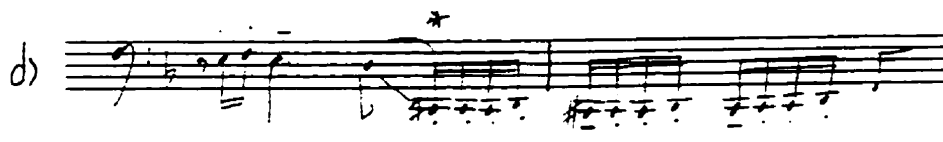
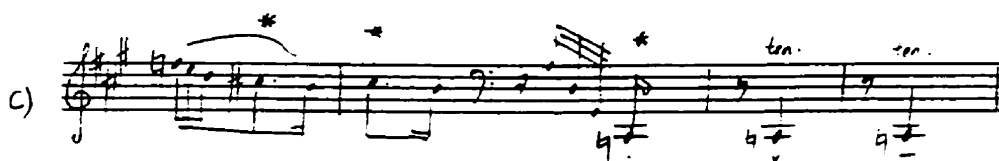
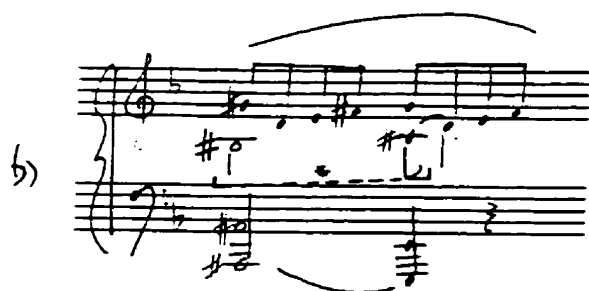
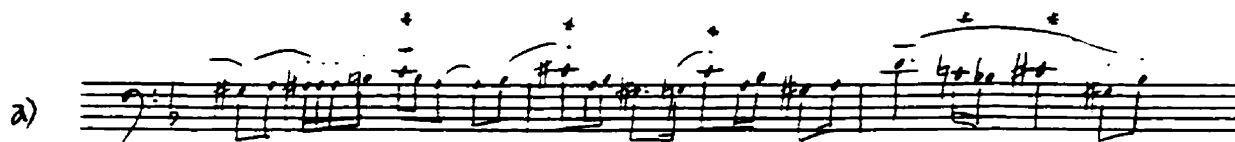
Handwritten musical score for measures 48-53, showing a different arrangement or continuation. The score is written on three staves (treble, alto, and bass clefs) in G major (one sharp). The notation includes various musical symbols and performance instructions:

- Measure 48:** Treble clef staff has *ten.* and *ren.*. The alto and bass staves have *sf marcato* and *pp*.
- Measure 49:** Treble clef staff has *ten.* and *ren.*. The alto and bass staves have *pp*.
- Measure 50:** Treble clef staff has *ten.* and *ren.*. The alto and bass staves have *pp*.
- Measure 51:** Treble clef staff has *ten.* and *ren.*. The alto and bass staves have *pp*.
- Measure 52:** Treble clef staff has *ten.* and *ren.*. The alto and bass staves have *pp*.
- Measure 53:** Treble clef staff has *ten.* and *ren.*. The alto and bass staves have *pp*.

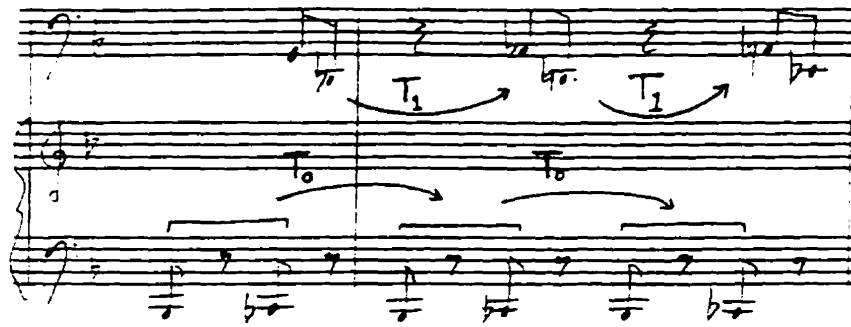
Example 17. Comparison of the cello line at measures 27-8, 44, and 48.

The image displays handwritten musical notation for a cello line, comparing measures 27-8, 44, and 48. The notation is written on a single staff with a treble clef and a key signature of one sharp (F#). The first system of notation includes a measure with a fermata and the word "Cedee" written above it, followed by a double bar line and the word "Mouv" with "arco" written below it. The second system of notation shows a measure with a fermata and the word "Mouv" with "arco" written below it, followed by a measure with a fermata and the word "Mouv" with "arco" written below it. The third system of notation shows a measure with a fermata and the word "Mouv" with "arco" written below it, followed by a measure with a fermata and the word "Mouv" with "arco" written below it. The notation is written in a cursive, handwritten style. There are arrows pointing down to the first system and up to the third system.

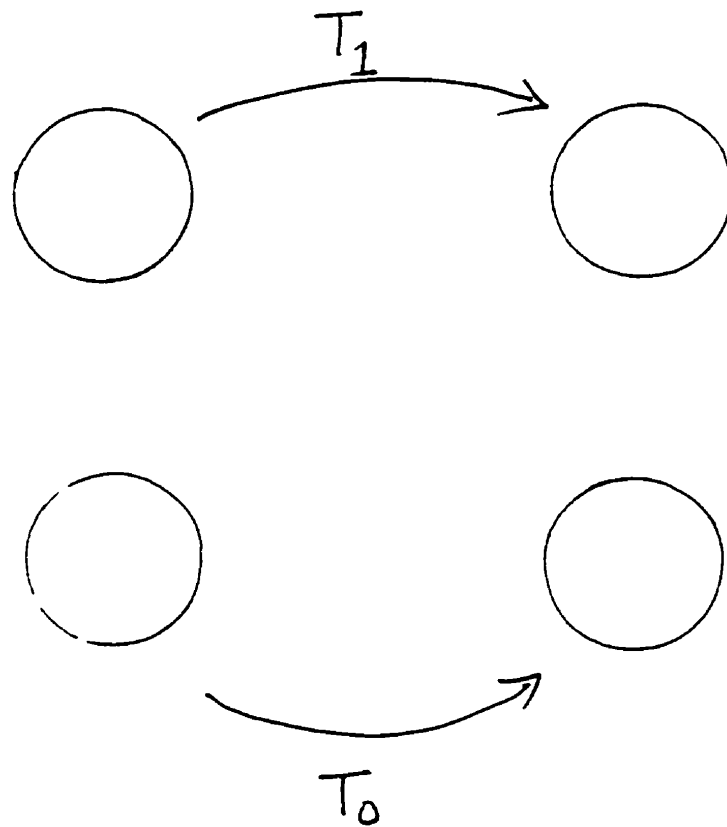
Example 18 a) Cello at measures 50-53; b) m.13-15; c) piano at m.15; d) cello at m.57-8:
C/C# oppositions.



Example 19. End of measure 3 to 4.



Example 20. Transformational Network.



Example 21. a) Measures 23-24; b) m.33-36; c) m.46-48:
Expansion and contraction of tritones and perfect fifths as manifestations of the
transformational network.

The image displays three musical staves, each illustrating a transformational network through tritones and perfect fifths.

- Staff 1 (Measures 23-24):** This staff shows a sequence of notes with annotations T_0 , T_1 , T_{-1} , and T_0 above the staff, indicating transformations. Below the staff, intervals are marked as $^{\circ}5$ (perfect fifth) and $^{\flat}5$ (tritone).
- Staff 2 (Measures 33-36):** This staff shows a sequence of notes with annotations T_{-1} and T_0 above the staff. Below the staff, intervals are marked as $^{\circ}5$ (perfect fifth) and $^{\flat}5$ (tritone). A dashed line indicates a transformation between two notes.
- Staff 3 (Measures 46-48):** This staff shows a sequence of notes with annotations T_{-1} and T_0 above the staff. Below the staff, intervals are marked as $^{\circ}5$ (perfect fifth) and $^{\flat}5$ (tritone).

Example 22. Measures 23-24.

Handwritten musical score for measures 23-24. The score consists of a vocal line (top staff) and piano accompaniment (bottom two staves). The key signature has one flat (B-flat). The vocal line features a melodic line with slurs and dynamic markings: *p* (piano) and *mf* (mezzo-forte). The piano accompaniment includes chords and moving lines in both hands, with dynamic markings *p* and *mf*. Performance instructions include "Cédez //" and "Cédez //". A large curved arrow labeled T_1 spans the top of the score, and a smaller curved arrow labeled T_0 is at the bottom. Brackets are used to group measures.

Example 23. a) Measures 28-29; b) piano reduction; c) cello reduction:
Kinesthetic shifts reconfigured in terms of the transformational network.

a)

Handwritten musical score for measures 28-29. The top staff shows a single melodic line with trills and slurs. The middle staff is a piano reduction with fingerings (1, 3) indicated. The bottom staff is a cello reduction with fingerings (2, 4, 7, 2, 6, 7) indicated.

b)

Diagram illustrating the transformational network for the piano reduction. It shows a single staff with a treble clef. A circle connects two nodes, T_0 and T_1 , representing a transformation. The notes are G^{\sharp} and A in the treble, and G and A in the bass.

c)

Diagram illustrating the transformational network for the cello reduction. It shows a single staff with a treble clef. A circle connects two nodes, T_0 and T_1 , representing a transformation. The notes are G^{\sharp} and A in the treble, and G and A in the bass.

Example 24. Measures 59-64.

Handwritten musical score for measures 59-64, system 1. The score consists of three staves. The top staff contains a melodic line with various accidentals and a dynamic marking of p . The middle staff contains a complex chordal texture with many accidentals and a dynamic marking of pp . The bottom staff contains a bass line with a dynamic marking of p . A bracket labeled T_0 spans the first two measures, and a bracket labeled T_1 spans the last two measures.

Handwritten musical score for measures 59-64, system 2. The score continues from the first system. The top staff has a melodic line with a dynamic marking of p . The middle staff has a complex chordal texture with a dynamic marking of pp . The bottom staff has a bass line with a dynamic marking of p . A bracket labeled T_0 spans the first two measures, and a bracket labeled $T-1$ spans the last two measures.

Example 25. Beginning of the Finale.

Handwritten musical score for the beginning of the Finale. The score is written on three staves. The top staff is in treble clef, the middle staff is in treble clef, and the bottom staff is in bass clef. The key signature is one flat (B-flat). The time signature is 2/4. The tempo/mood is marked "Animé". The dynamics are marked "p" (piano) and "arraché" (arratched). The notation includes various musical symbols such as notes, rests, and accidentals. There are also some handwritten annotations and markings, including a "3" under a note in the middle staff and a "p" under a note in the bottom staff.

Example 26. Finale, measures 9-12.

A handwritten musical score for measures 9-12 of a finale. The score is written on three staves. The top staff is in treble clef and contains a melody with a long note in measure 9, followed by a melodic phrase in measure 10, and then a long note in measure 11, followed by another melodic phrase in measure 12. The middle staff is in treble clef and contains a complex, fast-moving accompaniment. The bottom staff is in bass clef and contains a simpler accompaniment. The key signature has one sharp (F#). The time signature is not explicitly written but appears to be 4/4. The word "marque" is written under the melody in measures 10 and 12. The dynamic "p" (piano) is written under the melody in measures 9 and 11.

Example 27. a) Finale, measures 23-5; b) m.37-9.

Handwritten musical score for Example 27a, measures 23-5. The score is written on three staves. The top staff has a melodic line with a 'ten.' marking. The middle staff has a piano accompaniment with a 'p' marking and the instruction 'dolce sostenuto'. The bottom staff has a bass line. The key signature is one sharp (F#).

Handwritten musical score for Example 27b, measures 37-9. The score is written on three staves. The top staff has a melodic line with a 'dim. molto' marking. The middle staff has a piano accompaniment with a 'p' marking and the instruction 'subito e. dim. molto'. The bottom staff has a bass line. The key signature is one sharp (F#).

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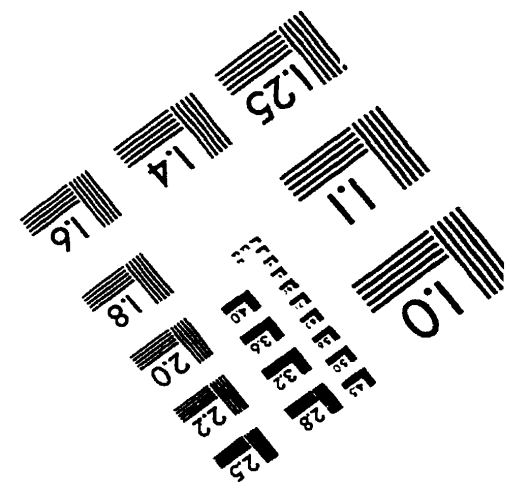
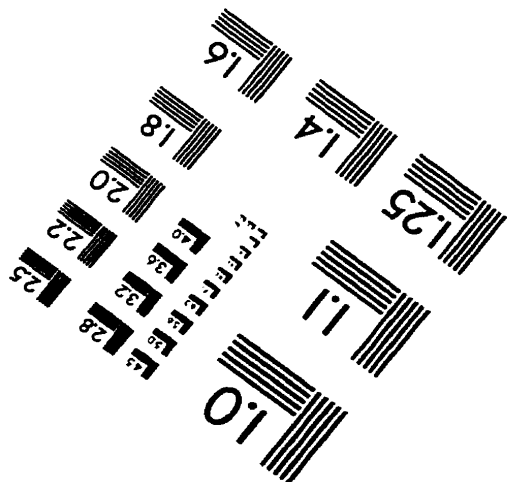
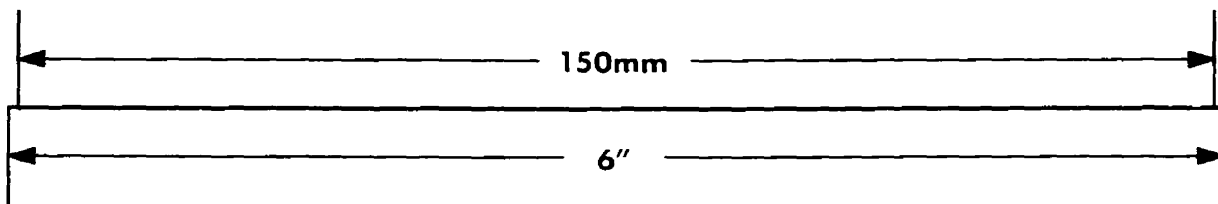
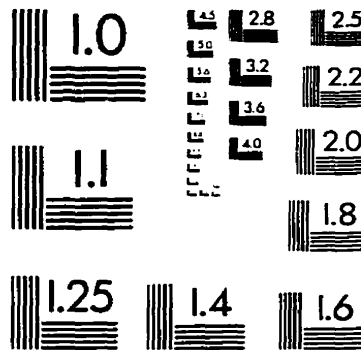
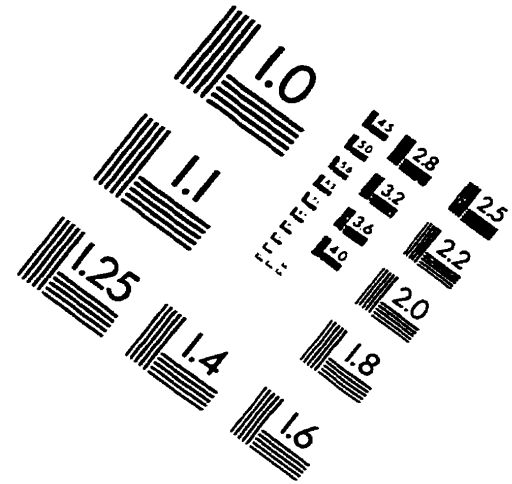
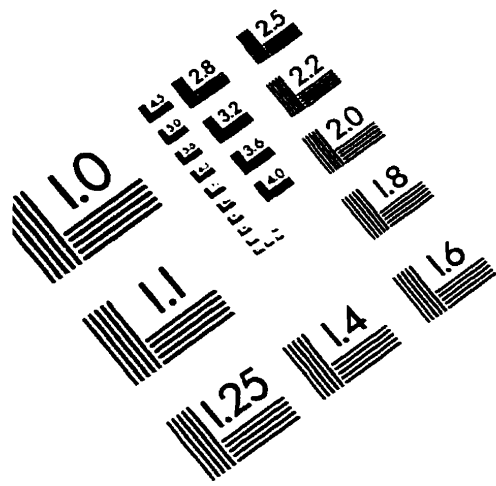
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