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A

GENDER, POLITICS, AND MODERNIST MUSIC:

ANALYSES OF FIVE COMPOSITIONS

BY RUTH CRAWFORD (1901-1953) AND MARION BAUER (1887-1955)

by

ELLIE M. HISAMA

A dissertation submitted to the Graduate Faculty in Music
in partial fulfillment of the requirements for the degree of
Doctor of Philosophy, The City University of New York

1996

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*For my parents,
Toshiaki and Kay K. Hisama*

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Example 13, "Contour-Reduction Algorithm" from Robert D. Morris, "New Directions in the Theory and Analysis of Musical Contour," in Music Theory Spectrum 15/2 (Fall 1993), 212. Used by permission of Robert D. Morris and Music Theory Spectrum.

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CHAPTER 1

INTRODUCTION: CULTURAL ANALYSIS AND POST-TONAL MUSIC

Given the vast, marvelous repertoire of feminist approaches to literary analysis introduced over the past two decades, a music theorist interested in bringing feminist thought to a project of analyzing music by women might do well to look first to literary theory. One potentially useful study is Sandra Gilbert and Susan Gubar's The Madwoman in the Attic, a landmark work asserting that nineteenth-century writing by women constitutes a literary tradition separate and distinct from the writing of men and argues more specifically that writings of women including Dickinson, Austen, and Shelley share common themes of alienation and enclosure.¹ Some feminist theorists have claimed that a distinctive female tradition exists also in modernist literature; Jan Montefiore, for example, asserts that in autobiographical writings of the 1930s, male modernists tended to portray their experiences as universal in contrast to female modernists who tended to represent their experiences as marginal.²

But because of the singular nature of the modernist, post-tonal musical idiom, an analytical project intended to explore whether a distinctive female tradition indeed exists

in music immediately runs aground. Unlike tonal compositions, which draw their structural principles from a more or less unified compositional language, post-tonal works are constructed according to highly individualized schemes whose meaning and coherence derive from their internal structure rather than from their relation to a body of works. Milton Babbitt has characterized these contrasting qualities of post-tonal and tonal music as "contextual" and "communal," respectively, a distinction that will be useful in establishing the approach, boundaries, and intentions of this study.³

Babbitt defines "contextual" compositions as largely self-enclosed works that establish their premises and materials within themselves--he gives as examples compositions by Schoenberg, Webern, and himself--and argues that these pieces can be understood on their own terms without reference to other works. In contrast, the coherence of music that he calls "communal," like common-practice tonal compositions, depend on their relation to external principles which are shared with other works.

If we accept Babbitt's premise that post-tonal compositions are by nature contextual and self-enclosed, then the task of drawing them into broader analytic categories like "music by women" for the purposes of comparative study proves to be extremely difficult, if not impossible; it follows that the enterprise of integrating

gender into a set of close readings of post-tonal compositions might not best be served by a comparative method with the intent to generalize about the distinctiveness or "difference" of modernist music by women but by an alternative strategy.

Thus, rather than to seek to argue that specific compositions share some sort of commonality because they were written by women who were working within a specific idiom and historical moment, this project proposes to relate music by two twentieth-century American women, Ruth Crawford (1901-1953)⁴ and Marion Bauer (1887-1955), to the composer's identity.⁵ Since their position as women in a predominantly male profession and their social views can be regarded as elements that strongly defined the identity of both Crawford and Bauer, I offer analyses of their music that are informed by the conditions of gender and politics within which they exist. By the term "gender" I mean, following historian Joan Scott's definition, the social organization of sexual difference; under this definition, gender is regarded as distinct from biological sex.⁶ By "politics" I am referring to the network of relations between people in a society.

The compositions I analyze are Crawford's String Quartet, movements three and four, composed in 1931; her song "Chinaman, Laundryman," composed in 1932; and two of Bauer's Four Piano Pieces, Chromaticon and Toccata,

premiered and published in 1930.⁷ Chapters 2, 3, and 6 explore how gender-specific experiences of these two composers might relate to their music; Chapters 4 and 5 address the impact of the composers' political views on their music. Each analytical chapter first offers information about the composer relevant to the piece, then presents an analysis informed by the biographical material. This general approach might thus be understood as employing another sense of the term "contextual"--in addition to Babbitt's meaning of "self-referential," my analyses are also contextual because they relate the techniques and strategies of each piece to its social contexts. Taken together, the analyses suggest that formalist readings acknowledging the impact of a composer's gender and political views on the work itself impart valuable ways of hearing and apprehending these compositions.

The following biographical survey provides a preliminary portrait of both composers. Born in 1887 as the youngest child of French Jewish immigrants, Bauer first studied piano with her sister Emilie in her hometown of Walla Walla, Washington, and later with Henry Holden Huss and Eugene Heffley in New York.⁸ In 1906 she went to Paris for the first time; there she studied with Nadia Boulanger, exchanging English lessons for instruction in harmony and analysis, and studied piano with Raoul Pugno. In 1910-1911 Bauer studied counterpoint and form in Berlin with Paul

Ertel, and composition in New York during World War I with Walter Henry Rothwell.

Crawford was born in 1901 in East Liverpool, Ohio. Her father was a Methodist minister, and her mother a pianist who gave Crawford piano lessons.⁹ She continued studying piano with Djane Lavoie Herz and composition with Adolf Weidig at the American Conservatory in Chicago; Crawford spent the summer of 1929 at the MacDowell Colony in Peterborough, New Hampshire, where she met Marion Bauer, who was also in residence there. That fall Crawford moved to New York and began studying composition with Charles Seeger. In August of 1930 she went to Europe to continue her musical education in Berlin, supported by a Guggenheim fellowship--the first in composition awarded to a woman. Both Bauer and Crawford were active in New York's modern music community during the late 1920s and early 1930s, and both earned some measure of recognition from their colleagues for their musical accomplishments.

During the 1930s the two women took different paths: Bauer continued her career as a composer, writer, and university professor while living with her sister in New York City. In 1926 she became the first woman faculty member to join New York University's music department, where she taught generations of students during her twenty-five year career, among them composers Milton Babbitt, J. Vincent Higginson, and Julia Frances Smith.¹⁰ In 1933 she

published Twentieth Century Music, an introductory guide which was then particularly valuable for its reproductions of extracts from hard-to-find music by composers of atonal music including Schoenberg and Webern.¹¹ She was a correspondent for the Chicago-based periodical The Musical Leader, and her orchestral work Sun Splendor was premiered by the New York Philharmonic in 1947 under the direction of Leopold Stokowski, noteworthy as the second piece by a woman ever performed by the Philharmonic.¹²

Crawford, in contrast, married in 1932. Raising four children, giving piano lessons, and teaching music at her daughter's school took up enormous amounts of her time, and for the next two decades she stopped composing modernist works, devoting her energies instead to transcribing and arranging numerous American folk tunes; she published several folk song collections in the 1930s and 1940s. Crawford returned to modernist composition in the 1950s, just before she died of cancer in Chevy Chase, Maryland at the age of 52. Her compositions have enjoyed a renaissance during the past decade; scores, recordings, and information about her life and work are fortunately being made available, and her String Quartet of 1931 is now rightfully regarded as one of the finest modernist works of the genre.

The compositional style that Crawford forged in Chicago bears the influence of Scriabin in its harmonic language, a quality of which Seeger was highly critical. Early pieces

include her Nine Preludes for Piano, the first five composed in 1924-1925 and the last four in 1927-1928; the Violin Sonata of 1925-1926; and her Five Sandburg Songs, composed at the MacDowell Colony in the summer of 1929. After beginning to study composition with Seeger in 1929, Crawford became much more concerned with contrapuntal procedures in her music, as is evident in some works composed during this period including her second, third, and fourth Diaphonic Suites of 1930; her 1931 String Quartet; and her 1930-32 song cycle Rat Riddles, with texts by Carl Sandburg.¹³

Bauer's music is more conservative than Crawford's. Many of her compositions through the 1930s rely upon a pitch center; she turned to serialism relatively late, in the 1940s, in her piano works Patterns, op. 41 (1946) and Moods, op. 46 (1950/1954). Although her writings and lectures of the early 1930s embraced modernism and atonality, her own music remained less experimental than the music she advocated by Schoenberg, Webern, Cowell, and others.¹⁴ This seeming inconsistency may be partly explained by the reluctance of her publisher, Arthur P. Schmidt, to support her early leanings toward modernist composition.¹⁵ Two piano works illustrating Bauer's tonal compositional style are Three Impressions (1918) and From the New Hampshire Woods (1922).

Bauer's study at the Paris Conservatory from 1923-1926 with André Gédalge, who taught Ravel, Milhaud, and Honegger,

marks a turning point in her compositional style from a tonal to a post-tonal idiom.¹⁶ Her interest in innovative compositional procedures is apparent also in one of her tonal works, her 1922 Prelude in D minor for piano, op. 15/3, in which a melodic line is presented by the right hand in a continuous rhythm of short-note values and is doubled at the octave by the left hand.¹⁷ Bauer continued composing in a post-tonal style from the 1930s through the mid-1950s; these works include her Dance Sonata, op. 24 (1932); Two Aquarelles, op. 39 (1944/1950); and Anagrams, op. 48 (1950).

My approaches to Crawford's and Bauer's music differ: I relate Crawford's compositions to information about her life specifically during the time in which she composed the work under discussion. The three chapters analyzing her music describe, in turn, incidents of professional bias against women and her reactions to them, her self-image, and her leftist political beliefs, in order to suggest that these aspects of Crawford's experience, as recorded in her letters, diary entries, and other writings, shape some of her compositions. In other words, Crawford's identity that emerges in these prose writings is, in my account, expressed in the fabric of her music.

Because biographical information currently available on Bauer is comparatively scant, my readings of her compositions are not grounded in specific lived experiences

to the level of my analyses of Crawford's music. Rather, they speculate about possible relationships between the narratives in two of Bauer's piano works and her identity as constructed in her writings about music and in reflections by her contemporaries.

Though my approach to each composition differs, a unifying thread is my attention to various aspects of contour, working from the foundations of contour theory established by Robert Morris, Elizabeth West Marvin and Paul Laprade, and Michael Friedmann.¹⁸ Morris defines contour space as "a pitch-space consisting of elements arranged from low to high disregarding the exact intervals between the elements."¹⁹

I apply Morris's definition of contour space to variety of musical spaces; each chapter deals in some way with contour. Chapter 2 presents an analysis of the third movement of Crawford's 1931 String Quartet. By using an original analytical tool that measures the "degree of twist" of the four instrumental voices as compared to their normative arrangement with the first violin as the highest voice, second violin as the second highest voice and so forth, I argue that this work speaks in a "double-voiced discourse" (a phrase coined by literary theorist Elaine Showalter) by presenting both a dominant narrative and a "muted" narrative that is recoverable only when applying the twist tool to its dimension of voice leading.²⁰ Chapter 3

presents a narrative hearing of the fourth movement of Crawford's quartet. As in Chapter 2, I argue that Crawford's personal experience of bias against women composers informs the structure of a movement from her string quartet, and suggest that a female persona is given voice in the first violin, its music actively opposing the other three instruments which represent authority. Chapter 4 presents an analysis of a composition with text, Crawford's song "Chinaman, Laundryman" from her Two Ricercari. Introducing the notion of "contour deviance," an analytical measure analogous to the "twist tool" which I employed in Chapter 2, I argue that measuring the contour deviance of the piano's music underscores a particular reading of the text, one that can be linked to Crawford's leftist politics.

Chapter 5 analyzes Bauer's Chromaticon, a work for piano. I argue that Bauer's beliefs about the organization of society are present in her prose writings about music and that a particular musical narrative in this work can be heard as musically representing such views. Through an analysis of the piece that maps out a narrative of conflict between specific melodic contours, I suggest that Bauer's belief in the necessity of challenging the status quo is reflected in the structure of the piece.

Chapter 6 examines Bauer's Toccata through an aspect of its performance--the relationship of the pianist's hands--

and traces out a narrative in terms of one hand's dominance over the other. Its particular approach to contour space is one that has not yet been examined in the contour literature: I discuss the relationship of the pianist's hands in performing the predominately four-note simultaneities of the piece, whose precise pitches remain secondary in my analysis to the physical arrangement of the performer's hands. I argue that within this performative dimension, a narrative based on a playful reversal of hand dominance, is present in the work; my analysis also contemplates whether this reading of the piece might be understood to resonate with Suzanne Cusick's recent speculations about a possible relationship between musical experience and sexuality.²¹

This project of presenting analyses that are inflected by historical and social context does not argue that these strategies exist uniquely in compositions by women. There is, obviously, no biological imperative for women to compose one way and men another, and it is certainly possible that structures similar to those I describe in Crawford's and Bauer's music are present in music by male composers. If one indeed discovered similar strategies in compositions by men, their existence would not alter my argument about the relationship between gender and structure in these works by women, though I would not attribute their presence in a piece by a male composer to gender in the ways I claim here.

Four additional points will further clarify the goals and limits of this study. First, the compositions analyzed are not meant to be representative of the oeuvre of Crawford or of Bauer, or of post-tonal music by American women composers of the early twentieth century more generally. My aim is rather to argue that these pieces may be related to Bauer and Crawford's subjectivity in specific ways; other compositions by these composers may or may not exemplify the specific relationships I claim here between musical structure and biography.

Second, apart from the potential futility of the task of identifying common structural elements or strategies in a group of compositions by women, such a goal is unattainable in this study, given its scope: it presents close readings of a small number of pieces by two American composers. Exploring the question of whether music belonging to a particular category (e.g., "early twentieth-century music by American women") is somehow structurally distinctive would necessitate detailed readings of a number of compositions, and of music by both male and female composers.

Third, my argument is not based on compositional intention, i.e., that Crawford and Bauer consciously constructed these musical narratives in order to express their personal situation. There is no documentary evidence that Crawford or Bauer intended to produce the narratives I present, though it remains a possibility. Rather, what I

hope to show is that by making connections between biography and structure, a listener is able to experience new and compelling ways of understanding these pieces.²²

Fourth, in this study I aim to present feminist accounts of post-tonal music that are pro-modernist. It thus responds to a recent essay by Catherine Parsons Smith in which she argues that "It appears that modernism in music, as in literature, may indeed be understood as a reaction to the first wave of feminism. One must painfully conclude that while this reaction was productive for many males, it was profoundly destructive for female composers."²³ Smith cites as one example Ruth Crawford, who she asserts "abandoned the development of her own modernist compositional language in the early 1930s, just as she seemed to have gained creative maturity."²⁴

The close readings I perform here of compositions by Crawford and by Bauer support my contrasting belief that the techniques and aesthetic of musical modernism are neither inherently sexist nor misogynist, but that modernism positively provides a space for forms of women's compositional expression. Because it released Crawford and Bauer from the strictures of a common musical style by giving them the technical means to forge new musical procedures and narratives, modernism hardly proved harmful to these women, but rather stimulated their work in inventive and liberating ways.

Note on Musical Terminology:

Pitches will be identified according to the Acoustical Society of America's system notation, where C4 equals middle C.

Contours will be identified by cseg names as listed in the appendix to Elizabeth West Marvin and Paul Laprade, "Relating Musical Contours: Extensions for a Theory for Contour," Journal of Music Theory 31 (1987), 257-62.

Pitch-class sets will be identified first with Allen Forte's classification, followed its prime form given in brackets. Forte's list of set types is given in Appendix 1 of The Structure of Atonal Music (New Haven: Yale University Press, 1973).

CHAPTER 2

THE QUESTION OF CLIMAX IN RUTH CRAWFORD'S STRING QUARTET, MVT. 3

The opening bars of the third movement of Ruth Crawford's 1931 String Quartet present a strikingly original musical conception. They draw the listener into an unfamiliar sound-world, one in which the voices twist over, then under one another, come together and veer apart, creeping up all the while. As Example 2-1 shows, about three-quarters of the way through the work, the voices crescendo to *fff*, attack triple-stops, and snap apart--that is, the piece reaches a climax. The voices then swiftly descend and return to the soft and slow quality of the opening to conclude the movement.

The presence of a climax suggests a significant critical issue for the piece: as a remnant of nineteenth-century musical procedures, it seems at odds with the work's particular innovative structure and aesthetic.¹ I know of no string quartet movement composed within a decade of Crawford's that draws upon her techniques of placing the viola and cello in high registers so that they produce unusual timbres, of presenting the four instrumental voices as more or less equal in importance, and of writing the

The dotted lines (.....) indicate that the first tone of each new bow is not to be attacked; the bowing should be as little audible as possible throughout. The crescendo and decrescendo should be equally gradual.

Andante (♩ = 116)

5

sempre legatissimo

ppp *p* *ppp* *p* *ppp* *p* *ppp* *p* *ppp* *p*

ppp *p* *ppp* *p* *ppp* *p* *ppp* *p*

sempre legatissimo

[illegible]

Example 2-1 (page two). Crawford, String Quartet, Mvt. 3,
measures 25-48

25 decrescendo to meas. 29 30

1 2 3 4

crescendo to meas. 43 35

5 4 3 2

40

2 2 0 1 3

45 decrescendo

3 4 4 4

114-40013-45

Example 2-1 (page three). Crawford, String Quartet, Mvt. 3,
measures 49-71

[50] crescendo to meas. 66

1 2 2 2 2 4 4

[55]

6 4 4 3 2 0 0

[60]

0 0 0 0 1 1 1 1 1

[65]

[70]

1 1 2 2 3 5 6 5

sempre *fff*

sempre *fff*

sempre *fff*

5 2 sempre *fff* [50] 9 1 5 17 *ff* 2

Doppio movimento accel. molto to meas. 88

0 1 1 1 2 2 0 0 1 0 0 1 0 2 3 1 2 2 1 2 2

[55] rall. e dim. molto [90] Quasi tempo primo

3 1 0 1 3 2 0 2 *f* *f* [95] 2 2 *p* *mf* *p*

Tempo primo (J. 116)

p *mf* *p* *mp*

pp

mf *p* *mf* *pp* *mp* *pp* *mp* *ppp* *p* *pppp*

mf *p* *mf* *pp* *mp* *pp* *mp* *ppp* *p* *pppp*

piece as a counterpoint of dynamics; two pieces composed much later--the seventh of Elliott Carter's 1950 Eight Etudes and a Fantasy for Woodwind Quintet and the ninth of György Ligeti's 1968 Zehn Stücke für Bläserquintett--evoke comparison with Crawford's composition through their emphasis on timbre and the communal labor of the instruments. By remarking on the oddness of the climax's inclusion in Crawford's quartet movement, I am not making an *a priori* claim that climaxes are incongruous with modernist music, but rather am suggesting that this particular climax does not match the rest of its musical fabric.

While musing over the various possibilities with which I could explore the question of climax in the work, it struck me that feminist theory might prove useful to such a study, for over the past two decades feminism has transformed entire disciplines; I believed it could bring crucial insights to music theory as well.² Ruth Crawford's String Quartet seemed a promising piece to begin forging an example of what feminist music theory might be.³ The work has always struck me as an inappropriate specimen to slide under the microscope of set theory (currently the most frequently used mode of music analysis for post-tonal music), for it is not composed of a few set classes which a set theorist would locate and trace through their various manifestations. Consequently, I have developed another

method to analyze the quartet's third movement. What I hope to demonstrate by applying this model to the composition is that close readings of musical structure and formalist music theory may indeed address, and in fact grow out of, a feminist consciousness.

In attempting to reconcile feminism with music theory, I want to commit myself to close readings of musical structure for two reasons. The first is personal; I enjoy doing it. The second is more global. If we are to build a feminist community of music scholars, we need to leave open as many ways of reading as possible. Although some feminists reject rational and formalist approaches as masculinist, I do not find it necessary or desirable to stop analyzing music from codified principles-- in short, to designate formalism as the Other in feminist music analysis.⁴ I want to claim instead that hearing pieces of music as feminists may lead us to reject our traditional analytical tools and encourage us to develop new ones, which may be formalist as a particular piece warrants. Because some works might exceed our received ways of hearing, theorizing, and critiquing, I believe they deserve consideration through alternative theoretical models.

* * *

In the fall of 1929, Ruth Crawford moved to New York in order to continue her musical education. Only 28, she had

already rightfully earned the admiration and support of colleagues who could wield a good deal of influence. With the aid of Henry Cowell, she moved into the home of music patron Blanche Walton and began to study composition with Charles Seeger, who had been Cowell's own mentor. Walton provided Crawford both financial and emotional support, and the composer Marion Bauer, whom she met at the MacDowell Colony, became her mentor. In 1930, the Guggenheim Foundation awarded her a year-long fellowship in composition, its first to a woman.⁵

Yet Ruth Crawford was no stranger to the many barriers that resulted from sexist opinions about women composers. Charles Seeger was initially reluctant to accept her as a student because he believed women to be incapable of composing; the director of the Guggenheim Foundation did not want even to consider her application on the simple grounds of her sex.⁶ Crawford's diary entry from February 22, 1930 records a memory of being shut out:

The musicologists meet. It is decided that I may sit in the next room and hear [Joseph] Yasser [a visiting Russian musicologist] about his new supra scale. Then when I come out for this purpose, I find someone has closed the doors. Blanche is irate, so am I. Men are selfish, says Blanche. You just have to accept the fact. Perhaps, I wonder, their selfishness is one reason why they accomplish more than women....I walk past the closed door to my room, and when I pass I turn my head toward the closed door and quietly but forcibly say, "Damn you," then go on in my room and read Yasser's article. Later, my chair close to the door, I hear some of the discussion.⁷

I have chosen to lead into my analysis with this image because it powerfully illustrates Crawford's status as a composer. Living in the Walton home, she could gain access to important musical resources, but as a woman, she was still kept from entering the drawing room on the occasion of Yasser's visit and was reduced to pressing her ear to the door in order to pick up whatever scraps of information she could.

While much of Crawford's music is obviously a product of her rigorous training in musical modernism, I will argue that her compositions also reflect her gender, or the social organization of sexual difference. I do not mean this in a biological or essentialist sense. Rather, I mean that as a woman, Ruth Crawford often found herself pushed to the outside of professional circles and that the structure of this string quartet movement mirrors her social, gender-based exclusion. As a result of this gender-based exclusion, her compositions became a site of resistance, speaking in what the literary theorist Elaine Showalter calls a "double-voiced discourse."⁸ Because I am grounding my argument in the social exclusion and double participation that some women experience, rather than in their biology, I am not arguing that all women composers create such artistic spaces, nor that music by women is necessarily distinct from music by men. Such generalizations assume that women and men are monolithic groups, which I do not believe, and

disregards historical context and individual experience, factors which are crucial to my reading of Crawford's work.⁹

The groundwork for my argument that links Crawford's string quartet movement to her gender is a theory offered by the anthropologist Edwin Ardener, who has suggested that women in a society operate both within a dominant group and in a space outside it. From his studies in Cameroon, he argues that Bakweri women, who are "muted" both socially and linguistically, express their views of the world not through direct expository speech but through the encoded realms of art, myth, or ritual.¹⁰ Although some feminist theorists romantically urge us to celebrate such spaces as pure realms of female culture, unsullied by the dominant male culture, it is important to acknowledge that many of these models are not autonomous. As Showalter observes, because of the widespread influence and authority of the dominant male-generated model, and the necessity that women present their concerns in a form acceptable to men in order simply to be heard, a muted group's perceptions of the world and forms of self-expression are often transmitted through the dominant order.¹¹

Using Ardener's theoretical framework, I want to claim that while Crawford's quartet movement works its way up to a traditional climax, it also creates a musical space within which another procedure subverts the climax.¹² Because this undercurrent is much less obvious than the loudly trumpeted

moment of climax, I will introduce an analytical model to account for its presence. Consequently, rather than having to conclude that the movement's promise of a new musical vision is spoiled by an unimaginative narrative strategy, we may alternatively understand it as challenging or even parodying a nineteenth-century climax and might contemplate the possibility that the foiling of the climax is in some way related to Crawford's experience as a woman.¹³ Her composition, then, would be not just revolutionary but also distinctly feminist in undercutting a dominant, masculinist musical narrative by including a second narrative wholly independent of the first.

I do not know whether Crawford intended the movement to enact the specific feminist strategy I am suggesting here, or even whether she considered traditional musical climaxes to be a male domain. Although what she set out to do certainly interests me, the analysis I offer here does not depend upon compositional intent. Rather, my reading emerges from my knowledge of Crawford's strong feelings about the inequity of women compared to men, and my own identity as an Asian-American woman who occupies social spaces analogous to the two musical spaces I perceive in this piece.

* * *

The quartet's third movement opens by establishing its

unusual musical processes: instead of the instruments' keeping their distance, marking off their registral territory, they snuggle together a semitone apart and often pack themselves within the space of a minor third as they creep up towards the downbeat of m. 75, the point at which they break apart. The viola and cello are tossed up into registers alien to their usual tessituras, yielding unusual tone qualities; voices rub against each other at the space of a semitone; instruments shift pitch in turn. The movement rejects the predominant Classical string quartet model in which the first violin takes on the role of leader over harmonic support provided by the second violin, viola, and cello. Instead, the instruments work cooperatively, sharing in the same musical tasks.¹⁴

Yet in contrast to these innovative musical strategies, the movement takes on a traditional narrative shape. As Figure 2-1 graphically demonstrates, the voices collectively inch upward. They also gradually get louder. The four horizontally directed lines in this figure represent each instrument's path through the piece.¹⁵

In m. 65 (sonority change 53 in Figure 2-1) the violins begin a game of one-upmanship which brings all instruments to the pinnacle of the piece and to its subsequent collapse. Ten measures later, the movement becomes very loud, shifts from legato bowing to attacks via triple-stops in all instruments, and sprawls across four octaves. In a

27

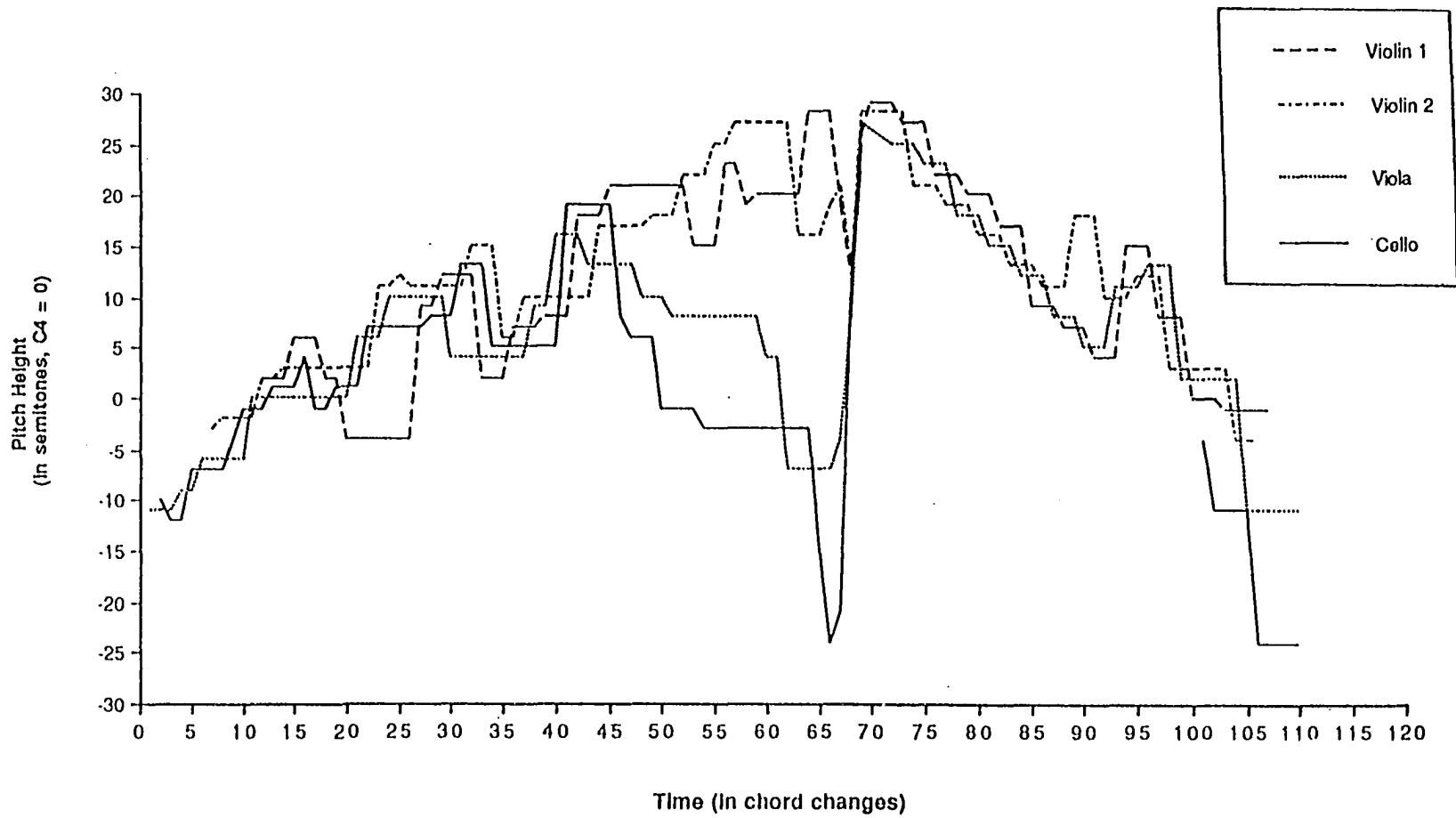


Figure 2-1. Voice Leading Graph of Crawford, String Quartet, Mvt. 3

traditional musical narrative, this moment would serve as the climax.

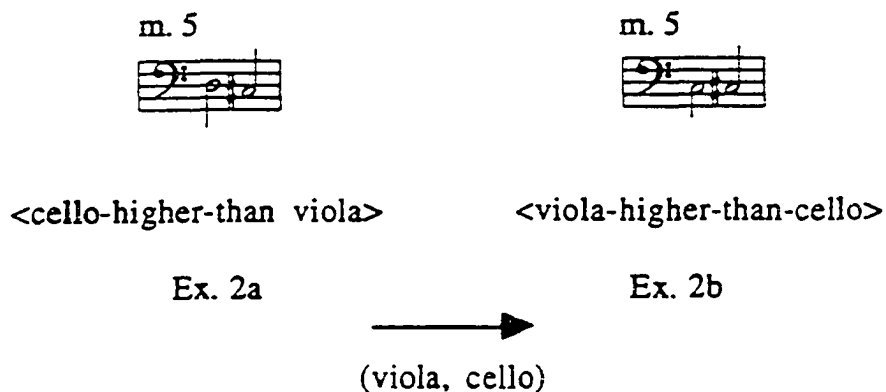
My analytical model, however, reveals a second narrative, which depends on the following paradigm. Think of the instruments as four strands of sound that are woven together throughout the piece. Each strand occupies a characteristic register, one not located in absolute pitch space but defined relative to the other strands' registral position. The reference state is that in which the sound-strands do not cross; that is, when the first violin occupies the highest register, the second violin the second highest register, the viola the third highest register, and the cello the lowest register. As the instrumental voices begin to twist and weave together, the pattern becomes more intricate. We can think of the piece as moving through varying patterns whose intricacy we can measure. The lowest possible measurement will indicate the state in which no strands cross; the highest possible measurement will indicate the greatest degree of "twist" possible for the four sound-strands.¹⁶

A closer look at the first three notes of the movement will introduce the mechanics of the analysis. The viola enters on a barely audible C#3, quickly crescendos and dies away. As it swells a second time to *p*, the cello enters a semitone above it, *ppp*, and similarly pulsates between *p* and *ppp* in turn, alternating with the viola in dynamic

prominence. The cello then moves underneath the viola in m. 5 to sound the pitch a semitone below the viola's sustained C#3. With the cello's move to C#3 in m. 5, the two instruments swap registral places. The cello becomes the lower voice, the viola the higher.¹⁷

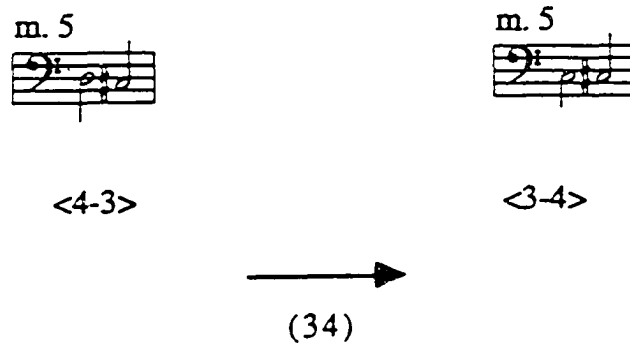
Using the conventions introduced in Example 2-2, we can explore this registral exchange in greater detail. At the beginning of m. 5, the cello is higher than the viola; at the end of m. 5, the viola is higher than the cello. (Throughout the examples, the notes of violin 2 and the cello have downward stems; the notes of violin 1 and the viola have upward stems.)

Example 2-2. Permutational Notation for Registral Exchange between Viola and Cello



The change from Example 2-2a to Example 2-2b is labelled with the permutation symbol (viola, cello) that denotes an interchange between the viola and cello. This interchange transforms Example 2-2a, <cello-higher-than-viol>, into Example 2-2b, <viola-higher-than-cello>. Example 2-3 illustrates an abbreviation of this terminology; by calling the viola "instrument 3" and the cello "instrument 4," the two situations may be notated as <4-3> and <3-4>. The first situation, <4-3>, is thus transformed into the second, <3-4>, by the permutation (34), which simply means that instruments 3 and 4 exchange registral roles.

Example 2-3. Numerical Notation for Registral Exchange in a Two-Voice Sonority



Regarding the movement of the voices as an exchange helps us to chart the crossing of each sound-strand.

Example 2-4 applies this permutational notation to the sonorities of m. 25, two examples of the four-voice sonority

patterns that predominate in the piece.

Example 2-4. Numerical Notation for Registral Exchange
in a Four-Voice Sonority

m. 25



m. 25



<1-2-3-4>

→

<2-1-3-4>

(12)

The only instrument to change pitch in m. 25 is violin 1, which moves from F#4 to D4. The registral disposition of the first sonority of Example 2-4 is represented as <1-2-3-4>. That is, instrument 1 is in the highest register, instrument 2 in the second highest register, and so forth. The second sonority is represented as <2-1-3-4>; instrument 2 is now in the highest register and instrument 1 is in the second highest register. The permutational notation (12) shows that instruments 1 and 2 have switched places, and the

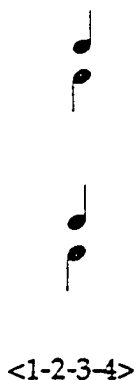
others remain in relative position.

Appendix A is a score reduction that displays all the simultaneities of the piece using two staves. The first set of numbers below each system indicates measures; when more than one simultaneity appears in a measure, its measure number is followed by a letter (e.g., 8a, 8b). The second set of numbers indicates vertical sonorities. Appendix B lists all strand patterns greater than two strands from Appendix A using numerical notation. Its first three columns list the measure number, sonority, and the strand pattern(s) for that measure. The fourth column lists the permutations that connect successive strand patterns. The number in the fifth column measures the "degree of twist" of the sound-strands at any given moment. The numbers in the sixth and seventh columns, "Max" and "N", will be discussed shortly.

To measure the degree of twist, I have borrowed Milton Babbitt's idea of order inversions which he introduced to investigate a completely different musical relationship.¹⁸ In my application, a degree of twist equal to 0 occurs when the instrumental strands do not cross; as Example 2-5 illustrates, their registral disposition is <1-2-3-4>.

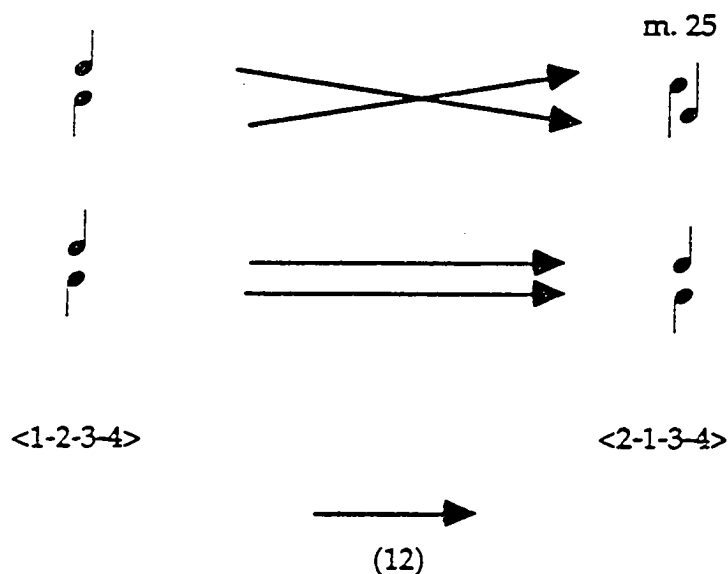
The degree of twist for any other strand pattern is defined as the number of times an instrument is "out of sequence" as compared with the reference pattern. For example, given the pattern <2-1-3-4> of Example 2-4, we can

Example 2-5. Degree of Twist = 0 in a Four-Voice Sonority



calculate its degree of twist to be 1, for as Example 2-6 illustrates, it contains just one reordering of <1-2-3-4>.

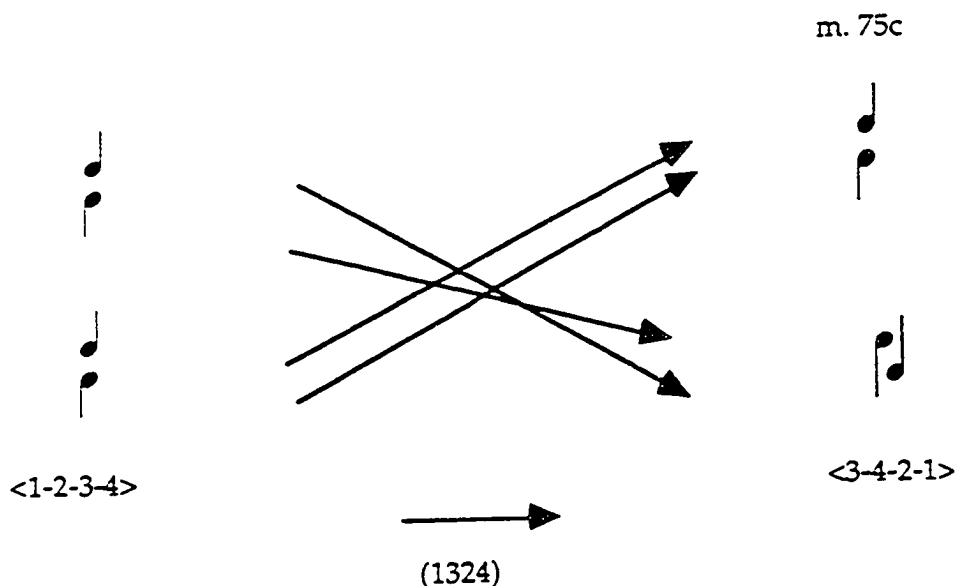
Example 2-6. Degree of Twist = 1 in a Four-Voice Sonority



Example 2-7 demonstrates a degree of twist equal to 5 for the strand pattern <3-4-2-1>. The arrows cross five times, showing five twists (or five reorderings) of the basic no-twist pattern.

Measuring the degree of twist for each sound-strand pattern throughout the piece enables us to describe the progression of these patterns. Although perceiving the

Example 2-7. Degree of Twist = 5 in a Four-Voice Sonority



exact degree at any one moment would require the musical ability to recognize each instrument's placement in relation to all the others--not an easy task, to be sure--many listeners do have the ability to hear that these strands are being continually woven and unwoven into configurations of varying intricacy, and to discern an increase or decrease in the degree of twist which the numbers reflect.¹⁹

In order to characterize the twining activity throughout the piece, Example 2-1 is annotated with the

degree of twist for each sonority of three or more voices. The first three-instrument grouping occurs with the second violin's entrance in m. 13. Here, the degree of twist registers 0. It gradually reaches 2 in m. 18 through a progression of 0-0-1-2-2.

At m. 19, the first violin enters, bringing the total of voices to four, and the degree of twist collapses back to 0. (Appendix B lists this moment as a *three-voice* strand pattern, <2-3-4>, in order to suggest that instrument 1 is⁽¹⁾ doubling instrument 2, having not yet asserted its first-violin identity.) On beat 3 of m. 19, the cello's change to C#4 increases the degree to 1; in m. 20, the second violin's move to Eb4 effects an increase to 2; and in m. 24, the cello's subsequent drop to B3 brings the degree back down to 0. To summarize, the opening gesture of the three instruments (mm. 13-19) begins with no degree of twist, increases to 1, then 2, then drops back down to 0; it immediately repeats this sequence in mm. 19-24. (The drop from degree 2 to 1 in m. 21 is relatively brief, and does not affect the overall profile.)

This twisting activity of the voices is quite different from the overall upward registral climb toward the moment of climax and release. Within the dimension of voice-weaving, an increase is followed immediately by a decrease. The musical movement, then, is not simply a vector pointed toward m. 75; rather, it rocks back and forth.

In using the terms "increase" and "decrease" to describe progressions of twist values, I am not drawing a parallel between an increase in the degree of twist and an increase of "tension" in the weaving of sound strands. First, equating a greater degree of twist with a higher level of tension is incompatible with my metaphor: a high twist number for any particular sound-strand pattern would not be considered a more "tense" moment in the weave. Second, regarding the degree of twist as a measurement of tension or stress that is alleviated would be inconsistent with my argument that this hidden dimension subverts the dominant, traditional narrative. Doing so would greatly diminish the feminist content of my argument, one aspect of which I consider to be the refusal of this second musical space to merely reflect the first, to borrow Virginia Woolf's metaphor of a looking-glass to describe women's expected roles in relation to men.²⁰ Rather, in my analysis the primary significance of the twisting activity is its cyclic organization.

Measure 24 initiates a steady increase in twist, from 0 to the maximum degree of 6 in m. 32, where the cello reaches G4. The degree of twist then immediately decreases, 6-4-3-3-2-2, returning to degree 0 at m. 39.

The permutations, listed in Appendix B, help to articulate the increasing and decreasing degrees of twist.

From mm. 13b-15, the rising degree numbers correspond to no change, symbolized by (), or change measured in two-element permutations, or 2-cycles. The return to degree 0 at m. 19a takes place over a 3-cycle, (243). From mm. 19a-22, the numbers correspond to 2-cycles, while the approach to degree 0 at m. 24 corresponds to a 3-cycle. Furthermore, a 3-cycle over mm. 30-32 accompanies the move from degree 4 to 6, and a 3-cycle also marks the return at m. 39a to degree 0. To summarize this section of the piece, 3-cycles accompany movement to degrees 0 or 6; 2-cycles and ()-cycles are used to move between other degrees of twist.

Attending to the permutations thus makes it easier to hear the continual transformation of strand patterns. I would like to suggest two additional listening strategies. The first is to listen for prominent melodic leaps. For example, at m. 24 the cello drops a fourth from E4 to B3, bringing the degree-of-twist progression back to 0. At mm. 31-32, the cello also signals the move to degree 6, the greatest degree of twist, with its distinct tritone ascent from C#4 to G4. The second listening strategy is to trace the path of a single strand. For instance, over mm. 24-32 the cello moves up from the lowest registral position to the highest while the degree of twist increases from 0 to 6.²¹

Returning in m. 39 to the musical narrative, we hear the degree of twist drop to 0, then increase to 1, 3, and then to 4, yielding the value of 4 three times over

mm. 45-47. While the twisting activity pauses in these three measures, each instrument abandons its climb upward: the viola sustains its E4 throughout; in m. 45 the first violin dives 10 semitones, from C5 to D4; in m. 46 the cello drops 8 semitones from C#5 to F4; and in m. 47, the second violin falls 9 semitones from D#5 to F#4. (Figure 2-1 shows the similar downward motion of the three instruments over sonorities 31-33.) This stretch of music thus exemplifies a local correspondence between the upward ascent and the steady twining activity of the sound-strands; both are temporarily abandoned. (This moment does not, to me, indicate mutual recognition or reinforcement between the two spaces; indeed, points of coincidence might be expected of two forces operating independently of one another.)

To move out of degree 4, the first violin ascends a fourth at m. 49 from D4 to G4, and the degree drops to 1.²² This drop is accompanied by permutation (1342), the first 4-cycle to occur in the piece. The degree of twist then increases to 2 and swiftly reaches the maximum degree 6 at m. 56a with another 4-cycle. Degree 6 is displaced on the next beat by 4, which in turn decreases to 2 at m. 58b. With the assistance of the 3-cycle (234), the degree of twist returns to 0 at m. 59. Figure 2-1 shows this passage in which the violins begin to split off registrally from the viola and cello over sonorities 44 to 65 (mm. 59-75).

After the strand pattern reaches degree 0 at m. 59, it

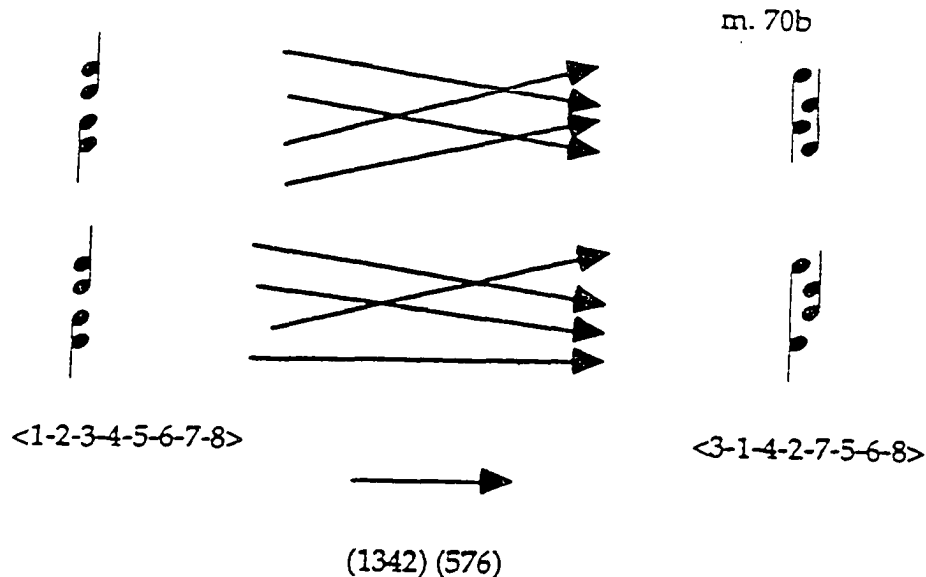
returns this value for four measures until the second violin ascends in mm. 62-63 by a major third, F#5 to A#5, a move that shifts the degree to 1. The value of 1 is returned seven times before violin 1 plays its first double-stop in m. 68. In other words, the sound-strands cease their continual to-and-fro motion and grind to a halt. But in striking contrast, it is at this moment of relative repose, when the continual shifting of patterns pauses for quite a long time, that the tension of the piece starts to build more quickly, soon to become unbearable.²³

When the double- and triple-stops commence in m. 68, we cannot continue to calculate their degree-of-twist values as we did for the three- and four-strand patterns. The model can be generalized in the following way to accommodate this increase in the number of registral voices in a sound-strand pattern from four to five, six, seven, eight, or twelve as needed.

Example 2-8 represents the sonority at m. 70b as <3-1-4-2-7-5-6-8>. The strand patterns are ordered, as before, from high to low, but the first violin's double-stop notes are designated 1 and 2, the second violin's notes 3 and 4, etc. Since the sonority contains five reorderings of <1-2-3-4-5-6-7-8>, it would be assigned a degree of twist of 5.

The overall increase in degree of twist in Appendix B, for mm. 68-75a from 2 to 9 is a bit misleading because with

Example 2-3. Degree of Twist = 5 in an Eight-Voice Sonority



an increase in the number of registral voices, the maximum possible degree of twist increases proportionally. The fifth column in Appendix B contains the maximum possible degree of twist for each expanded strand pattern. A three-voice sonority has maximum degree of 3 (e.g., <4-3-2>); a four-voice sonority has a maximum degree of 6 (e.g., <4-3-2-1>). A five-voice sonority has a maximum degree of 9; a six-voice sonority has a maximum degree of 13, and so forth.²⁴

A sonority's degree of twist divided by its maximum possible degree of twist gives a more accurate figure for comparing the degrees of twist among sonorities of different sizes. The sixth column in Appendix B lists these relative

values as N ($=\text{Degree of Twist} \div \text{Maximum Degree of Twist}$). For mm. 68-74, the values range from .08 to .25. In contrast to the heightening intensity of this passage as it progresses toward the climax, the degree of twist stays within a relatively small range. The climax sonority of m. 75 registers degree 9, which appears on first glance to be a local high, but with a maximum degree of 46 for a twelve-note sonority, its N -value is merely .20, remaining well within the small range already established. The highest N -value for mm. 68-75 is .83 at m. 75c, which is less than the N -value of 1 obtained at m. 32 and m. 56a. The events on the surface of the music are therefore not reinforced at the level of voice-twisting activity; the weaving of the sound-strands has slowed considerably, in contrast to the bells and whistles going off that signal a climax. This disjunction between the two dimensions continues after the moment of climax. During the release of surface tension, the twisting again commences--the sonority on the last beat of m. 75 registers 17 out of a maximum 24, or .71, a prominent increase from .20 of m. 75's downbeat sonority.

Calculating the degree of twist for the slurred eighth- and sixteenth-note figures that connect the climax sonority to the octachord in m. 75 beautifully illustrates the twisting activity. If we count the four beginning pitches and four end pitches of the slurred figures in m. 75 as each constituting a strand pattern, we can measure the degree of

twist for these figures before and after their two-and-a-half octave sweep. Appendix B lists the beginning pitches in m. 75b as pattern <2-1-3-4> with degree of twist 1, and lists the end pitches in m. 75c as pattern <3-4-2-1> with a degree of twist 5. The increase from 1 to 5 suggests that over the second and third beats of m. 75, the strands plait rapidly from a nearly untwisted state into an highly twisted pattern.²⁵

As Example 2-1 shows for m. 77 to the end of the piece, the steady increase and decrease of the degree of twist is mostly absent. Now the patterns shift much more rapidly, beat to beat, in what seems an almost random fashion in contrast to the instruments' steady collective descent after their triple-stop attacks: they sink downward, moving as relentlessly to the piece's nadir as they did to its peak.

* * *

In a 1976 interview, Charles Seeger acknowledged his former prejudice against women composers:

I was very snooty in those days about women composers and had come more or less to the conclusion that the great tradition of European music, say from 1200 to about 1930, had been created mostly by men and that it was a bit absurd to expect women to fit themselves into a groove which was so definitely flavored with machismo (and, of course, the early music of the twentieth century and the late music of the nineteenth century was machismo with a capital M).²⁶

My reading of his wife's string quartet movement suggests how a woman composer did manage to situate herself

simultaneously "within the groove" and outside it, to flow with the mainstream and to run a countercurrent underneath it. Rather than refusing to answer the compositional call to machismo, Crawford's quartet movement replies in part within the dominant discourse--but answers deviously, to borrow a phrase from Teresa de Lauretis.²⁷ Thus it manages to speak the language of the "great tradition" while also maintaining a space of resistance.

By tracing these twists systematically through the quartet movement, we are able to perceive a musical space through which an alternative narrative is written, one that proceeds alongside the more prominent narrative of the music's surface that drives toward the climax. My analysis thus draws a parallel between the structure of Crawford's quartet movement and her existence as a woman composer whose music seemingly accepts the conventions of the dominant group while it in actuality resists them. As I have argued, Crawford's gender animates this work in a way not readily evident, but which can be made audible, in this case, through formalist analysis.

CHAPTER 3

FEMALE SUBJECTIVITY IN CRAWFORD'S STRING QUARTET, MVT. 4

In the late spring of 1930, Crawford travelled with Charles Seeger to Patterson, New York, where Seeger usually spent the summer with his three sons. Crawford was to continue her composition lessons with him, which she had begun in the fall of 1929 in New York City. In Patterson, these lessons took a different form--they consisted of Seeger dictating a treatise on modernist music to her every morning and afternoon, which she transcribed and typed. The projected two-part work, eventually called "Tradition and Experiment in (the New) Music," was based upon her tutorials during the previous nine months and on the composition lessons of Seeger's other students, including Henry Cowell. In addition to these secretarial responsibilities, she commented extensively on a complete draft of the manuscript before leaving in August to begin a year as a Guggenheim fellow in Berlin.¹

Crawford's willingness to give up the opportunity to spend a second summer composing at the MacDowell Colony for this arrangement in Patterson, which concentrated on drafting Seeger's book rather than on developing her compositional skills, attests to her commitment to working

with him. Her correspondence documents the extent to which her relatively brief period of study with Seeger had immensely influenced her. In a letter of November 11, 1930, she recounts how in Germany she had begun describing Seeger to others as "a man whose ideas have the disciplinary advantages of Schoenberg's but with a vision and a vista that reaches far beyond."² In a letter to Nicholas Slonimsky, she writes that Seeger "shared with me his conception of the aspects and as yet untried possibilities, both in form and content, of a new music, and his views as to various means of bringing some organic coordination out of the too often superabundance of materials in use at present. As a result of this study, my work began at last to take a 'handleable' shape, to present itself in some sort of intelligible continuity."³

"Tradition and Experiment in (the New) Music," which has been published only recently, gives both a speculative account of modern music and practical guidelines for composing it. One theme that emerges is Seeger's emphasis on the importance of a composer's musical feeling or intuition that he believed must accompany technical proficiency. In a section devoted to the idea of "mood," which concerns the composer's artistic conception of a piece and which is distinct from its systematic organization, he writes the following:

So far we have dealt with the technique of music as if it were entirely a matter of intrinsic organization. Perhaps it is necessary again to point out that this is only half the story. Probably at least half the time the composer does what he does not on the grounds of technical procedure at all, but at the behest of mood, literary program, a conception of the lyric, declamative, dramatic, or antiphonal, or a grand conception of a work as a whole. ... [I]n even the strictest exercises in organic composition, mood and external suggestion of every kind must be expected to play its indispensable role. For if it does not, the result will not be musical.⁴

Seeger's view that a mood or program must accompany a compositional system was one with which Crawford was familiar, and it may well have influenced her conception of her own music. In a letter she wrote to Seeger in February, 1931 not long after she began composing her String Quartet,⁵ she describes the inception of the first movement by giving human agency to specific musical entities, writing: "[I] took a little monody which is lyric and gave it a leggiere pal with a bass voice and it insisted on becoming a string quartet."⁶

One of Crawford's markings in her personal copy of the score alludes to her conception of the piece as a dialogue. Scratching out "Allegro possibile" as the tempo indication in the published score, she adds "half note = circa 100" and writes "Allegro quasi recitative." By invoking a style of text setting that simulates speech in a piece that has no text, Crawford suggests that the instrumental voices mimic speech. Her own brief analysis of the movement makes no mention of the program I shall present in which the

instruments carry out a conflict between opposing parties, but the circumstances of her analysis warrant consideration: she prepared it in 1948 at Edgard Varèse's request for a course he was teaching at Columbia University; while the audience for the analysis would surely have been interested in aspects of form, pitch, and so forth, an extra-musical program may not have been appropriate to include. In an accompanying letter to Varèse, Crawford writes that the enclosed score is "analysed as to tone, rhythm, form, and dynamics," which at least leaves open the possibility that there were other aspects of the piece that she chose not to analyze.⁷

In Chapter 2, I proposed that Crawford's music might be read as the record of a life, and argued that the compositional strategies in the third movement of her quartet can be heard as conveying her experiences of professional marginalization. I shall analyze the fourth movement using a radically different narrative than for the slow movement. My analysis presents a reading of its drama as representing gender-based experiences that Crawford may have not been able or willing to articulate in speech or prose.

One such experience occurred in 1929, when Henry Cowell initially suggested to Seeger that he give composition lessons to Crawford, whose work had impressed him. Seeger initially refused, recalling his reasons fifty years later:

I had other women students at the time, and none of them was particularly interesting, so I made the arrangement that, all right, I would take her as a composer at my regular fee. Mrs. Walton, whom she was going to stay with, would pay for it and Ruth would promise to take six lessons. At the end of the six lessons we would have a discussion of the situation.⁸

Despite Seeger's reluctance to teach her, Crawford was able to produce compositional assignments that pleased even his prejudiced eye, and so she was permitted to continue studying with him.

But I would imagine that Crawford could not have so easily shrugged off the impact of realizing Seeger's negative opinion of women composers. That she respected his opinion is self-evident: he was able to persuade her to leave behind her beloved Scriabin models, whose harmonic influence may be discerned in her Piano Preludes; he introduced her to the new, "ultra-modern" style for which she had a real affinity; and he impressed her with his musical imagination and discipline. When she learned of his belief that female composition students were inherently dull, Crawford's dismay must have been acute.⁹

After struggling against Seeger's preconceptions about women composers, Crawford encountered other professional barriers because of her sex. While in Vienna during the spring of 1931, she visited the director of Universal Edition, Emil Hertzka, who suggested that as a woman, she would find it difficult to get her music published.¹⁰

In her diary, that most private form of prose

expression, Crawford described her feelings about women's status in society, which ranged from rueful ("Women have gained great independence, but men have that which women will never have"¹¹) to indignant, as in the following entry:

I ... vent my spleen today on the fact of being a woman, or rather on the fact that beastly men, not satisfied with their own freedom, encroach on that of women and produce in them a kind of necessitous fear which binds them about. For instance, what is more mysterious and delightful than to walk at night, especially on deserted and ill-lighted streets, when the few windows peek at one delightfully but do not intrude on one's aloneness--when shadows are deep and silent and the occasional whirrings of cars make swift crescendos and diminuendos on the night's symphony? Or to work one's way around the world, a poet-tramp, stoker, bell-boy, deck-hand, finding, probing into the essence of the roots of living; or a recluse for a few years, like Thoreau, building a hut off in the deep woods, feeling in his pulse a great freedom.¹²

If Crawford felt the need to express in prose her anger about the limits placed upon women, she may well have done the same in her music. That anger can be heard in the narrative I shall propose for the last movement of her 1931 String Quartet. The basis for this claim is that Crawford's experiences of professional discrimination began to accrue during the late 1920s and early 1930s, a time just before she would compose the quartet.

In a diary entry of May 3, 1930, Crawford describes her hesitancy to assert herself, a trait that I believe can partly be attributed to contemporary social expectations of women.

I am afraid to tell others often my opinion. Not because I am afraid of hurting them, but because I am afraid of hurting their opinion of me. I am afraid to hold an opinion opposite to that of someone I respect. I am afraid, afraid.¹³

She alludes again to this fear a year later in a letter written to Seeger during the time she was completing the quartet, and describes how she is attempting to alter this behavior: "I am trying to develop a polite frankness and make myself lose my fear of expressing an opinion."¹⁴

In the quartet's last movement, the first violin is anything but reluctant to express an opinion. Example 3-1 gives the score:

Example 3-1. Crawford, String Quartet, Mvt. 4,
measures 1-18. Copyright 1941 Merion Music

IV

Allegro possibile

5

ff

pp sempre con sordino

pp sempre con sordino

pp sempre con sordino

sempre ff

10

15

cresc. poco a poco to meas. 60

cresc. poco a poco to meas. 60

cresc. poco a poco to meas. 60

Example 3-1 (page two). Crawford, String Quartet, Mvt. 4,
measures 19-36

The musical score is presented in four systems, each containing four staves. Measure numbers 20, 25, 30, and 35 are indicated in boxes above the first staff of each system. The first system includes the instruction *decresc. poco a poco to meas. 60* and the dynamic *p*. The second system includes the dynamic *mp*. The third system includes the dynamic *mf*. The fourth system includes the dynamic *f*. The score features various musical notations, including triplets (marked with '3' and a bracket), slurs, and accidentals. The key signature has one flat (B-flat).

Example 3-1 (page three). Crawford, String Quartet, Mvt. 4,
measures 37-53

The musical score is presented in four systems, each containing four staves. The first system begins with measure 40, marked with a box containing the number 40. The second system begins with measure 45, marked with a box containing the number 45. The third system begins with measure 50, marked with a box containing the number 50. The music is written in a key with one flat (B-flat) and a 4/4 time signature. The notation includes various rhythmic values, including eighth, sixteenth, and thirty-second notes, as well as rests. Dynamic markings such as *f*, *ff*, and *pp* are used throughout the score. The score is identified by the number 114-40013-45 in the bottom left corner.

Example 3-1 (page four). Crawford, String Quartet, Mvt. 4,
measures 54-71

The musical score is presented in four systems, each containing four staves. Measure numbers 55, 60, 65, and 70 are indicated at the beginning of their respective systems. The notation includes various musical symbols such as notes, rests, and dynamic markings. The dynamics *ff* (fortissimo) and *ff-p* (fortissimo piano) are used in measures 55-60. In measures 60-65, *pp* (pianissimo) and *ff* are used. Measures 65-70 feature *f* (forte) and *p* (piano) dynamics. Performance instructions are provided for measures 65-70: *cresc. poco a poco to meas. 100* and *decresc. poco a poco to meas. 101* for the first three staves, and *decresc. poco a poco to meas. 101* for the fourth staff.

Example 3-1 (page five). Crawford, String Quartet, Mvt. 4,
measures 72-87

The musical score is presented in four systems, each containing four staves. The first system (measures 72-75) features a complex melodic line in the first staff with slurs and ties, while the other staves provide harmonic support with sustained notes and moving lines. The second system (measures 76-80) introduces dynamic markings such as *mf* and *mp*, and includes triplet markings. The third system (measures 81-85) continues the melodic development in the first staff, with the other staves maintaining a steady harmonic texture. The fourth system (measures 86-87) concludes the passage with a final melodic flourish in the first staff and sustained harmonic accompaniment in the others. Measure numbers 75, 80, and 85 are clearly marked above the first staff of their respective systems.

Example 3-1 (page six). Crawford, String Quartet, Mvt. 4,
measures 88-103

90

95

ppiu f

100

ff

pp

pp

pp

114-40013-45

Example 3-1 (page seven). Crawford, String Quartet, Mvt. 4,
measures 104-116

The image displays a musical score for a string quartet, consisting of three systems of staves. The first system begins at measure 105, marked with a box containing the number 105. It features four staves: the first two are in treble clef and the last two in bass clef. The first staff has the instruction *sempre ff* above it. The second and third staves have *sempre pp* above them. The music is written in a key with one flat (B-flat) and a 3/4 time signature. The second system begins at measure 110, marked with a box containing the number 110. The third system begins at measure 115, marked with a box containing the number 115. The music continues with various melodic and harmonic patterns, including some dynamic markings like *ff* in the final measures.

The first violin's *sforzando* marking, accents, and rising register immediately establish its assertive character, manifestating that personal quality with which Crawford was so concerned.¹⁵

By casting the first violin as a self-confident and assertive subject, Crawford is able to situate a quality that she wished to acquire within the very fabric of her music. Thus not only might the composition be heard to play out a narrative that was all too familiar to Crawford, in which her musical efforts were not readily acknowledged or accepted by men who were in positions of power, but the movement can further be understood to function as a site in which she was able to bring to life a persona that she herself found difficult to project in everyday discourse. Both of these compositional "moods" can, I believe, be linked to Crawford's sex.

I want to emphasize that I am not asserting that an individual's struggle against a larger group in authority is an exclusive concern of women and not of men; nor am I making the essentialist claim that women are diffident while men are self-assured. However, in Crawford's particular case, her writings document both her frustrations stemming from her encounters with fixed, traditional beliefs and her inhibitions about expressing contrary opinions; both of these situations can, in my opinion, be attributed to her female subjectivity.

The first violin remains steadfastly independent of the second violin, viola, and cello throughout the piece. In her annotated copy of the score, Crawford refers to the first violin as "Voice I" and to the lower three instruments as "Voice II," a designation I shall also employ.¹⁶ Voice II, in contrast, acts as an unyielding mass of authority which remains united in opposition to Voice I's passionately stated beliefs. My reading of the piece characterizes the fundamental interaction of the two voices as conflicting and opposed; because for Crawford many of the professional barriers she faced were posed by men as a result of her sex, the nature of her portrayal of two voices in conflict can be understood to be gendered, with Voice I and Voice II representing a female and a male persona, respectively.¹⁷

This is not to suggest that each voice somehow inherently constitutes either a "feminine" or "masculine" identity by neatly fitting into a binary scheme of gender conventions. Indeed, my feminist account of the voices' relationship contradicts the particular gender stereotype in which female identity is equated with passive, weak, and timid, and male identity with aggressive, strong, and confident; in the movement's opening, Voice I may be understood to be the more forceful and authoritative of the two. Furthermore, while Voice II plays *con sordino* throughout, Voice I is never muted; as a result, although Voice II encompasses three instrumental voices presenting a

united front while Voice I comprises only the first violin, the force of its statements is considerably weakened.

Voice I starts boldly, *ffz*, secure of what she says. She initiates the dialogue with a single pitch, A_b3 played for the duration of a sixteenth note. Her next utterance contains two notes, G3 and A3, which are accented and played *détaché*; the subsequent utterance contains three notes, also accented and played *détaché*, and so forth. The length of each successive utterance increases by one note until by m. 57 Voice I has amassed a phrase twenty-one notes in length.

Voice II responds by using a contrasting dynamic, articulation, and phrase length. In mm. 3-5, the three instruments mutter amongst themselves, *pp*, with a flurry of slurred eighth notes, none of which receives an accent or a *sforzando*. The pitch material of Voice II is derived from the ten-tone row that begins in m. 3 with D4 and ends with C5 in m. 4. (For the sake of consistency, I shall identify Voice II's pitches by referring to the second violin's part.) In mm. 4-5, the row is restated but rotated to start on E4, which is the second note of the row. In mm. 7-8, the row is again restated, this time rotated to begin on F4, the third note of row. Voice II's notes continue to cycle through successive pitches of the row in this fashion. In addition, it proceeds by presenting each successive phrase decreased in length by one note until only a single pitch remains in m. 57; for the second half of the

piece, it gives in retrograde the pitches of the first half of the piece in their original rhythm, concluding in mm. 112-114 with a phrase twenty notes long. By having both voices retrace their previous material, Crawford maintains a distinct identity for each.¹⁸

Throughout the piece, they employ very different styles of communication: Voice I's speech is initially choppy and irregular, later becoming more flowing with longer phrases as the dialogue moves towards its midpoint at mm. 57-60, which Crawford calls its "Turning Point." In contrast, Voice II's speech starts out inarticulately with a soft stream of pitches that becomes louder, shorter, and more defined as it proceeds toward the work's midpoint.¹⁹

I shall classify the phrases of each voice according to its melodic contour; for a contour of cardinality n , its contour segment or "cseg" is given by listing its contour pitches in order according to relative height, with 0 assigned to the lowest pitch and $n-1$ to the highest.²⁰

A useful analytical tool to apply to this movement in which each phrase is either a note longer or shorter than its predecessor is Robert Morris's contour reduction algorithm. It pares a contour down to a more basic profile by pruning passing tones and inner voices, which makes it easier to compare contours of varying lengths.²¹ Morris justifies the use of his algorithm by invoking the principles of Gestalt psychology, which propose that the

boundaries or outlines of an object are perceptually prominent. In Crawford's quartet movement, playing or listening to the relatively lengthy phrases that appear in mm. 3-5, for example, provides a convincing illustration of Morris's assertion.

The skeletal version of a contour, called a "prime contour", consists of its first and last pitches as well as its maximum and minimum pitches (the maximum and minimum can be the first or last pitches). Appendix C reproduces Morris's algorithm. To demonstrate its application to the quartet, Example 3-2 reduces Voice II's first statement, in mm. 3-5, to prime <1201>.²² Appendix D lists the prime contours of each voice's phrases throughout the piece.

Example 3-2. Sample Reduction of Crawford, String Quartet, Mvt. 4, measures 3-5



<1201>

Reducing each phrase to its prime contour reveals a deeper level at which the voices are opposed. In mm. 1-12, the first four exchanges between the two voices are relatively polite. Each voice waits for the other to complete its statement before responding to it. This initial willingness to cooperate is reinforced by the prime contours: after Voice I plays B $\flat$ 3-A3-B $\sharp$ 3 in m. 6, which forms cseg <102>, Voice II responds in mm. 7-9 with a nineteen-note phrase whose prime contour, derived using Morris' algorithm, is also <102>.

In mm. 9-10, this relationship becomes more strained. Voice I gives a statement that reduces to prime <201>, which is the retrograde of <102>. This retrograde relationship, which presents the voices as opposed, continues in the next four phrases: in mm. 10-12, Voice II's phrase takes the form of prime <2031>; in m. 13, Voice I immediately gives its retrograde, <1302>. In mm. 14-16, Voice II presents another <102> prime, which in mm. 16-17, Voice I answers with prime <201>.

Here the exchange between the two gets more heated. In m. 16, Voice II scrambles up at the end of its phrase to a higher register, first reaching C6 and then accenting D6. Getting more stirred up in turn, Voice I enters in m. 16 before Voice II completes its statement. This act in turn rouses Voice II in mm. 17-19 to speak more loudly, crescendoing *poco a poco* to m. 60.

Starting in m. 19, Voice I attempts to regain her composure: in m. 19 and m. 22, she tries to speak in a more measured way, stressing each syllable with triplet quarter notes against Voice II's steady eighth notes. The prime contour of Voice I's phrase reinforces this idea of pulling back: rather than to continue to present the retrograde contour of Voice II's preceding phrase, Voice II's <1032> prime in mm. 17-19 is reiterated in mm. 19-20 by Voice I.

But this moment of reconciliation is only temporary. Voice II's next phrase, in mm. 20-21, reduces to prime <201>, and as before, Voice I gives its retrograde in mm. 21-23. In mm. 24-25, Voice I repeats Voice II's prime uttered in mm. 23-25, but since the voices now overlap at both the beginning and end of their phrases, neither can clearly hear what the other is saying.²³

This situation agitates both parties. Beginning in m. 21, Voice I's register begins to rise upward rapidly until m. 30. Her successive entrances leap up to a higher register closer to the beginning of each phrase: in m. 22, she leaps a major seventh between G3 and F#4; in m. 24, a perfect fifth between Db5 and Ab5; and in the phrases that begin in mm. 26 and 28, she places herself in a high register at the very beginning, on Db6 and E6, respectively. Similarly, Voice II begins in m. 3 by playing in its lowest register of the piece and gradually works its way up to its highest register in m. 32, which requires each instrument

to play on its uppermost string and thus increases Voice II's strained quality.

Having steadily moved up to this register, both parties are literally raising their voices, arguing with increased emotion, passion, and commitment. But it seems that they are no longer listening to each other; neither waits for the other to finish; their phrases continue to collide and overlap.

Wanting desperately to be heard, Voice I attempts to remedy the situation using contour and rhythm. In mm. 26-27, the prime contour of Voice I's phrase is <10>, a contour that she repeats with her next phrase in mm. 28-29 as if to underscore her point. Voice I continues to reinforce her statements by giving prime contours in pairs three more times, in mm. 31-37, 38-43, and 46-52. Voice II, in contrast, does not repeat any prime contours, which suggests a less clearly defined position.

In m. 32, Voice I lengthens the initial note of her phrase, delaying her more active pitches--the eighth notes and quarter-note triplets--only well after Voice II has ceased making most of its remarks. This strategy works momentarily: from mm. 40-46, Voice II remains silent while Voice I speaks, without cutting her off. But it doesn't last; in m. 49, Voice II interrupts her once again.

Hoarse from all this talk, Voice I has already faded from her assured opening *ff* to, in m. 44, a mere whispered

p. While she has more and more to say, her energy and confidence with which to say it is being rapidly depleted.

Voice II, in contrast, has less and less to say, but says it with greater conviction. In m. 52, it states the three notes of its phrase firmly, *fortissimo*, over Voice I's final three notes of her nineteen-note phrase, played *piano*, effectively silencing them. In m. 54, Voice II does exactly the same thing with its two-note entry, stating them over the last two notes of Voice I's phrase. In mm. 55-57, Voice I manages to articulate one last three-octave long *pianissimo* plea, while Voice II triumphantly reaches E4. Voice I warily joins it on a tied G3, considering the terms of the agreement.

But Voice II's offer does not seem to satisfy Voice I, and for the remainder of the movement she stubbornly repeats what she has just argued, but backwards and a semitone higher. Voice II's response is simply to restate what it just said, also a semitone higher and in retrograde. Mirroring the first half of the composition, Voice I states four of its prime contours twice in succession in mm. 65-71, 74-79, 80-86, and 88-91; the piece ends with the voices presenting primes with a retrograde relationship in mm. 94-97, 100-103, 104-107, and 107-110 to emphasize one last time the oppositional nature of their relationship.

Thus for the second half of the piece, the female protagonist retraces her previous argument, having failed to

come to agreement with Voice II but maintaining the integrity of her own position. Rather than joining them in intoning the row, she clings to her original assertion and the movement concludes as it started: after the lower three instruments grumble a string of twenty pitches, the first violin resolutely attacks a single note and so gets the last word.

* * *

The last movement of Crawford's quartet establishes a relationship of fundamental disagreement between the two voices, one that is present on the music's surface through the elements of pitch, dynamics, phrase length, and rhythm, and is also submerged at a deeper level through the piece's contour structure. Using events in Crawford's biography as a stimulus for my analysis, I have drawn the relationship of the voices into a reading that involves two distinct musical personae; my analysis identifies a female voice in the music of the first violin, who is independent, assertive, and daring in the course of its interaction with Voice II, with which it does not reach common ground by the movement's end.

By so organizing a principle of conflict between the two voices, the fourth movement of Crawford's quartet differs markedly from the third movement, which I characterized in Chapter 2 as being produced by the communal labor of four instrumental voices. However, both movements

can be heard as structures through which Crawford communicated aspects of being female, which for her often required battling traditional attitudes about appropriate activities for women. Composing, which allowed her to create musical spaces that expressed her own social condition, thus afforded her the opportunity to feel the "great freedom" she described with such longing in her diary and to write her voice, which would have otherwise been muted, into sound.

CHAPTER 4

THE POLITICS OF CONTOUR IN CRAWFORD'S "CHINAMAN, LAUNDRYMAN"

San Francisco sleeps as the dead ---
Ended license, lust and play:
Why do you iron the night away?
Your big clock speaks with a deadly sound,
With a tick and a wail till dawn comes round.
While the monster shadows glower and creep,
What can be better for man than sleep?

-Vachel Lindsay, "The Chinese Nightingale"¹

Being a laundryman is no life at all. I work
fourteen hours a day and I have to send home
almost all my wages.... People think I am a happy
person. I am not. I worry very much. First, I
don't like this kind of life; it is not a human
life. To be a laundryman is to be just a slave.
I work because I have to. If I ever stop working,
those at home stop eating.

-A Chinese launderer, ca. 1930²

Experiencing the Depression in New York was an
important catalyst in Crawford and Seeger's decision to take
up the cause of folk music, which they would come to believe
during the 1930s possessed more social relevance than
modernist composition.³ Seeger's desire to explore music
that was pertinent to society led to his involvement with
the New York Composers' Collective, a group of approximately
twenty-four composers whose leftist political beliefs
brought them together each week for the purpose of composing

choral music whose texts expressed Communist sentiments.⁴

Seeger's political stance was by no means unique; many others were also passionately committed during the 1930s to the work of writing music "for the people," including Henry Cowell, Aaron Copland, Norman Cadzen, Jacob Schaeffer, Marc Blitzstein, Elie Siegmeister, Wallingford Riegger, Janet Barnes, and Earl Robinson, to give a partial list of the Collective's members. The means by which Crawford would negotiate her feelings about how best to employ her musical talents for the social good--in ways that might even somehow contribute to the humanizing of society--is manifested in her decision to take up the work of writing original piano accompaniments to folk tunes and of transcribing folk music, a project to which she would devote considerable energy during the next two decades.

But Crawford's dedication to leftist political ideals is evident also in a pair of art songs she composed in 1932 for a commission from the Society of Contemporary Music in Philadelphia, entitled Two Ricercari.⁵ The texts of these Ricercari, which were written by Hsi-Tseng Tsiang, address pressing social concerns in the United States during the 1920s. Crawford's songs respond to these concerns while remaining squarely within the atonal art music idiom in which she composed other works of the time. The first song, "Sacco, Vanzetti," is based upon the infamous execution of two Italian anarchists in Massachusetts; the second song,

"Chinaman, Laundryman," grapples with the capitalist exploitation of an immigrant Chinese laundry worker.

In a 1934 essay Seeger described what he envisioned as "proletarian music."⁶ Believing music to be a cultural medium through which a dehumanized society might become more compassionate, Seeger argued that music composed specifically for the proletariat, defined as "the propertyless members of modern industrial society," would make such a humanizing possible.⁷

In his essay, Seeger set forth three stages in the evolution of proletarian music: a first stage in which music draws upon a "bourgeois" musical style;⁸ a second stage in which music employs both proletarian content and the revolutionary techniques of art music; and a final stage which constitutes a new category of music "comparable to the grand styles of Plainsong, the Gothic, Renaissance, Rococo and Romantic periods."⁹ As for what the music in this final stage would actually comprise, Seeger's article is more speculative than analytical.

Crawford's "Chinaman, Laundryman" was premiered by Radiana Pazmor and Elie Siegmeister at the MacDowell Club in New York on March 12, 1933; it was performed again at the Mellow Gallery for the Society of Contemporary Music in Philadelphia on March 27, 1933, and at the City College Auditorium in New York for the First American Workers Music Olympiad on May 21, 1933.¹⁰ This song illustrates in my

opinion the second phase of proletarian music that Seeger describes--that music may express revolutionary content through modernist experimental compositional techniques. The score is given as Example 4-1:

Example 4-1. Crawford, "Chinaman, Laundryman,"
measures 1-8. Copyright 1973 Merion Music, Inc.

Chinaman, Laundryman

Duration: ca. 3'

Voice and Piano

H. T. Tsiang

Ruth Crawford

Recitative 4 Moderato (♩ = 66)

Voice* "Chi-na-man!" "Laun-dry-man!" Don't call me "man!" I am

Piano* *sempre p*
senza pedale

5

worse than a slave. Wash! Wash!

7

Why can I wash a-way the dirt of oth-ers' clothes but

* An accidental affects only the note it precedes

Example 4-1 (page 2). Crawford, "Chinaman, Laundryman,"
measures 9-16

9

not the ha-tred of my heart? My skin is yel-low, Does my

11

yel-low skin col- or the clothes? Why do you pay me less

13

for the same work? Clev - er boss!

15

You know how to scat-ter the seeds of ha-tred a - mong your

Example 4-1 (page 3). Crawford, "Chinaman, Laundryman,"
measures 17-24

17

ig-no-rant slaves. Iron!— Iron!—

19

Why can I smooth a-way the wrin-kle of oth-ers' dress-es but

21

not the mis-er-ies of my heart? Why should I come to A-mer-i-ca to

23

wash clothes? Do you think Chi-na-men in Chi-na

Example 4-1 (page 4). Crawford, "Chinaman, Laundryman,"
measures 25-32

25

went no dress-es? I came to A-mer-i-ca

g

This system contains measures 25 and 26. It features a vocal line with lyrics and a piano accompaniment. Measure 25 has a 'g' marking below the piano part. Measure 26 has a '3' marking below the piano part.

27

three days af-ter my mar-riage. When can I see her a-gain? On-ly the

This system contains measures 27 and 28. It features a vocal line with lyrics and a piano accompaniment. Measure 27 has a '3' marking below the piano part. Measure 28 has a '3' marking below the piano part.

29

al-might-y dol-lar knows! Dry! Dry!

This system contains measures 29 and 30. It features a vocal line with lyrics and a piano accompaniment. Measure 29 has a '3' marking below the piano part. Measure 30 has a '3' marking below the piano part.

31

Why do clothes dry, but not my tears?

This system contains measures 31 and 32. It features a vocal line with lyrics and a piano accompaniment. Measure 31 has a '3' marking below the piano part. Measure 32 has a '3' marking below the piano part.

Example 4-1 (page 5). Crawford, "Chinaman, Laundryman,"
measures 33-41

33

I work twelve hours a day,

35

he pays fif-teen dol-lars a week. My

37

boss says: "Chi-na-man.

40

go back to Chi-na, if you don't feel sat-is-fied!

Example 4-1 (page 6). Crawford, "Chinaman, Laundryman,"
measures 42-49

42

There, un - lim - it - ed

44

hours of toil two sil - ver dol - lars a week,

46

if you can find a job."

48

Thank you, boss,

The musical score is written for a vocal line and a piano accompaniment. The key signature has one flat (B-flat), and the time signature is 2/4. The score is divided into four systems, each corresponding to a measure number in a box on the left: 42, 44, 46, and 48. The lyrics are written below the vocal line. The piano accompaniment features various rhythmic patterns, including triplets and arpeggiated figures. The lyrics are: 'There, un - lim - it - ed hours of toil two sil - ver dol - lars a week, if you can find a job.' 'Thank you, boss,'.

Example 4-1 (page 7). Crawford, "Chinaman, Laundryman,"
measures 50-57

50

for you re-mind me. I know

52

boss - es are rob - bers ev - 'ry-where!

54

Chi - nese boss says:

56

"You Chi - na - man, me Chi - na - man,

Example 4-1 (page 8). Crawford, "Chinaman, Laundryman,"
measures 58-65

58

come work for me, — work for your fel-low coun-try-man!

The musical score for measures 58-59 features a vocal line and a piano accompaniment. The vocal line begins with a half note 'come', followed by a quarter note 'work', a half note 'for me, —', and then a half note 'work' followed by a quarter note 'for your fel-low coun-try-man!'. The piano accompaniment consists of a right hand with eighth notes and a left hand with a steady eighth-note bass line. Measure 59 includes a fermata over the final note of the vocal line.

60

By the way, you 'Wong', me 'Wong',

The musical score for measures 60-61 shows the vocal line with the lyrics 'By the way, you 'Wong', me 'Wong'', where 'Wong' is in single quotes. The piano accompaniment continues with a similar rhythmic pattern of eighth notes in both hands.

62

do we not be-long to same fam-i-ly? Ha! Ha!

The musical score for measures 62-63 features the vocal line with the lyrics 'do we not be-long to same fam-i-ly? Ha! Ha!'. A fermata is placed over the final note of the vocal line in measure 63. The piano accompaniment maintains its eighth-note texture.

64

We are cou-sins! O yes!

The musical score for measures 64-65 shows the vocal line with the lyrics 'We are cou-sins! O yes!'. A fermata is placed over the final note of the vocal line in measure 65. The piano accompaniment concludes with a final chord in both hands.

Example 4-1 (page 9). Crawford, "Chinaman, Laundryman,"
measures 66-73

66

You 'Hai Shan', me 'Hai Shan', do we not come from same dis-trict?

68

O come work for me:— I will treat you bet-ter!"

70

Get a-way from here!

72

What is the dif-fer-ence when you come to ex-ploit me?

Example 4-1 (page 10). Crawford, "Chinaman, Laundryman,"
measures 74-86

74 Recitative

77 A tempo ($\text{♩} = 66$)

Chi - na - man! Laun - dry - man! Don't call me "Chi - na - man!"

78

Yes, I am a "Laun-dry-man!" The work-ing man!"

80

Don't call me "Chi - na - man!" I am the world-man!

82

84 Recitative

"Chi - na - man!" "Laun-dry - man!"

Example 4-1 (page 11). Crawford, "Chinaman, Laundryman,"
measures 87-94

87 A tempo ($\text{♩} = 66$)

All you work-ing-men! Here is the brush

89

made of stud-y. Here is the soap

91

made of ac-tion. Let us all

93

wash with the brush! Let us all

Example 4-1 (page 12). Crawford, "Chinaman, Laundryman,"
measures 95-101

95

press with the iron! Wash!

This system shows measures 95 and 96. The vocal line (treble clef) has lyrics 'press with the iron!' and 'Wash!'. The piano accompaniment (grand staff) features a melody in the right hand with eighth and sixteenth notes, and a bass line in the left hand with eighth notes. A dashed line with an '8' indicates an eighth-note pattern.

97

Brush! Dry!

This system shows measures 97 and 98. The vocal line (treble clef) has lyrics 'Brush!' and 'Dry!'. The piano accompaniment (grand staff) continues the melody and bass line from the previous system. A dashed line with an '8' indicates an eighth-note pattern.

99

Iron! Then we shall have a clean— world!

This system shows measures 99, 100, and 101. The vocal line (treble clef) has lyrics 'Iron!' and 'Then we shall have a clean— world!'. The piano accompaniment (grand staff) continues the melody and bass line. A dashed line with an '8' indicates an eighth-note pattern.

141-40011

Although "Chinaman, Laundryman" is not itself an example of the "mass-song style" that the Composers' Collective was instrumental in developing during the 1930s, Crawford's song recalls a few of its characteristic features: the text is given primacy in order to emphasize its message, and its setting is syllabic.¹¹ But with its serial piano accompaniment given in octaves throughout, "Chinaman, Laundryman" does not share other traits of mass-song style, including a homophonic texture and a bass containing many octaves and fifths, elements that would have made the songs more suitable for performance by a workers' chorus.

"Chinaman, Laundryman" is politically significant not only for its choice of text, which portrays the oppressive working conditions of the immigrant ethnic laborer, but also for its musical setting. This chapter argues that the structure of the composition comments on how the laundryworker's race and gender shape his existence, and underscores an optimistic narrative that is present in Tsiang's poem.¹² More specifically, through her use of musical register, Crawford depicts a transformation in the relationship between the two figures in the poem, one in which the launderer eventually emerges from being dominated by the boss to becoming independent of him and self-affirming as the song proceeds.¹³

The song's text, written by a Chinese male, H. T.

Tsiang, goes against the common contemporaneous stereotypes of Chinese men and of Chinese laundrymen in particular, portraying the laundry trade as it was experienced by many Chinese. H. T. Tsiang was a student at Columbia University in the 1920s; "Chinaman, Laundryman" was published in his 1929 Poems of the Chinese Revolution.¹⁴ The poem, given in Figure 4-1, passionately expresses its sympathies with the oppressed worker:

Figure 4-1. "Chinaman, Laundryman" by H. T. Tsiang

"Chinaman!" "Laundryman!"
Don't call me "man!"
I am worse than a slave.

Wash!--- Wash!---
Why can I wash away the dirt of others' clothes
but not the hatred of my heart?
My skin is yellow,---
Does my yellow skin color the clothes?
Why do you pay me less for the same work?
Clever boss!
You know how to scatter the seeds of hatred
among your ignorant slaves.

Iron!--- Iron!---
Why can I smooth away the wrinkle of others' dresses
but not the miseries of my heart?
Why should I come to America to wash clothes?
Do you think Chinamen in China wear no dresses?
I came to America three days after my marriage.
When can I see her again?
Only the almighty dollar knows!

Dry!--- Dry!---
Why do clothes dry, but not my tears?
I work twelve hours a day, he pays fifteen dollars a week.

My boss says:
"Chinaman, go back to China, if you don't feel satisfied!
There, unlimited hours of toil:
two silver dollars a week, if you can find a job."

Thank you, boss,-- for you remind me.
I know bosses are robbers ev'rywhere!

Chinese boss says:
"You Chinaman, me Chinaman, come work for me,---
work for your fellow countryman!
By the way, you 'Wong', me 'Wong',
do we not belong to same family?
Ha! Ha! We are cousins!
O yes! You 'Hai Shan', me 'Hai Shan',
do we not come from same district?
O come work for me;-- I will treat you better!"

Get away from here!
What is the difference when you come to exploit me?
Chinaman! Laundryman!
Don't call me "Chinaman!"
Yes, I am a "Laundryman!"

The working man!
Don't call me "Chinaman!"
I am the worldman!

"Chinaman!" "Laundryman!"
All you working men!
Here is the brush made of study.
Here is the soap made of action.
Let us all wash with the brush!
Let us all press with the iron!
Wash! Brush! Dry! Iron!
Then we shall have a clean world!

The poem begins by describing in the first person the harsh working conditions experienced by a Chinese laundry man and his unhappiness with his present situation, and concludes with the launderer exhorting his fellow men to work for a "clean world."

When Crawford began composing "Chinaman, Laundryman" in 1932, such a declaration of sympathy with Asian immigrant workers would have been both brave and radical, as well as timely: in 1933, the New York City government proposed taxing Chinese launderers \$1,000 and also fingerprinting workers in Chinese laundries; the Chinese Hand Laundry Alliance successfully prevented the passage of both of these proposals.¹⁵ The political import of Crawford's compositional setting can be more fully understood when examined within the virulent anti-Asian and specifically Sinophobic sentiment that abounded in the United States during this time.

The first law in the United States that excluded immigrants on the basis of race or nationality was directed

specifically at the Chinese; this was the 1882 Chinese Exclusion Law, which halted the immigration of Chinese skilled and unskilled laborers. Amended versions of the bill prevented those still in China from immigrating to join their male relatives who were already working in the U.S. When combined with the anti-miscegenation laws that prohibited marriage between Chinese and non-Chinese, this added feature of the Exclusion Law prevented Chinese men from marrying anyone, and thus also had the effect of limiting the population of Chinese in the U.S. This brand of anti-Asian legislation continued with the Immigration Act of 1924, which severely restricted the numbers of Asians who were permitted to immigrate, now including Koreans and Japanese, as well as Chinese.¹⁶

While lawmakers were actively minimizing the Asian presence in the United States, cultural representations were simultaneously being circulated that depicted Chinese persons as evil, servile, greedy, crafty, grotesque, and depraved heathens. Historian John Kuo Wei Tchen has called the process of engraving these collective images upon the American psyche "yellowface acculturation." These portrayals of the so-called "Yellow Peril" took the form of films, cartoons, newspaper caricatures, dime novels, pulp magazines, and the music of Tin Pan Alley.¹⁷ Chinese women were represented in them as sexually exotic, but the real threat to the dominant white male consciousness in the

domain of sexuality was Chinese males' potential linkages with white women. One answer to this threat was to represent them as either asexual or feminine, perhaps in the hope of diminishing their attractiveness to white women.¹⁸

Example 4-1 shows the notation that Crawford devises to project a type of *Sprechstimme*. It appears first in m. 4.¹⁹ To notate approximate rather than exact pitch height, she employs an arrow notehead and a wavy line drawn between two pitches to indicate a portamento. In an explanatory note to "Sacco, Vanzetti," the first of her Two Ricercari, she writes: "It is essential that the audience understand the words. If the effort to secure the pitches as written should interfere with the clear rendition of the words, those pitches should then be regarded as general rather than as specific indications." Crawford's emphasis on approximate rather than exact pitch in these songs makes relevant the application of contour theory to the vocal part. Contour theory also reveals interesting structural aspects of the piano's music, whose pitches are not approximated but are serialized.

As in several of Crawford's other pieces composed during the 1930s, the piano's pitch material in the song is strictly ordered.²⁰ When the piano enters in m. 4, it plays a stream of notes in octaves, G-G $\flat$ -F-E $\flat$ -C-E-D-B-C $\sharp$, that give the prime form of a nine-tone row, T $_0$. Measure 5 begins on the second pitch of T $_0$, G $\flat$, and ends on its first

pitch, G $\sharp$; this statement can be considered rotation 1. Measure 6 begins on the third pitch of the prime form of the row, F, and ends on its second pitch, G $\flat$. This process continues through m. 12; each subsequent measure rotates the row once to begin on a new pitch of T₀.

In m. 13 the row is then transposed a semitone down to begin on G $\flat$; as before, each subsequent measure begins on a successive note of this new transposition for the next eight bars. In m. 22, the row is transposed to begin on F and the process of rotation is repeated. The transpositions of the row presented thus far--to G, G $\flat$, and F--are the first three pitches of T₀; Crawford continues to use each subsequent pitch of T₀ in turn for the remaining transposition levels. After T₀ has been rotated and transposed nine times, the piece presents in m. 91 one final statement of T₀; mm. 92-99 give its eight rotations. Example 4-2 summarizes the piece's serial organization:

Example 4-2. Pitch Organization of Piano

The musical score consists of ten staves, each representing a different piano (T0, T11, T10, T8, T5, T9, T7, T4, T6, T0). Each staff contains a sequence of notes numbered 1 through 99. The notes are organized into groups of 12, with some groups having a 13th note marked with an asterisk. The staves are arranged in a non-sequential order: T0, T11, T10, T8, T5, T9, T7, T4, T6, T0. The notes are organized into groups of 12, with some groups having a 13th note marked with an asterisk. The staves are arranged in a non-sequential order: T0, T11, T10, T8, T5, T9, T7, T4, T6, T0.

*m. 15: repeats C, doesn't state B

†m. 73: repeats B $\flat$, not A $\flat$

‡m. 78: repeats B $\flat$, not G $\flat$; substitutes A for B $\sharp$

The organization of the piano's melodic contour is perhaps more immediately perceptible than this serial plan of pitch or its rhythm structure, which is also strictly ordered. Figure 4-2 shows the three rhythmic patterns that organize the nine notes of the row; they are identified as A, B, and C:²¹

Figure 4-2. Rhythmic Organization of Piano

EXPLANATORY NOTES:

- Marks a complete presentation of the three rhythmic patters
- | Marks a complete presentation of the six possible permutations of (ABC)
- * Indicates a break in pattern
- / Indicates a rest

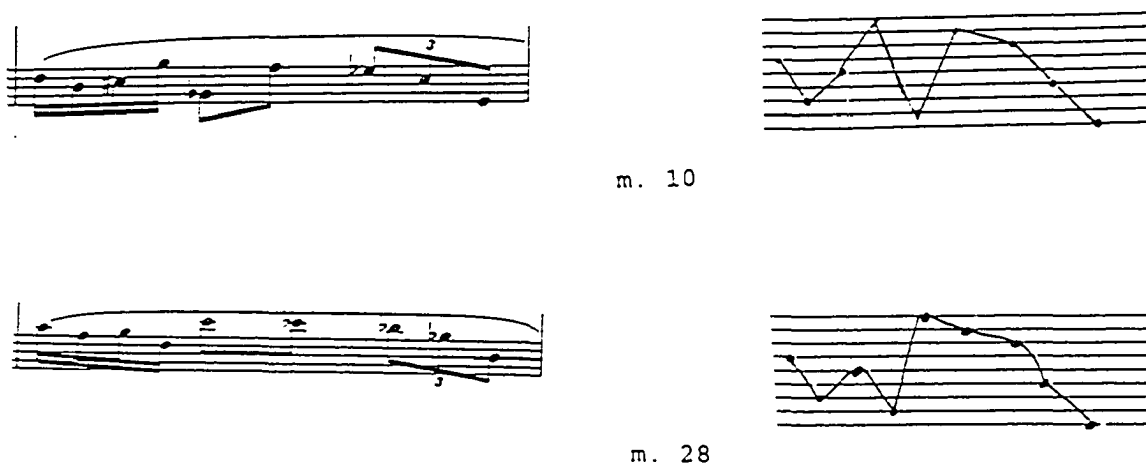
Pattern	A	B	C
			
	4 + 3 + 2	5 + 2 + 2	4 + 2 + 3
m. 1	2	3	4
5	6	7	8
9	10	11	12
13	14	15	16
17	18	19	20
21	22	23	24
<u>A B C</u> <u>A C B</u> <u>C A B</u> <u>C B A</u> <u>B C A</u> <u>B A C</u> <u>A B C</u>			
25	26	27	28
29	30	31	32
33	34	35	36
37	38	39	40
41	42	43	44
45	46	47	48
<u>A C B</u> <u>C A B</u> <u>C B A</u> <u>B C A</u> <u>B A C</u> <u>A B C</u> * <u>C C B</u> <u>C A B</u>			
49	50	51	52
53	54	55	56
57	58	59	60
61	62	63	64
65	66	67	68
69	70	71	72
<u>C B A</u> <u>B C</u> * <u>C</u> <u>B A C</u> <u>A B C</u> <u>A C B</u> <u>C A B</u> <u>C B</u> * <u>C</u> <u>B C A</u>			
73	74	75	76
77	78	79	80
81	82	83	84
85	86	87	88
89	90	91	92
93	94	95	96
<u>B</u> / / / <u>A C</u> <u>A B C</u> <u>A</u> * <u>B</u> / / / <u>B</u> <u>C A B</u> <u>C B A</u> <u>B C A</u>			
97	98	99	
<u>B A C</u>			

Throughout the song, these three rhythmic patterns are always played as some permutation of (ABC) before any one pattern is repeated. These short chains of three-bar rhythmic patterns are in turn organized into six groups of six.

In contrast to the piano's systems of pitch and rhythm, the register in which each pitch class of the row is realized is not so predictable.²²

Figure 4-3 gives the piano's music in mm. 10 and 28 in the form of csegs.

Figure 4-3. Piano, measures 10 and 28
and Contour Representation



The relationship between these two contours is that they both carry out rotation 6, but at different transposition levels of the row.

As Figure 4-3 shows, the contours of the two statements are not identical. The pair's corresponding contour pitches are in the same relative positions except for cps 4 and 5,

which are given in reverse order. This change in two cps affects three internal contours of the cseg--the gestures between cps 3 and 4, 4 and 5, and 5 and 6, are opposite.

Figure 4-4 identifies each of these contours in a manner introduced by Michael Friedmann, as a series of pluses or minuses within brackets to indicate the direction between adjacent pitches.

Figure 4-4. CAS's of Piano, measures 10 and 28

<- + + - + - - ->
m. 10

<- + - + - - - ->
m. 28

A plus sign indicates ascent and a minus sign indicates descent; this series of pluses and minuses is known as the Contour Adjacency Series (CAS).²³ Comparing corresponding positions of the two series in mm. 10 and 28, we can observe that the third, fourth, and fifth symbols are dissimilar, which indicates the inversional relationship between corresponding contours--that is, an ascending gesture replaces a descending gesture or vice versa.

To measure precisely the degree to which a contour is modified from the prototype, we can count the number of inversions; the bottom contour of Figure 4-4 would be assigned the number three. I shall call this change in the

contour of a row from its corresponding form in the prototype its "contour deviance value," which is the total number of inversions between the CAS's of two contours.²⁴ This progression of gradual increase and decrease of the row's contour deviance is somewhat analogous to the "degree of twist" voice-leading process in Crawford's String Quartet, third movement, that I discuss in Chapter 2. Each process, of twist and contour deviance, proposes a norm (either a relative registral ordering of instrumental voices or a particular realization of a row form in pitch space) and then measures the deviation from that norm through the entire piece.²⁵

Appendix E gives the following data about the piano's music: column one gives the measure number; column two lists the nine-note contour for that measure; column three lists its prime contour; column four lists the corresponding text, giving the boss's text in italics; and column five measures the contour deviance value for each measure. Each transposition level of the row is also labelled and given a section number. In my analysis, I have chosen to divide the piano's music into measures because each contains a distinctive and audible rhythmic grouping--sixteenth notes or pentuplet sixteenth notes followed by two groups of eighth notes or triplets.

As Appendix E shows, section 1 contains T_0 and its eight rotations; section 2 contains T_{11} and its eight

rotations. Section 3, which begins in m. 22, transposes the nine contours of section 1 down two semitones, resulting in the same CAS's; section 4, which begins in m. 31, similarly transposes the contours of section 2 down two semitones.

In order to present the contour deviance values succinctly, Figure 4-5 shows the large-scale contour of both voice and piano graphically.²⁶ The two lines that move in parallel trace the piano's movement, and the independent line traces the voice's. Time is measured on the x-axis in bars; pitch height is measured on the y-axis.²⁷ Underneath the row of measure numbers, I have recorded the contour deviance values of each of the piano's contours. Figure 4-6 gives Figure 4-5 as a single graph, omitting the deviance values.

Figure 4-5. Graph of Piano and Voice, measures 1-25

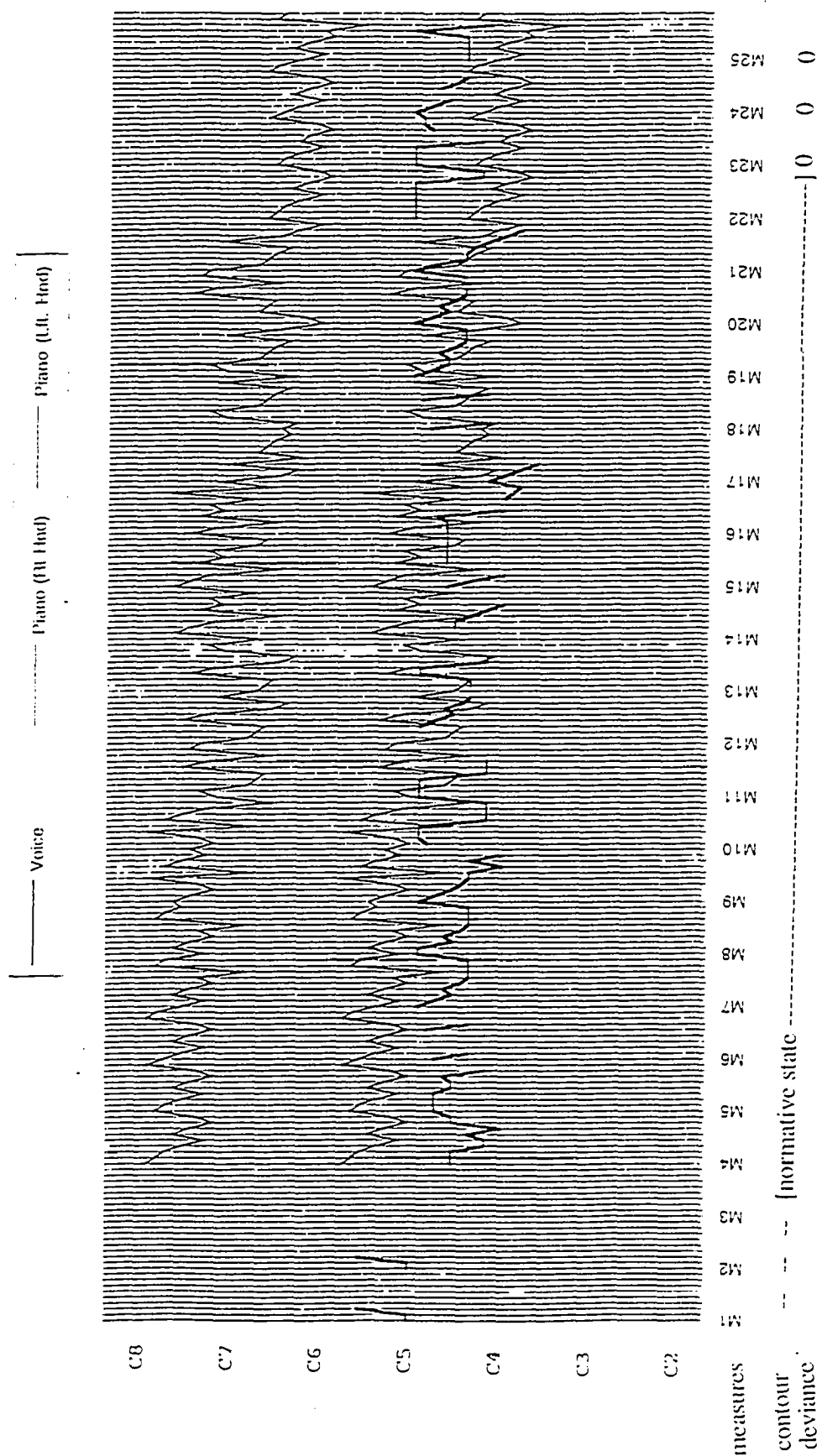


Figure 4-5. Graph of Piano and Voice, measures 26-50

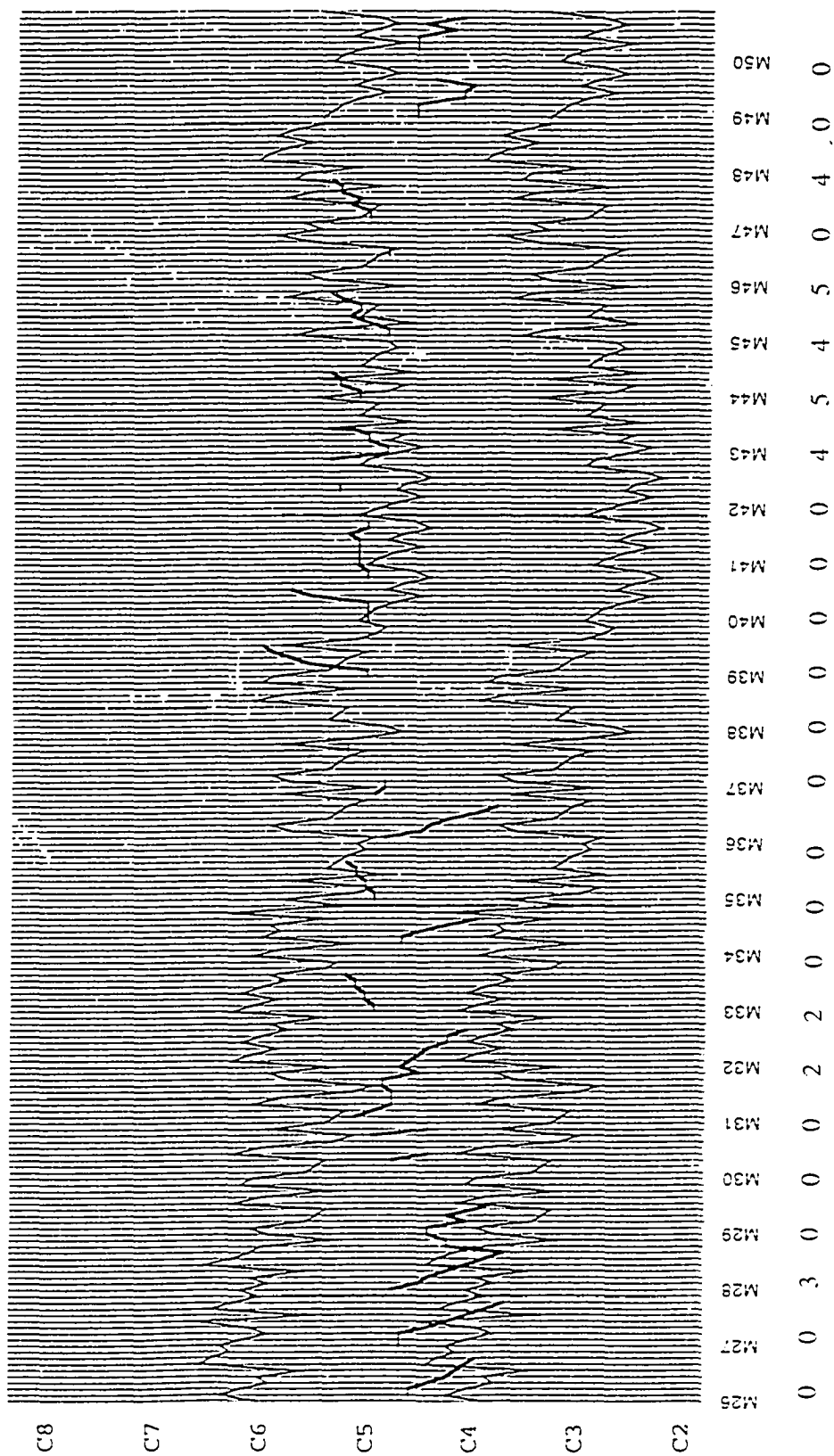


Figure 4-5. Graph of Piano and Voice, measures 51-74

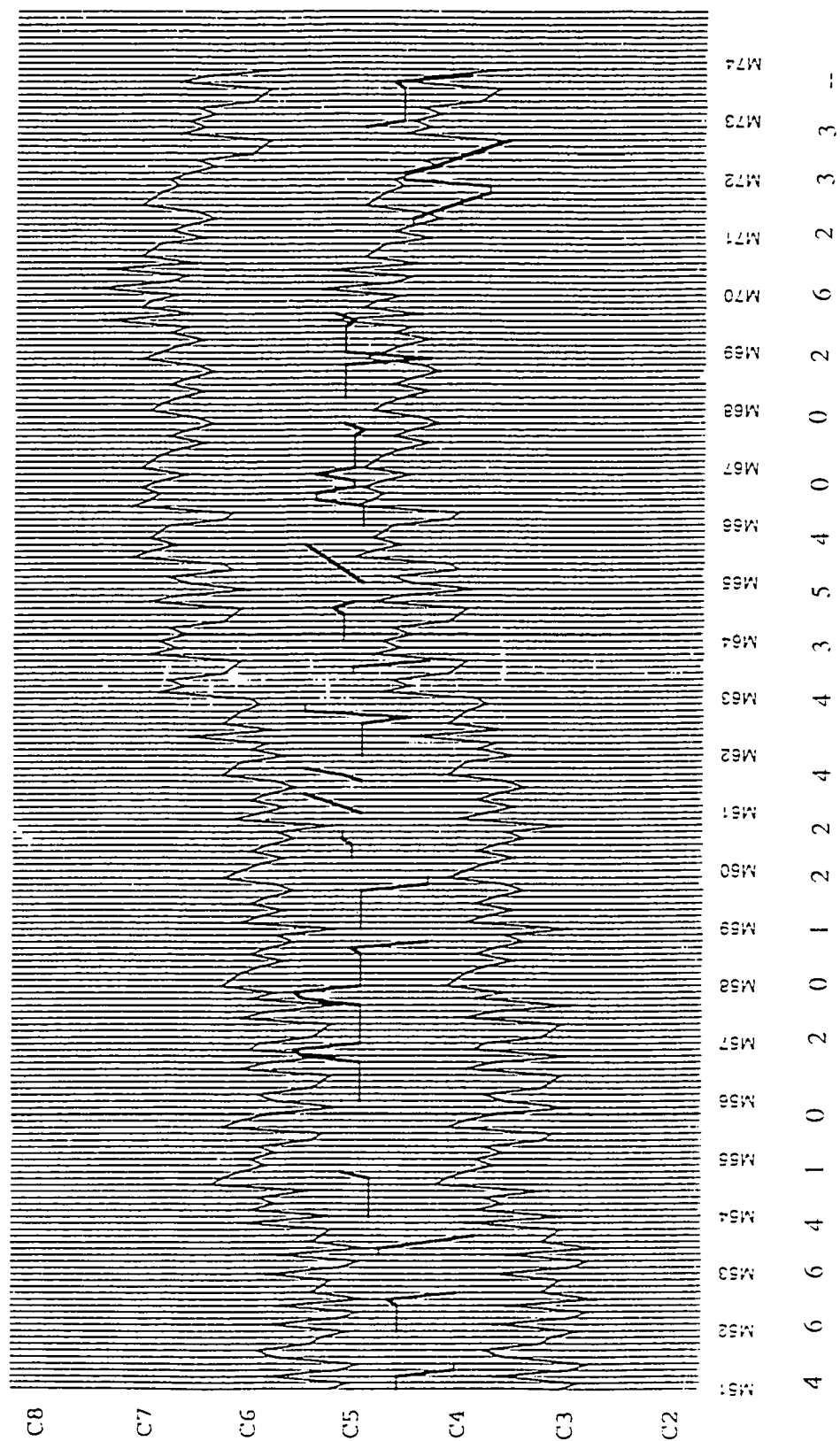


Figure 4-5. Graph of Piano and Voice, measures 75-101

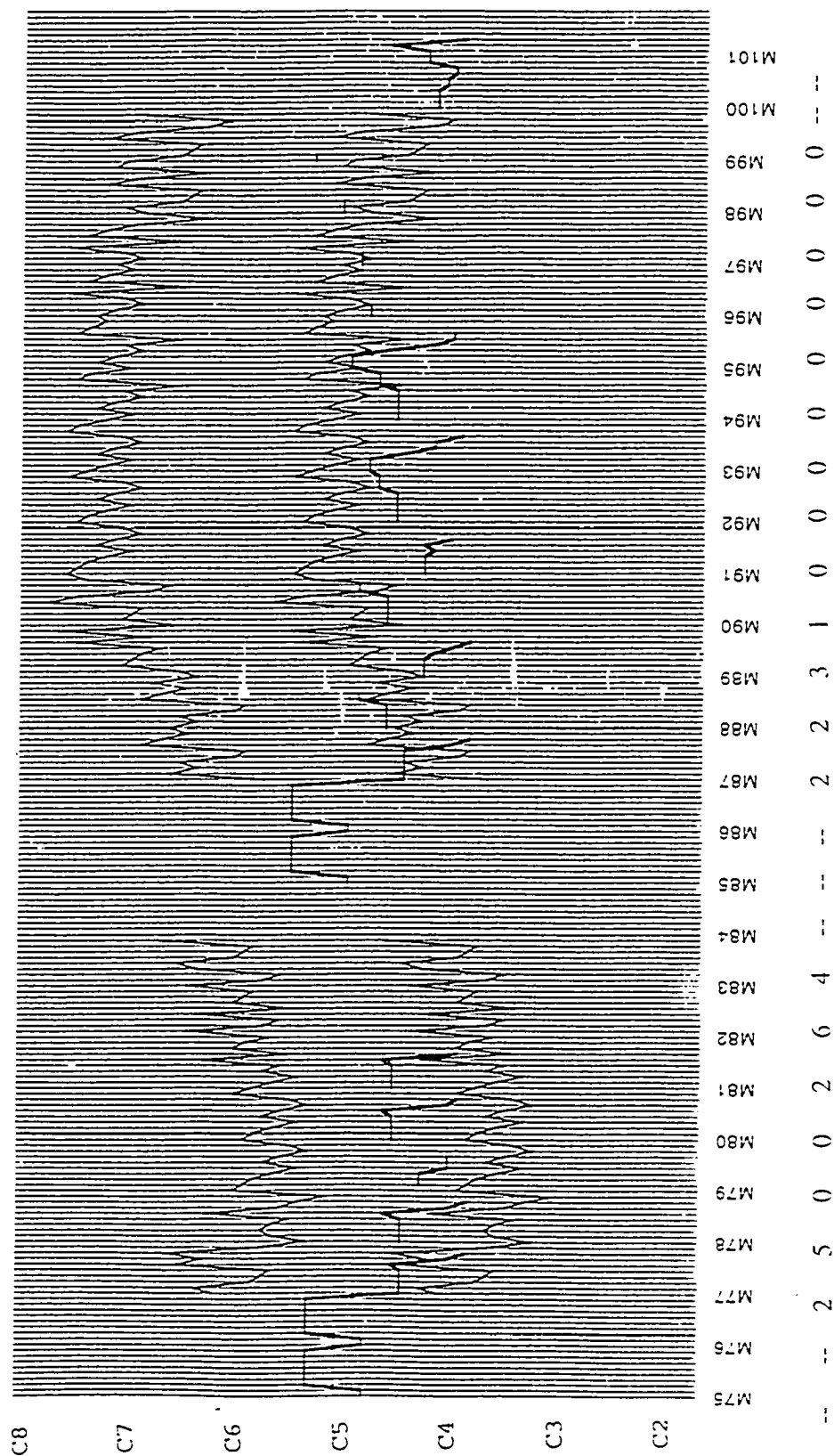
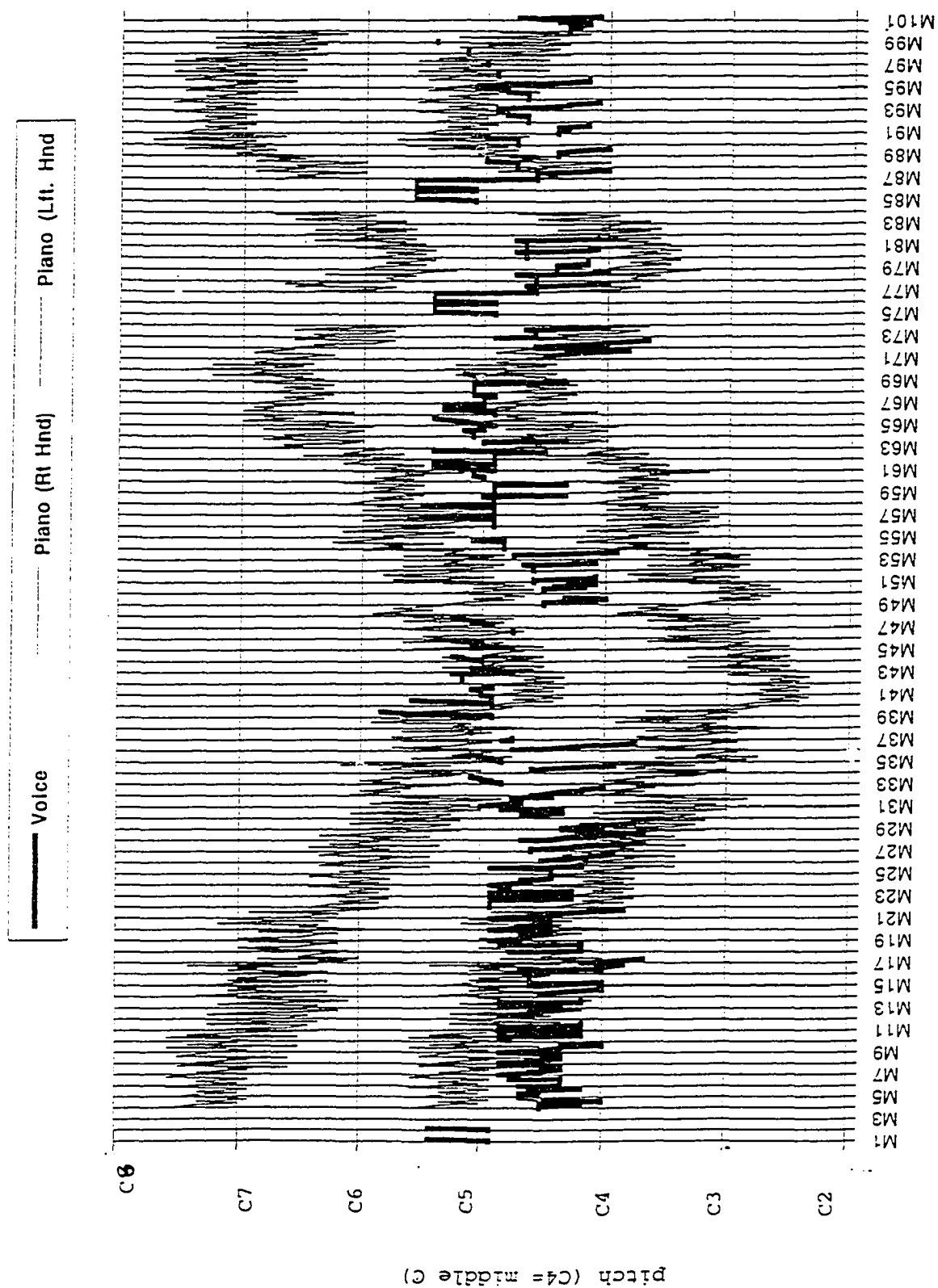


Figure 4-6. Graph of Piano and Voice, measures 1-101



As Figure 4-5 shows, the piano contours in sections 3 and 4 vary minimally from the corresponding contours in sections 1 and 2, giving only briefly the contour deviance values of 3 and 2, respectively. Beginning in section 5, these values rise sharply, to 5 and 6, and contour deviance occurs much more frequently. In section 5, the values are 0-0-0-4-5-4-5-0-4, and in section 6, the values are 0-0-4-6-6-4-1-0-2.

Section 6, which begins in m. 49, marks the midpoint of the song; here, both piano and voice begin their ascent back to their initial register. This section also marks the point at which the piano begins each subsequent section by giving the first contour of section 1, <8 7 6 4 1 5 3 0 2>; each of these sections is thus modelled upon section 1, and the piano can be regarded as abandoning its lengthy twenty-four measure norm, which is now decreased to twelve measures.

Sections 7, 8, and 9 reach relatively high contour deviance values of 5 and 6: in section 7, the values are 0-1-2-2-4-4-3-5-4; in section 8, the values are 0-0-2-6-2-3-3-2-5; and in section 9, the values are 0-0-2-6-4-2-2-3-1. The final section, section 10, restates T_0 leaving all of the original contours of section 1 intact.

Although the piano's fixed systems of pitch and rhythm seem to represent the unyielding nature of the world of work

the narrator describes, this third element of structure, the registral deployment of each pitch class in a row form, alters this characterization.²⁸ As the narrator's speech unfolds, the piano's melodic contour begins a regular process of departing from and then returning to the prototype, thereby restructuring what was initially a rigid and uncompromising system.

Moreover, as this musical system is dismantled, the relationship between the launderer and his boss goes through a transformative process. The launderer initially describes his unhappiness with his working conditions by merely asking a series of rhetorical questions about his condition, but later emerges from being dominated by his boss, addressing him more sharply. By the end of the song comes to ignore him completely.

When the boss first addresses him in mm. 1-2 ("Chinaman! Laundryman!"), the launderer responds with the first of eight rhetorical questions, asking "Why can I wash away the dirt of others' clothes but not the hatred of my heart?" He ends in mm. 31-32 with "Why do clothes dry, but not my tears?" The launderer also describes the degrading nature of his work in mm. 4-5 ("I am worse than a slave").

When the boss speaks a second time in m. 39 using the same words, the launderer departs from this mode of self-questioning to remark angrily in mm. 52-53 "I know bosses are robbers ev'rywhere!"; notably, this moment occurs when

the piano's contour deviance reaches the relatively high level of 6.

Sections 8 and 9 reach their local high contour deviance value of 6 when the piano plays alone, in mm. 70 and 82. This high contour deviance value occurs in m. 70 after the boss claims "I will treat you better." Because the voice is silent, the piano's contour deviance is made more audible and gives the launderer an opportunity to reflect. Subsequently, in his next statement he becomes increasingly forceful, directly challenging the boss in m. 71 with the line "Get away from here!".

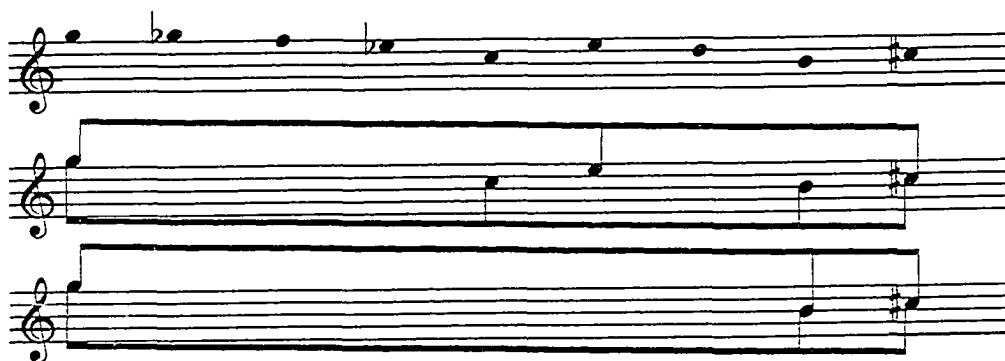
The piano's pattern of departure from the original contours of T₀ parallels the launderer's increased resistance to his situation, which climaxes in his statement of self-affirmation ("I am the worldman!").²⁹ Finally, in mm. 85-86 when the boss once again repeats his familiar cry, the launderer does not respond to him at all, taking up instead the more important task of uniting his fellow "working men."

One can understand the piano to have a dual function: it represents the labor system that is being splintered, and it prompts the launderer to take a more active role in changing his situation. In m. 91, the piano returns to playing its initial set of contours from the opening, having successfully prodded the launderer from merely articulating his dissatisfaction with his situation to gather his fellow

workers to take action.

This metamorphosis of the launderer's actions is reflected also in the variation in his vocal contour. Robert Morris's Contour Reduction Algorithm, which I previously applied in Chapter 3 to the final movement Crawford's String Quartet, makes it possible to compare more systematically contours of different lengths, such as those shaping the narrator's vocal line.³⁰ Morris's algorithm is given in Appendix C. To demonstrate its application to "Chinaman, Laundryman," Example 4-3 calculates the piano's nine-note contour in m. 4. (For consistency, I shall use the piano part on the lower staff to calculate primes.)³¹

Example 4-3. Reduction of Piano, measure 4, to Cseg <2 0 1>



In the song's opening, the narrator begins by singing in the voice of the boss, who summons the launderer with the cry of "Chinaman! Laundryman!" His two pitches, B4 to F5, form his signature interval, an ascending tritone, which has cseg <0 1>.

Being called the derogatory term "Chinaman" provokes

the launderer; in response, he immediately resists the affront by singing the vocal line in m. 4 whose first pitch is the highest of the phrase and whose final pitch is the lowest. Since all intervening pitches lie between these boundary pitches, they are considered "passing tones" and are subsequently pruned by Morris's algorithm; the launderer's response is thus labelled prime $\langle 1\ 0 \rangle$; the launderer's contour $\langle 1\ 0 \rangle$ is the inversion of $\langle 0\ 1 \rangle$, the contour that accompanies the boss's statements. The inversion of contour $\langle a\ b\ c \rangle$ is defined as $\langle n-a\ n-b\ n-c \rangle$, where n is the cardinality of the cseg.

The prime contour for each vocal phrase is given in Appendix F; text phrases determine the boundaries of vocal contours. (The prime for each nine-tone row form in the piano is given in Appendix E, column 3.)

As Appendix F shows, the boss's statements in mm. 1-2 and 36-39, which are reducible to two-note primes, are characterized by contour $\langle 0\ 1 \rangle$. The launderer's statements in mm. 4-36 which are reducible to two-note primes are characterized by prime $\langle 1\ 0 \rangle$. There is thus a clear division between the launderer and the boss based on the contour of their two-note primes; by drawing this basic distinction between boss and worker, Crawford underlines the opposition between them essential to Communist ideology.

Reducing vocal contours to their primes through Morris's algorithm makes concrete the intuition that the

voices of the two narrative personae are distinguished by ascending or descending contour, and provides a way of formally linking the vocal phrase of m. 4, which comprises a single downward gesture, with the phrase of m. 7, which comprises two downward gestures connected by an ascending semitone.

Figure 4-7 below gives a more precise account of this division between the two voices. It lists the number of times that the boss and the launderer sing each prime.

Figure 4-7

Prime Types of Voice

<u>Cardinality</u>	<u>No. of occurrences</u> (voice)	
	launderer	boss
<u>2-note primes</u>		
<0 1>	7	19
<1 0>	33	3
<u>3-note primes</u>		
<0 1 0>	5	1
<0 2 1>	0	0
<1 0 2>	0	3
<1 2 0>	15	2
<2 0 1>	1	1

Figure 4-7 records that the launderer sings prime <1 0> relatively frequently, a total of 33 times, while the boss sings it only three times. In contrast, the boss sings

<0 1> a total of 19 times, compared to the launderer who sings it only seven times.

Of these seven times, five occur in the final section of the text, in which the launderer entreats the working class to take up the "brush of study" and the "soap of action" to improve the world. The launderer's ability to sing both the upward <0 1> contour that is characteristic of the boss, and his own downward <1 0> contours with equal ease for the first time in the piece demonstrates a change in him. By the end of the song, he is able to enter what formerly had been the preserve of the boss: he sings in the highest register of the piece, one that had been previously accessible only to the boss; and in mm. 96-99, he outlines the boss's trademark tritone and sings contour <0 1>.

This idea of making the two narrative voices distinct by means of the simple marker of up or down is one that is carried throughout the piece for three-note primes of the vocal line, as well as for contours <0 1> and <1 0>. As Appendix E shows, the contour of the launderer's statements that are reducible to three-note primes take the form of cseg <1 2 0> more often than of any other prime: m. 13, which accompanies the cadence of the lines "Why do you pay me less/for the same work?" is one of the fifteen total occurrences of <1 2 0>. The first and last pitches of this contour retain the downward gesture of the launderer's previous statements. The boss, in comparison, sings

<1 0 2>, the three-note prime that has an overall upward gesture, three times, in contrast to the launderer, who never sings this contour. Thus the contours of three-note primes also distinguish the two narrative voices and significance the stark opposition between the capitalist boss and the exploited worker.

In mm. 36-37, the narrator alters his characteristic descending vocal gesture when he sings an ascending melodic third from A#-C#. This change can be attributed to the change in function of the words he sings--here he introduces a change in voice with the words "My boss says." The boss's subsequent statement in m. 39, "Chinaman, Go back to China/if you don't feel satisfied!" begins with a Bb, the first pitch of his emblematic tritone, which reiterates the <0 1> prime of his initial statement.³²

The launderer's inability to improve his working conditions is symbolized further by his lack of pitch mobility. Each time that he sings <0 1 0> (in mm. 7-9, 10-11, 19-21, and 22-23), he asks a question; the downward cadential gesture accentuates their rhetorical nature. The inability of this contour prime to change pitch serves as a musical manifestation of the narrator's inability at this point in the poem to alter or to improve his condition.

The graph shows that the relative registers of the voice and piano with which the song begins are unconventional--rather than being given harmonic support by

the piano, the voice begins below the piano. In fact, the launderer never sings in the normative register above the piano; his vocal register is always either beneath or between the staves of the piano's music. He begins singing in the register about an octave below the pianist's left hand. Throughout the song, he remains suspended in this register. The only moment where the voice does ascend above the piano's upper staff occurs in mm. 40-41; significantly, this is a passage sung by the boss, who, as the graph shows, typically occupies a higher register than does the launderer.

The piano has much greater registral mobility than either vocal part. After entering in m. 4, where its highest pitch is G5 and lowest pitch is B4, it makes a steady downward trajectory through m. 43, descending three octaves; here its highest pitch is C3 and its lowest pitch is E2. The music begins its about-face in m. 43, where its minimum pitch moves up a semitone from the previous bar to F2 and its maximum up four semitones to E3; the piano's music then ascends to m. 99, returning to the registers in which it originated.

Since the voice's register remains more or less constant, the piano first collides with the voice during its downward plunge and then passes over it. The voice and piano intersect first in m. 11. As the graph shows, the voice's four Bbs followed by three Ds twist through the

music played by the pianist's left hand. From m. 11 to m. 18, the piano's and voice's lines alternately meet and move apart; by m. 19, the musical space traversed by the voice is firmly enclosed within the musical space bounded by the pianist's hands.

As the speaker enumerates the various unjust practices of his boss and gathers momentum, the space locked in by the piano's two melodic lines freely moves past the narrator's vocal line as if to suggest the narrator's immobility. The piano's ability to move easily from the octaves of C5 and C7 to the octaves of C2 and C4 while rolling over the launderer's limited melodic space in the process can be read as indicating the system's utter disregard for his situation; he is completely subject to the actions of the labor machine of which he is merely a cog.

The piano's ascent is, however, not nearly so steady as its descent. As the graph shows, brief passages break up the larger V-shaped framework with smaller descending motions in mm. 71, 78, and 94. Like the measure-to-measure contours which deviated from the prototype, the piano's large-scale contour similarly fractures a musical process for the second half of the poem.

While the contour of the launderer's local statements is predominantly downward, his pitches form chromatic ascending lines over several phrases. Measures 4-7 form a chromatic chain of F#-G#-A-Bb; the Bb is then repeated in

the next six bars as the highest pitch, through m. 13. The F# in m. 14 initiates another stepwise line, one that reaches a higher endpoint than did the one in mm. 7-13, reaching a B $\sharp$ in m. 19 which he repeats through m. 25.

After reporting his long workday with little compensation, in mm. 36-47 the narrator quotes the boss, who tells him that it would be worse for him in China. The boss again sings a tritone, here between A and D# in mm. 43-44, 45, and 46-47. The entrance of the boss in m. 40 occurs at a stretch of the music during which the piano reaches its lowest point; at his entrance, the voice clings to the melodic ceiling of the right hand rather than remaining either positioned below both hands or poised between them.

This is the moment in which the song comes closest to employing a "traditional" distribution of voices supported by the piano in a lower register. The boss's music, then, might be understood to have the functions of interrupting the launderer's ascending chromatic line and of acting as the agent that inflects the piano to ascend again.

In the final section (mm. 87-101), contour type <0 1 0> disappears, as the launderer turns from outlining the details of his miserable situation to imploring his fellow workers to unite forces. This is the passage in which he instead sings <0 1> and <1 0> in alternation.

As well as commenting upon the launderer's circumstances brought about by both his class and race,

Crawford's use of register pertains also to gender. If we accept David Lewin's idea that register can function as a gendered domain with relatively low and high registers traditionally signifying male and female identities, respectively, then positioning the male narrator in a mezzo-soprano register can be understood to comment upon how gender is constructed for the launderer.³³ The sight and sound of a woman performing a text written in the voice of a male invests the performance with a tension that might be understood as a statement about how gender was constructed for Asian-American men at this time. Doing laundry has been understood to be a prototypical form of "women's work," but it has also been a task traditionally done by hand laundry establishments run by Chinese men.³⁴ The redistribution of this stereotypically female type of labor to men does not disrupt assumptions of gender normativity, however, but rather reinforces them: since Asian men were represented at this time as having "weaker" characteristics and have been constructed to be more stereotypically feminine than white men, Asian men doing "women's work" would have been considered appropriate rather than odd and emasculating.³⁵

Through its meticulous use of register, Crawford's setting thus makes it possible for a listener to perceive how, in the early twentieth century, a Chinese-American laundry man's existence was marked by gender, race, and class--not as inherent, immobile systems but as socially

constructed ones that were alterable. The analytical technique I have applied to this song--measuring contour deviance from a prototype--makes evident a subtle parallel between the song's transformation of two systems, one musical and one social. By means of register, Crawford succeeds in composing an example of the "proletarian music" of which Charles Seeger and others wrote, by bringing to a text with obtrusive political sentiment these more sophisticated compositional methods.³⁶ In weaving this serial tapestry, Crawford recognizes the nexus of difficulties that a Chinese-American male laborer endured during the early decades of this century; in composing a song in which the worker is able to alter his initially unyielding musical environment, Crawford makes a musical statement of compassion, and of hope.

CHAPTER 5

RELATING MUSICAL STRUCTURE AND SOCIAL ATTITUDES IN MARION BAUER'S CHROMATICON

The greatest work of the composer is often sublimation, that is, the deflection of energies, thoughts, occurrences, psychological and physical reactions, into socially constructive or creative channels.

-Marion Bauer

Bauer's notion of compositional sublimation, recorded in a set of working notes for a book in which she intended to link a study of composers' lives with their music, provides a starting point for relating Bauer's own music to her social attitudes.¹

Although a biography of Bauer has not yet been written, a preliminary sketch can be drawn from a number of sources.² Other sources, including her books and articles, lectures, music criticism, and the recollections of her contemporaries, also contribute to such a portrait. Her book Twentieth Century Music, first published in 1933, immediately impresses the reader with its strong pro-modernist stance, particularly in supporting composers of the second Viennese school.³

Modernism has been argued in some quarters to have been a progressive artistic movement, in others, a reactionary

one.⁴ Although I have not as of this writing located information that speaks explicitly about Bauer's political beliefs, her book suggests that she was more inclined towards the progressive view of modernism, as articulated in the following passage:⁵

We might successfully sum up the new music as an attempt to escape the obvious, to avoid time-worn combinations, to elide the unnecessary, to allow the mind to supply implied detail and to break down established boundaries not in a spirit of revolt but of exploration.⁶

In another section, she urges listeners to confront the "discomfort of unknown territory" and attributes the rejection of modern music as a product of "intolerance and short-sightedness"; she also asserts that listeners would do well to accept modern music as it would benefit their individual development.⁷

A second indication of what I believe to be Bauer's tendency toward progressive thought is also given in Twentieth Century Music as well as in some of her unpublished writings. Bauer consistently promoted music by women in her writings and lectures, and brought the particular category of "women composers" to the foreground by co-founding the Society of American Women Composers in 1925. Further, her frequent reference to modernist music by black composers and her inclusion of jazz in her accounts of twentieth-century music bespeaks the importance she placed on the contributions of blacks.

Twentieth Century Music cites a number of women

composers--Ruth Crawford, Louise Talma, Ethel Glenn Hier, Rosalie Housman, Miriam Gideon, Ulric Cole, Vivian Fine, Evelyn Berckman, and Dorothy James, among others. Although Bauer does not knead a discussion of their music into the substance of the book, the fact that she includes them makes a significant statement about her personal stand on the inclusion of women. A survey of similar books written within a decade of Bauer's shows that Twentieth Century Music mentions women composers comparatively frequently: all twenty of Paul Rosenfeld's subjects in Musical Portraits, published in 1920, are men;⁸ in Rosenfeld's An Hour with American Music, published in 1929, women are virtually absent (he does mention Crawford in passing).⁹ The ratio of men to women who are represented in John Tasker Howard's book Our Contemporary Composers: American Music in the Twentieth Century, published in 1941, is comparable to Rosenfeld's: it lists 41 composers in the table of contents of which the only woman listed is Marion Bauer.¹⁰ In these publications, speaking approvingly of compositions by women--as in the 1925 edition of Louis Elson's History of American Music which praises the music of Amy Beach--seems to be the exception rather than the rule.¹¹

In a paper presented to the New York Federation of Music Clubs in 1938, Bauer again pointedly refers to music by a number of women--Amy Beach, Gena Branscombe, Mary Howe, Mabel Daniels, and Marianne Genet.¹² In an unpublished

typescript entitled "American Piano Music" written in or after 1944, Bauer surveys the music of Beach, Crawford, and Talma.¹³ In 1951, Bauer articulated her viewpoint on the status of women composers more directly:

My early aspiration was not to listen to the sly remarks of intolerant men regarding women composers... if given a reasonable chance for development, an individual talent, regardless of sex, can progress and grow.¹⁴

Bauer's writings also make evident her conviction that black composers deserved recognition alongside white composers, referring to compositions by R. Nathaniel Dett, William Grant Still, H. T. Burleigh, Hall Johnson, J. Rosamond Johnson, Clarence Cameron White, and others.¹⁵ In addition, in Twentieth Century Music she discusses the influence of music by black composers on white composers, and includes a brief discussion of jazz. Of the music books discussed above, John Tasker Howard's Our Contemporary Composers is notable for mentioning Burleigh, White, Dett, and Still; Paul Rosenfeld promoted the music of Still for several years during the 1920s.¹⁶ The following recollection by Fredric Stoessel, the son of Albert Stoessel, the founder of the music department at New York University, also casts light upon Bauer's social impulses:

Marion Bauer was one of the closest friends I had among my parents' circle. To me she was a boyhood friend, associate of my father's, a gifted composer and author of books on music, a welcome figure at holiday gatherings, and later an inspiring teacher when I was at N.Y.U. ... [M]y most vivid memory of Marion is at a New England restaurant [sic] one summer when I drove her back

to Peterborough [New Hampshire]. She sat in silence in the car with her negro maid Ella refusing to go in because they would not serve negros [sic], while the rest of us, somewhat unchivalrously, munched coffee and a doughnut inside.¹⁷

Bauer's quiet protest of a policy of segregation recalled in this vignette makes apparent the importance to her of social equality.¹⁸ However, the fact that Bauer even employed a black maid can itself be criticized as insensitive to the racial politics of the labor practice--namely, that the practice of whites hiring blacks to perform domestic work like housekeeping and childcare participates in a long tradition of making blacks dependent upon whites, with the result of positioning blacks in a lower economic class. Bauer's objection to the restaurant's refusal to serve her maid thus might be understood as both revealing a desire to challenge racial inequity while accepting a traditional arrangement, or a clashing of custom with progressive inclinations.¹⁹

This desire to establish equality between unequal groups is one that I argue also informs Bauer's *Chromaticon*, the first of Bauer's Four Pieces for Piano. It presents a narrative in which a musical figure's dominance is repeatedly challenged; framing my formal analysis is the notion that Bauer's music enabled her to make tangible the sorts of relations she observed or desired in society.

Chromaticon is among her earliest post-tonal compositions. The set of pieces was published in 1930 and

premiered at a League of Composers Concert in April of that year by Harrison Potter, a pianist with whom she gave a number of lecture-recitals on modern music; Bauer dedicated the second and fourth pieces, *Ostinato* and *Syncope*, to Potter, who continued to perform these works at recitals in New England and New York over the next twenty years.²⁰ By the time Bauer composed Four Pieces for Piano, she had published at least seven compositions for solo piano.²¹ Her first two piano works, Arabesque and Elegie, were published in 1904; by 1930 she had published numerous songs with piano accompaniment and had completed a violin sonata and a string quartet.²²

Chromaticon begins by presenting an ascending triplet which comes to dominate the piece. Example 5-1 gives the score²³:

Example 5-1. Bauer, Chromaticon, measures 1-16
 Copyright 1930 by Cos Cob Press/Boosey & Hawkes

TO ALMA M. WERTHEIM

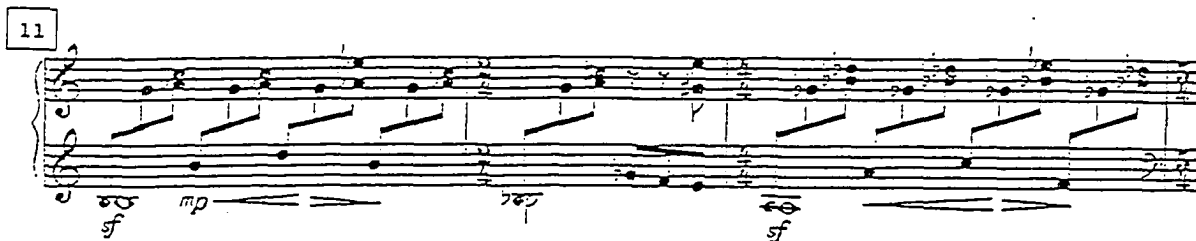
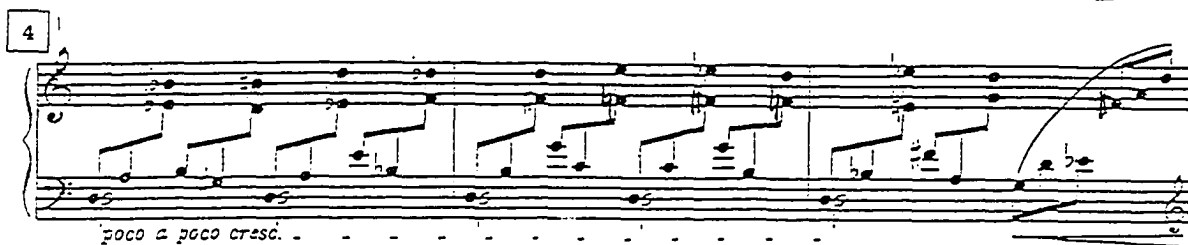
FOUR PIANO PIECES

I

CHROMATICON^{*)}

Marion Bauer, Op. 21, No. 1

Allegro commodo

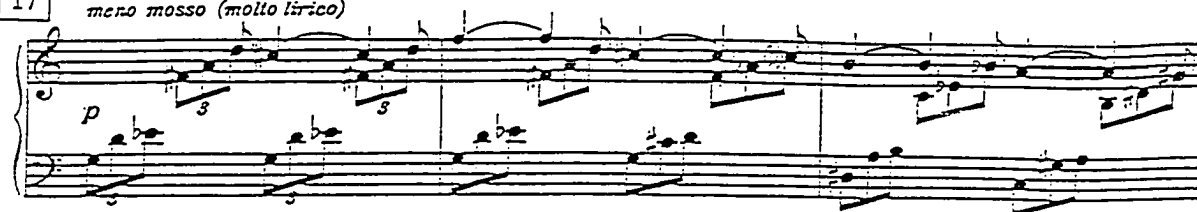


^{*)} Accidentals apply to individual notes only; they are not effective through the measure

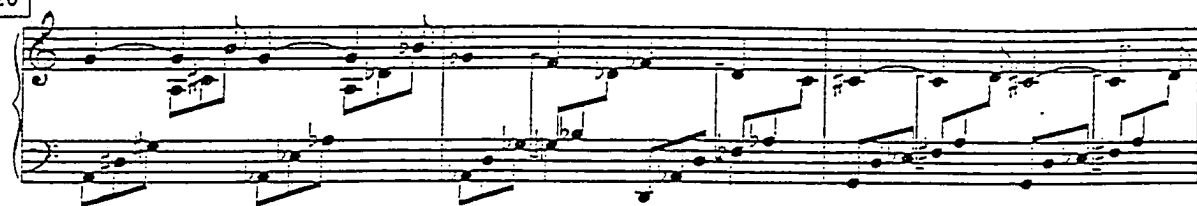
Example 5-1 (page 2). Bauer, Chromaticicon, measures 17-33

17

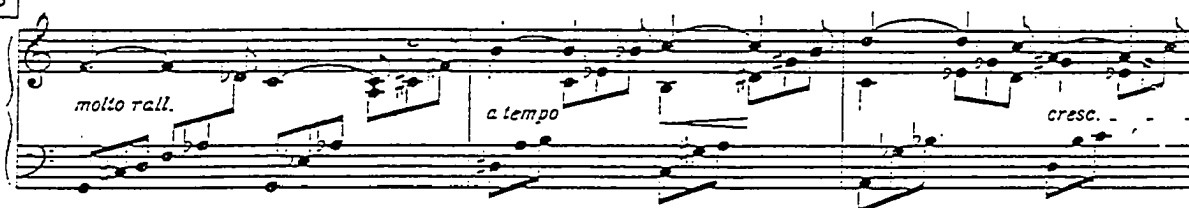
meno mosso (molto lirico)



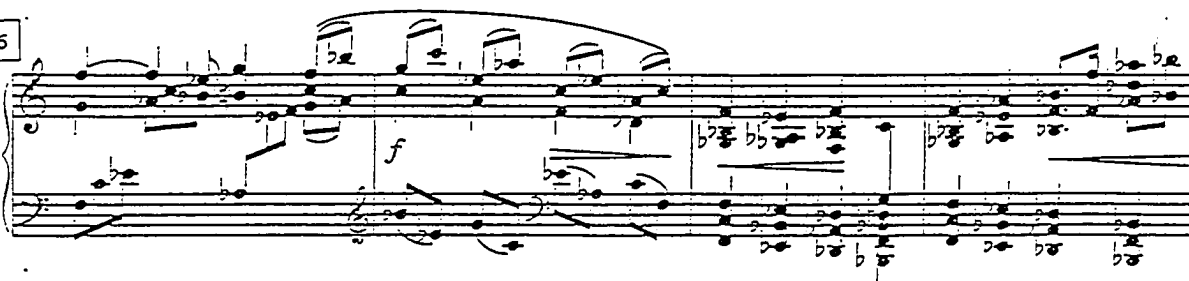
20



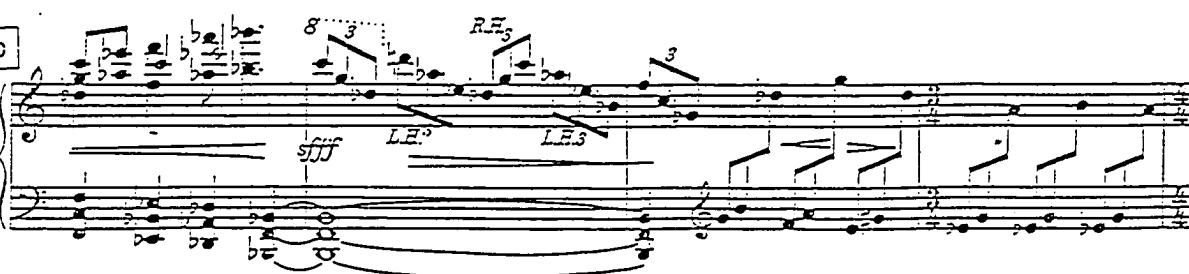
23



26



30



Example 5-1 (page 3). Bauer, Chromaticon, measures 34-56

34 *Tempo I*
poco rit.
p

37 *lirico*
p

40

43 *p*
poco a poco cresc.

46 *accel.*
molto cresc.

49 *ff*
mf
fff
stff

The first bar introduces the ascending triplet, which continues through the second bar through the beginning of the third. My narrative of the piece is based on the figure's attempts to maintain its position of authority against the efforts of other triplets to overthrow it. In mm. 45-48, a passage that builds to the climax of the piece in m. 49, three triplets, all with different contours and pitch content, affix themselves to the ascending triplet. This moment lasts only briefly before the original trichord in m. 54 and the original pitch-class center in mm. 55-56 regain their position of authority, a situation that gives the piece the uneasy and somewhat forced unity with which it ends.

To track this narrative more precisely, I shall identify the various triplet shapes and their pitch content using two branches of post-tonal theory: contour theory and set theory. The organization of my discussion will address contour, sets, and pitch-class center in turn, moving roughly chronologically.

The first beat of m. 1 contains two musical elements that become central to the piece--its primary pitch-class set is set class 3-8 [026] and its contour is cseg <012>. It also introduces the work's central pitch, D. The left hand begins by playing D4 followed by F#4; the right hand completes the triplet with Ab4. An upward gesture carries the first pitch to the second pitch, and the second pitch to

the third. These two gestures make up a melodic contour that functions as a fundamental shape in this section and indeed throughout the entire piece, saturating the second and third sections in equal measure.

As in Chapter 4, I shall label a contour by giving its contour pitches, or cps, in order of occurrence from lowest to highest, using the numbers from 0 to n-1 where n is the cardinality of the pitches in the contour. Figure 5-1 sketches the piece's first triplet as cseg 3-1 <012>.

Figure 5-1. Cseg 3-1 <012>



The three pitches of the first triplet, D-F $\sharp$ -A $\flat$, form the primary pitch-class set of the piece, set class 3-8 [026]. Like the contour in which these pitches are presented, cseg <012>, this set class returns throughout the piece and reasserts itself most strongly at the conclusion. The A $\flat$ in m. 1, beat 1 also acts as the first pitch for another instance of set class 3-8 [026], A $\flat$ -B $\flat$ -D, which is formed by the pitches in the uppermost voice in m. 1. The pitches on beat 4 of this measure give yet another statement of set class 3-8 [026], in the form of the set related by

inversion to the set in m. 1, beat 1.

In m. 2, the right hand plays a dyad on the last note of each triplet. Because each of the dyad's pitches have the same relationship to cps 1 and 2, we can regard the dyad as a single contour pitch, cp 3, and label this type of contour as cseg <012>. Figure 5-2 shows this new type of <012>.

Figure 5-2. Triplet with dyad as cseg <012>



Using this method to account for dyads, we see that cseg <012> occurs throughout mm. 1-2, and, in mm. 3-4, on the first and third beats. In mm. 3-4, beats 2 and 4, the first beat of the triplet is now higher than the second; accordingly, these triplets present a new contour with cardinality 3, <102>. Since these two <102> contours in mm. 3-4 occur on relatively weak beats, and because beats 1 and 3 are strengthened further with sustained half notes on D3, cseg <012> can still be regarded as the governing contour for the first four measures of the piece.

Measure 5 requires a further adjustment to our model of contour analysis. It presents a new configuration of the

triplet, where the first note of the triplets on beats two and four is placed between the two simultaneous notes on beat 3. To describe this intersection of cps 1 and 2 with the dyad, I count two separate contours, each drawing from a different note of the dyad. That is, G4-C4-E5 constitutes one contour, cseg <102>, and G4-C4-F4 a second contour, cseg <201>; both are heard at the same time.

By calculating csegs in this manner for the first section of the piece, which ends in m. 16 with a triple forte cadence followed by a fermata, we can hear that cseg <012> is first established as the primary contour, after which other types of ternary contours confront it, at first tentatively, on weak beats as in mm. 3-4, and then with more force and frequency with the contour hybrids of mm. 5, 10, 11, and 12.

Set class 3-8 [026] is not as prevalent as cseg <012>. Example 5-2 identifies its appearance in m. 2, on beats 3 and 4 (Ab-Bb-D and G-Bb-C#).

Example 5-2. Set class 3-8 [026], measure 2



Example 5-3 identifies its reappearance in m. 5, on beats 3 and 4 (D-C-F# and G-B-F#), which reinforces the importance of the initial triplet figure.

Example 5-3. Set class 3-8 [026], measure 5



In addition to introducing the main contour and set class, the opening bar presents the piece's pitch-class center, D. Through the motion of the bass down a chromatic step, each triplet moves seamlessly to the next, urging the music constantly forward. In mm. 1-2, the first note of each triplet contributes to a descending chromatic line which links the initial D4 to m. 2's G3, which serves as a secondary pitch-class center for the piece. Chromatic lines pervade other voices as well--the triplet beat in the middle register forms a line from F#4 to D#4, and then breaks the line off to present two pairs of chromatically linked neighbors, C-C# and Bb-B#. Pairs of chromatic neighbor notes continue through m. 6; the fuller four-note chromatic lines return in m. 7 with the C#-C#-B-Bb line in the bass voice on the first eighth-note beats of the triplets and the

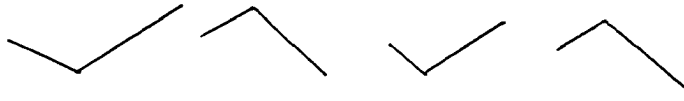
G-F#-F#-E in the middle voice on their second beats.

In terms of the general narrative strategy I invoked earlier, a listener can perceive these first five measures of the piece as follows: (1) in m. 1, <012> is asserted as the dominant contour; (2) a dyadic variant on cseg <012> enters; (3) a second contour, <102>, is introduced on the weak beats of mm. 3-4; and (4) in m. 5, a new arrangement of triplets permits the simultaneous entrance of csegs <201> and <102>.

Entering immediately after its primacy has been challenged by two other three-note contours, cseg <012> returns fiercely in m. 6 on beats 3-4; two <012> csegs are heard, the second higher than the first. The music crescendos into m. 7 which, with m. 8, reinforces m. 6's attempt to reinstate <012> with a strand of six <012> contours.

In m. 9 the triplets attempt to twist away from the <012> that has been established, more strenuously than before: each of the contours in m. 9 resists <012>, compared to only two of the four contours in mm. 3-5. For each of its four notes, the left hand strikes a pitch that lies between the second and third eighth notes. This results in the succession of triplets whose contours are shown in Figure 5-3.

Figure 5-3. Csegs in measure 9



The chain of triplets twists quickly from <102> to <120> back to <102> and again to <120>. Furthermore, the left hand reaches up into the highest register in which it has played so far, which draws additional attention to this departure from cseg <012>. The restatement of cseg <102> from m. 3, coupled with the introduction of a new contour, <120>, seizes the listener's attention, as does the quickened rate of change (the contour type changes on every beat in contrast to the prior sustaining of <012> for two and a half measures).

Set class 3-8 [026], which dominated the opening, raises its head again in m. 9 on beats 2 and 3; in contrast to mm. 2 and 5, all of its pitches are now unencumbered by simultaneous dyads. The reappearance of this set class urges the music back to its original course, to return to the musical figure of the opening from which the music had been moving.

Cseg <012> begins m. 10, in an attempt to take command once again, but is thwarted by the triplets on beats two, three, and four, which form, respectively, an <102>-<201> hybrid, cseg <201>, and second <102>-<201> hybrid. Each of

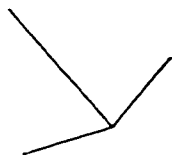
the next three measures repeats this basic progression: cseg <012> takes possession of the first beat, but the contours on the subsequent beats prevent it from spreading through the bar. The section concludes with m. 14 strongly reaffirming cseg <012> in both hands, followed a *fff* climax.

To summarize the events of the first section within the narrative frame, cseg <012> is situated as the dominant contour; csegs <102>, <201>, and <120> challenge and destabilize cseg <012>; and the section reestablishes cseg <012>.

As if the climax of section 1 had not even occurred, m. 17 begins serenely with a pair of <012> csegs. Since cseg <012> had met such resistance in the previous section, it attempts to reassert its position at the outset but is immediately foiled by the following type of triplet configuration.

The right hand plays a <012> triplet and then sustains C#; as a result, the left hand plays its triplet under a sustained melodic pitch through m. 26. This addition of the right hand's sustained quarter note generates the contour <201>. Figure 5-4 shows this pair of contours.

Figure 5-4. Csegs <201> and <012>



In this manner throughout the middle section, which ends in m. 34, cseg <012> is again obstructed from a position of absolute authority. The basic strategy for most of this section is for a second cseg--in this case <201>--to attach itself to cseg <012>. This tactic was, of course, used in section 1, but here these contour hybrids occur much more frequently, for ten consecutive bars. In the terms of the narrative, cseg <012> must share the stage in this section with alternate contour, and its power is thus diminished.

As the two strands of intertwined <012> and <201> cseg triplets thread their way to m. 26, set class 3-8 [026] reappears--for example, in the triplets of m. 19, beat 1 and m. 21, beat 1--but it does not reassert itself in the form given in m. 1 until the end of the section. In pitch as well as in contour, then, in section 3, the original triplet loses much of its former force.

The upper voice's gradual descent, which begins in m. 18, ends in m. 23, with a *molto rallentando* marking. The right hand's music begins to ascend again in m. 24. This process of gradual descent and ascent is repeated once again, with turning points in m. 27 and mm. 28-29. The second ascent culminates in m. 30, which is cut off in m. 31 by two decisive triple *sforzando* <210> csegs, during which the bass strikes a B $\flat$ 1-F2-B $\flat$ 3 simultaneity for six beats.

The last four bars of the section, mm. 31-34, display in condensed form the central conflict of the narrative:

beginning in m. 31, cseg <012> fights to maintain its position, but is strongly countered by cseg <210>. Cseg <210> returns in m. 34 in the right hand, but is quickly overcome in turn by three more <012> csegs that fill out the rest of the measure. Just after the climax of this section, set class 3-8 [026] materializes a total of four times--in m. 32, on beats 2 and 4, and in mm. 33-34, beats 1 and 3--to draw the music back in m. 35 to its starting point, the D-F#-Ab triplet at the original tempo.

The combination of set class 3-8 [026] and the return of <012> in mm. 31-34 in its "pure" form, without being linked to <201> as in the opening of section 2, serves to fortify the return of the original D-F#-Ab triplet figure and thus the piece's former state in which cseg <012>'s dominance went unquestioned.

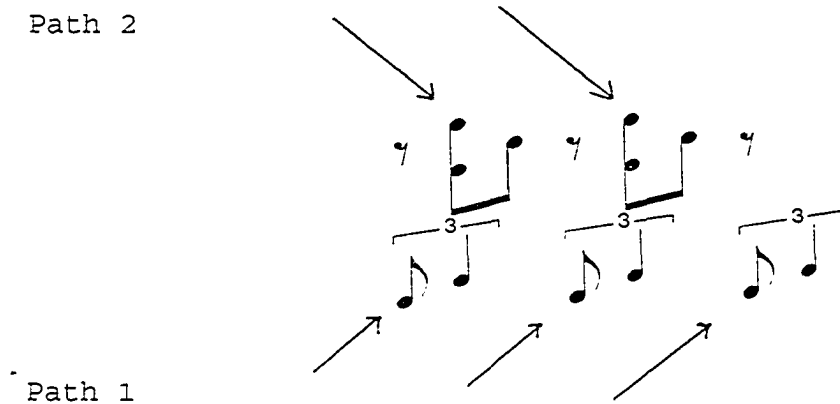
In section 3, the conflict between cseg <012> and other triplet contours is again central and soon becomes even more elaborate than before. This section begins in m. 35 by recapitulating the music presented at the opening of the piece for three bars; m. 39 restates material from m. 17, the opening of section two, giving again the <201> + <012> contour hybrid. Measure 45 breaks off the long stream of triplets preceding it that, like most of section two, is comprised of a fusion of csegs <012> and <201>.

Measure 45's Db5 in the upper voice initiates the ascending chromatic line that leads into the climax of the

piece, which contains the third and final struggle between the dominant <012> cseg and the csegs that attempt to displace it. It stretches up from D $\flat$ 5 to D $\sharp$, E $\flat$, E $\sharp$ and so forth, to B $\flat$ 5 in m. 47, then, moving up by whole step rather than by semitone, it reaches C6 and lands on D $\sharp$ 6.

Beginning in m. 45 and continuing through m. 48, a listener may perceive two distinct contour paths, from which a total of four contours will simultaneously intertwine. Example 5-4 shows these two paths.

Example 5-4. Two contour paths in measures 45-48



The first path groups the first beat of the triplet, which the left hand plays, with its second and third beats, which the right hand plays.²⁴ The second path groups the triplet's second and third beats with the left hand's subsequent note on beat one of the next triplet.

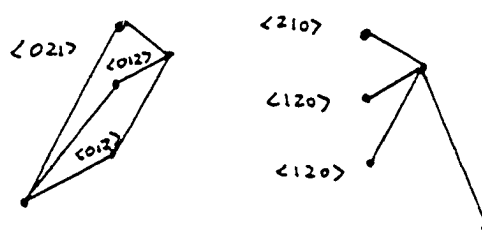
This grouping is plausible for the following reason. Because the first rhythmic path, which groups triplet beats

1, 2, and 3, has been strongly established earlier in the piece in both mm. 17-26 and again in mm. 39-44 just before the final climax passage, one's ear is immediately drawn to this grouping. The new rhythmic path is emphasized by the gradual thickening of the texture on the second eighth note beat of each triplet: it begins with the two notes that are struck in mm. 45-46, which increases to three notes in mm. 46-47, four notes in mm. 47-48, and culminates in the five-note texture of m. 49.

In m. 45, the upper voice begins an ascending chromatic line on D $\flat$. This melodic gesture also adds weight to the second triplet beat, persuading the rhythmic accent to shift over one eighth note. The contours for the first two triplets in m. 46, measured from the triplets' second eighth note, are both <210>.

In m. 46, on beats 3 and 4, not only does the right hand's dyad enclose the subsequent cp, but it is in this measure that a third pitch is first struck in the left hand along with the dyad. A possible way to analyze the contour for these triplets is to extend the approach developed for dyads to three-note simultaneities, calculating csegs for each three-note melodic contour, using each note of the three-note simultaneity in turn. Figure 5-5 illustrates this method for m. 46, beats 3-4 and m. 47, beat 1. It shows that for each ternary contour grouping, two distinct contours result from the three possible contour paths.

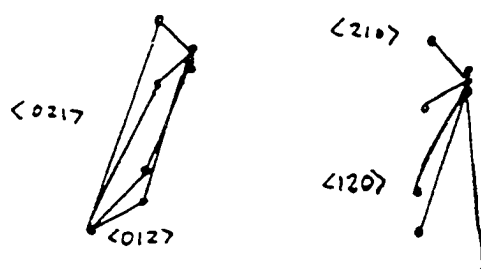
Figure 5-5. Csegs for a triplet containing a three-note simultaneity



Csegs $\langle 021 \rangle$ and $\langle 012 \rangle$ characterize the first grouping, given on the left side of Figure 5-5, and csegs $\langle 210 \rangle$ and $\langle 120 \rangle$ characterize the second grouping, given on the right side of the example.

Figure 5-6 gives the contours of the ternary groupings in mm. 47-48 that contain four-note simultaneities. It shows that they result in the same pairs of contours as the ternary groupings of Example 14, $\langle 021 \rangle$ and $\langle 012 \rangle$, and $\langle 210 \rangle$ and $\langle 120 \rangle$.

Figure 5-6. Contours of measures 47-48



These four contours, <021> and <012>, and <210> and <120>, are thus heard from m. 46 through m. 48.

The passage in mm. 45-48 manages to displace the dominant <012> contour, making it equivalent in importance to the other three ternary contours and thus temporarily draining it of its previous force. These measures contain the most successful effort yet in the piece so far to displace the dominant contour from its position of power.

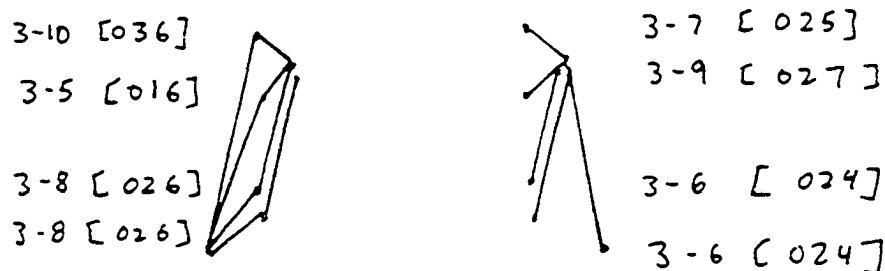
To hear the four contours in this passage more readily, a listener can use m. 45, the bar that contains <021> and <210>, as aural preparation for the <021> and <210> in the outer voices of the subsequent three bars. If a listener further conceives of the passage as having a three- and four-part texture, it then becomes easier to separate the melody note from the inner notes of the triplet's second eighth note rather than to group it with them. (For this configuration of contours, it is not necessary even to hear differentiation between inner pitches; it is essential only to hear lower two or three notes as constituting a single cp.) A pianist could further bring out the contour that draws upon the inner notes while deemphasizing the upper line, which is already quite audible with the ascending chromatic line moving in contrary motion to the bass's descending chromatic line.

With its increased dynamic and tempo, upward registral sweep, and the thickened texture, this passage functions as

a climax in traditional terms. With the added factor of contour, it contains the composition's most crucial struggle--between the formerly authoritative <012>, heard in the bass voice in the triplet grouping that starts on beat one of each triplet, and three competing contours, <021>, <210>, and <120>. With the addition of these contours, all six possible ternary contours now have been exercised: <102>, <201>, <201>, <210>, <021>, and <120>.

Just as <012> participates in mm. 46-48 in a complex of four contours in which it does not dominate, the pitch content of these measures is similarly diverse. In m. 47, beat 4, the pitches cease from moving outward and become locked into place--the final triplet of m. 47 is repeated four times in m. 48, and in m. 49 its pitches are struck one last time as a simultaneity. Figure 5-7 identifies the set classes of the ternary contour groupings in m. 48.

Figure 5-7. Ternary set classes in m. 48



Of the eight trichords that can be calculated for this cluster of pitches, two belong to set class 3-8 [026]; the remaining six trichords belong to a total of five additional set classes.

The uppermost line, which had been steadily ascending from D $\flat$ 5 in m. 45, stops on D6, the initial pitch-class center introduced back in m. 1. The lower line contains three pitches, pitches F, D $\sharp$, and A, whose trichord belongs to the set that began the piece--set class 3-8 [026].

After the climax, in m. 50 the music begins to ascend to the highest register of the piece, each bar marking off three <012> contours, this time in quarter notes. In contrast, the music in the bass clef descends in a series of three <210> contours, thus playing out the conflict between these two contours a final time. Like the previous two sections, this section closes with a series of six-note chords, three notes to a hand, which move out in contrary motion to a sustained *fff* chord in m. 54, which contains the section's climactic chord. This chord appears with D-A $\flat$ -F $\sharp$ in left hand; the right hand reinforces the F $\sharp$ and A $\flat$, giving set class 3-8 [026] one last time.

A tripled D closes the work, reinforcing the pitch-class center of section 1. The conclusion thus folds the piece back to its beginning, rather than allowing it to escape to a new pitch world or to an alternative set of ternary contours; consequently, the possibility of

overturning the musical world of the beginning dissolves.

* * *

This analysis has identified in Bauer's Chromaticon a narrative in which a primary idea undergoes challenge, is nearly overturned, and then reinstates itself. This is, of course, the narrative of a great many compositions, tonal as well as post-tonal--it might, for example, serve as a basic description of sonata procedure.

I am not claiming, however, that this piece's narrative is unique or somehow "different" because it is composed by a woman; rather I wish to suggest that a relationship between Bauer's subjectivity and this narrative may exist--namely, that her writings and actions insist on inclusion of various kinds, and that this insistence may have been translated or "sublimated" into music.

By compelling a dominant musical element to relinquish its privileged position of authority, Chromaticon can be heard to give musical expression to Bauer's concern with altering the social practice of elevating the accomplishments of one group to the exclusion of any others. But because the piece concludes neither by permitting the original musical figure and its adversaries to coexist nor by vanquishing the principal idea altogether but instead by reasserting itself, Chromaticon might be understood to

function not as a utopian musical narrative that realizes Bauer's ideal social vision, but rather as one that mirrors a social reality she might have more commonly experienced.

CHAPTER 6

GENDER, SEXUALITY, AND PERFORMANCE IN BAUER'S TOCCATA

One of the most striking aspects of Bauer's Toccata, the third of her Four Piano Pieces, op. 21, is the relationship of the performer's hands. Example 6-1 gives the first four measures.

Example 6-1. Bauer, Toccata, measures 1-4
Copyright 1930 by Cos Cob Press/Boosey & Hawkes



Both hands begin playing in the same register. In m. 1, the left hand plays C4-E4 and the right hand plays Db4-Gb4. The lower notes of these two dyads, C4 and Db4, played by the left and right hands, respectively, lie one semitone apart; their upper notes, E4 and Gb4, lie two semitones apart.

Because the notes played by the lower fingers of the left and right hands lie so close together, separated by the slimmest of intervals, the pianist's hands necessarily touch

one another. Furthermore, given the particular pitches that are played, the right hand lies on top of the left. In m. 1, after the right hand strikes its initial dyad of D $\flat$ 4-G $\flat$ 4, the left hand moves up from C4-E4 to D4-F4, a motion that places its dyad squarely within the right hand's dyad, D $\flat$ 4-G $\flat$ 4, which the right hand immediately strikes a second time.

A starting point for my analysis of Bauer's Toccata is a recent essay by Suzanne Cusick in which she articulates possible linkages between feminist theory and music theory. Working from the theoretical grounding presented in writings by historian Joan Scott and philosopher Judith Butler, Cusick formulates a valuable question for those of us who wish to bring questions of gender to the surface of our study of music, asking "if gender is constituted by bodily performances, and metaphors of gender are constantly circulating through discourse, might not elements of all bodily performances be read as metaphors of gender even when they seem to be performances of other things?"¹ Cusick's invitation to consider the possibility of a relationship between music and gender that may exist specifically within the dimension of performance is one that this chapter takes up by examining the physical relationship of the pianist's hands in performing Bauer's Toccata.

My analysis draws also upon a second essay by Cusick, one that describes her relationships with music that she

identifies as lesbian.² Cusick's speculative essay provides a useful way of contemplating the piece's narrative in light of statements made by three of Bauer's contemporaries.

Of Bauer's personal life little has been recorded. It is known that she never married; that she was supported by her sister Emilie until Emilie's death in 1926; and that in the same year, her sister Flora's husband died and so she and Flora began to live together in New York, an arrangement that continued until Flora's death in the early 1950s.³

Judith Tick has commented on the closeness of the relationship between Bauer and Crawford that began at the MacDowell Colony in the summer of 1929 and continued in New York that fall; Crawford later stated that their relationship at one time verged on becoming a sexual one, which she identified as "lesbian." Tick cites one incident in which Bauer reserved a hotel room during a trip to Washington for both her and Crawford, which made Crawford quite uncomfortable. Crawford preferred later to characterize her intense relationship with Bauer that developed in New York during these months as a maternal one.⁴

The comments of two additional people who knew Bauer, as colleague and as teacher, are interesting in connection to Tick's depiction of the nature of Bauer and Crawford's relationship. Martin Bernstein, who knew Bauer for over

twenty-five years (they both began teaching in the music department of New York University in 1926; Bauer retired in 1951 and Bernstein in 1972), has stated that Bauer did not, to his knowledge, have any romantic relationships with men, and moreover that he believed that she had "very little interest in men."⁵ When asked in a recent interview what his former teacher Marion Bauer was like, Milton Babbitt states:

Marion Bauer was one of the dearest, most wonderful creatures in the world. The only thing was that her basic orientation was [Nadia] Boulanger. She had studied with Boulanger. She was very French oriented, very much in the Boulanger tradition, except she wasn't that kind of personality. She was a dear lady from Walla Walla; she wasn't a stern lady from France. And she was very much a ... let's simply say unmarried. But she was an absolute dear.⁶

Crawford's writings and the remarks made by Bernstein and Babbitt do not in any way clearly establish the nature of Bauer's sexual orientation, but they do suggest, to varying degrees, the possibility that Bauer may have been a lesbian.

Cusick's essay "On a Lesbian Relation with Music" contains an idea that I believe might fruitfully inform a reading of Bauer's Toccata. Cusick describes the various ways she positions herself to particular pieces of music that allow her to vary whether she or the music is "on top"--that is, whether the music becomes "the active force which generates pleasure, which leads one body and soul into an alternate reality ..., into intimacy" or whether the

relationship is reversed; that is, when she as a performer "love[s] [music] in return...when, attending to its messages with ears, heart, and mind, I [use] my own body to release those messages again into the air, for the pleasure of my own ears and mind." In Cusick's relationship with music, she and the music take turns being "on top."⁷

She characterizes this relationship as lesbian not only from its analogy with physical expressions of sexuality, which she defines as "a way of expressing and/or enacting relationships of intimacy through physical pleasure shared, accepted, or given," but also--more relevant to Bauer's particular case in which her rejection of traditional heterosexual relationships has been alluded to but not verified--as suggestive of a possible psychological relationship between two women.⁸ If we accept Cusick's assertion that women are constructed to be non-dominating (which does not assume that all women actually are), then a relationship between two women can be understood to take place between two selves who are what she calls "non-power": "With her, a self who is also non-power is more likely to create a relationship based on non-power--that is, a relationship in which a porous boundary exists at all moments ..., allowing for a flow of power in both directions."⁹

My account of Bauer's Toccata describes a relationship between two agents of its performance, the performer's

hands, whose relationship varies throughout the piece.¹⁰ The question of "who's on top" indeed motivates the composition's entire narrative: the initially clear-cut relationship of inequality between the hands that appears in m. 1--i.e., right-hand dominance--is subsequently shifted back and forth in later sections of the piece in a persistent state of reversal. When directed specifically toward a pianist's performance, the question of "who's on top" is also a question of which hand constrains and contains the other.

Power, therefore, can be understood as a primary organizing element of Bauer's Toccata; it is not wielded by only one party, but it flows from one to the other and back. Moreover, in the specific ways in which power is used in the piece, it is not a means to terrify a weaker party, but rather gives the music a playful quality, making the pursuit of one hand by the other a game. If we choose to apprehend this composition, which Bauer dedicated to Crawford, from Cusick's position that a relationship between women might be one of a "continuous circulation of power," then the relationship between the pianist's hands--two equals at least pre-compositionally--might thus be heard as expressive of a relationship between women.

* * *

Bauer's Four Piano Pieces were premiered in April, 1930

at a League of Composers Concert in New York by Harrison Potter, who continued to perform them at recitals in New England and New York over a twenty-year span, up through the 1950s.¹¹ By the time Bauer composed these pieces, she had published at least seven compositions for solo piano.¹² Her first two piano works, Arabesque and Elegie were published in 1904; by 1930, she had published numerous songs with piano accompaniment and had also completed a violin sonata and a string quartet.¹³

As a solo keyboard work characterized by sweeping melodic gestures, continuously active eighth notes, and a somewhat improvisatory flair, Bauer's piece merits its designation as a toccata; the origin of the word "toccata," from the Italian "toccare" ("to touch"), is suggestive in the context of Cusick's account of musical experience. Example 6-2 gives the score:

Example 6-2. Bauer, Toccata
from Four Pieces for Piano, op. 21, measures 1-36

TO RUTH CRAWFORD

FOUR PIANO PIECES

III

TOCCATA^{*}

Marion Bauer, Op. 21, #2 3

Allegro scherzando

pp leggiero

7

14

21

meno mosso

29

mf

f *mf*

ff *pp* *pp*

^{*} Accidentals apply to individual notes only; they are not effective through the measure

Example 6-2 (page 2). Bauer, Toccata, measures 37-79

The musical score consists of six systems of staves, each beginning with a measure number in a box:

- System 1 (Measures 37-43):** Starts with measure 37. Includes the dynamic *cresc.* and *ff*. A dotted line with an '8' above it spans measures 41-43.
- System 2 (Measures 44-50):** Starts with measure 44. Includes dynamics *f*, *ff*, *dim.*, and *f dim.*
- System 3 (Measures 51-57):** Starts with measure 51. Includes the dynamic *p*.
- System 4 (Measures 58-65):** Starts with measure 58. The tempo marking *Scherzando* appears above the staff. Includes dynamics *mp* and *sf sf*.
- System 5 (Measures 66-72):** Starts with measure 66. Includes the dynamic *poco a poco cresc.* and *f*.
- System 6 (Measures 73-79):** Starts with measure 73. Includes dynamics *f* and *rit.*

Example 6-2 (page 3). Bauer, Toccata, measures 80-120

80

mp *poco a poco cresc.*

87

95

fff *pp* *Presto*

105

p *molto cresc.*

113

ff *fff*

Also typical of a toccata is the composition's relatively free form: it comprises seven sections, distinguished by texture, harmony, and rhythm. Nearly all of the sections increase their dynamic levels throughout.¹⁴

Section 1 (mm. 1-22) opens with alternating dyads, one to an eighth note, continuing until the performer's hands join at m. 23, playing the heavy *forte* chords that begin the next section. The left hand's pitches are drawn exclusively from the white keys and centered upon C; the right hand's pitches are drawn from the black keys and are centered on G $\flat$; the hands' relative positioning concentrates power in the right hand. Neither hand dominates in the next three sections: in section 2 (mm. 23-33), each hand plays three- and four-note harmonies made up of both black and white notes and based primarily on the intervals of a fourth and fifth; here both hands play on the same beats rather than on alternate beats. Sections 3 (mm. 34-43) and 4 (mm. 44-59) separate the duties of the hands, giving the left hand a brisk staccato accompaniment and the right hand a more melodic line, as the fourth- and the fifth-based harmonies are maintained. Section 5 (mm. 60-79) presents the two parts working together to form a composite line, a situation that is overturned when the left hand assumes the dominant position for the first time. This section again divides the white and black pitch material between the hands but without

the regularly alternating dyadic organization of section 1. The right hand energetically resists the left hand's attempt to control it, and the playful struggle between the two hands through section 6 (mm. 80-101) drives the music to the composition's climax in mm. 98-100. In section 6 the right hand maintains the eighth-note pulse while the left hand plays half notes and quarter notes; both hands play pitches drawn primarily from the black keys before moving to the climax in mm. 98-100. Section 7 (mm. 102-120) begins as section 1 did, with alternating dyads played on white and black keys, and so repeats the situation of right-hand dominance; the piece briefly surges up to a second, smaller climax just before the final cadence after which the hands separate into distinct registers.

A closer look at section 1 shows that while the principle of alternating dyads organizes both the upper and lower parts, it is applied in different ways for each hand. Throughout this section, which ends in m. 22, the left hand is confined to the white keys of the piano. This hand plays a stream of parallel thirds, each of which is connected to the next by either a step or a third. Pitch class C functions frames the left hand in three ways: as the first bass note; as the lower pitch of the dyad to which the thirds circle back in mm. 5, 10-12, and 15-17; and as the last bass note of the section. In contrast, the right hand's pitches are drawn entirely from the black keys of the

piano: this hand's pitch center is G $\flat$, heard as the uppermost pitch in the opening four bars; and it returns in m. 11 to dominate the final eight bars of the section.

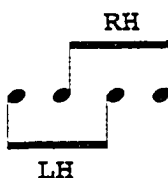
The hands are further distinguished by interval size. All of the left hand's harmonic intervals are thirds, while the right hand's dyads are comprised of intervals larger than a third--initially a fourth, then a fifth, sixth, seventh, and, by m. 21, an octave. The right hand may thus be construed more generally as differing from the left in two ways: its dyads are relatively large (that is, larger than a third) and its intervals can be characterized by their tendency to change, whereas the left hand projects a single, relatively small interval that is kept constant for nearly all of the section.

In addition to these intervallic considerations, rhythm also differentiates the music each hand plays. In section 1 the hands never play at the same time. Dyads are dispensed either to the strong eighth-note beats of the bar or to its weak beats, a distribution that occasionally switches from hand to hand--for example, in the opening bar the left hand plays on the first and third eighth notes in a 2/4 meter while the right hand plays on the second and fourth eighth notes. In m. 6 this arrangement changes--the right hand moves into the first eighth note position, now occupying the strong beats while the left plays on the weak beats. Measure 9 reverts to the original rhythmic organization, so

that the right hand moves back to its original second and fourth eighth note positions, and so forth.

Figure 6-1 gives a model for the first four-note situation in measure 1.

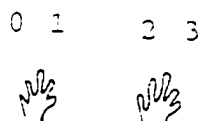
Figure 6-1. Position of hands in measure 1, beat 1



From left to right, the pitches played by the left hand are represented by the first and third notes, which are beamed together; the pitches played by the right hand are represented by the second and fourth notes, which are also beamed together. Figure 6-1 clarifies the aspect of contour in my analytical model, which emphasizes the relative position of the notes rather than their exact pitches and describes the relative positioning of the pianist's hands when performing any given contour. Assuming that a pianist would play the music of the upper staff with the right hand and the music of the lower staff with the left, we can track the positions of the hands relative to each other throughout the passage.

Figure 6-2 helps to illustrate the method by which I shall label these positions.

Figure 6-2. Numerical Method of Labelling a Hand Position



By assigning "0" to the finger of the left hand that plays the lower note of its dyad, "1" to the finger that plays the left hand's upper note, "2" to the finger of the right hand that plays the lower note of its dyad, and "3" to the finger that plays the right hand's upper note, we can label the situation in Figure 6-1 <0213>. From left to right, the first number indicates which finger plays the lowest note of the cluster of four notes, the second number tells which finger plays the second lowest note, and so forth.¹⁵ This method of numbering the contours is consistent with the system of contour labelling previously established by Robert Morris.

In m. 1 the left hand's ascent from C-E to D-F alters the initial <0213> relationship between the hands. Figure 6-3 illustrates this second two-dyad grouping.

Figure 6-3. Cseg <2013>



Using the numerical notation introduced above, we can name this new relationship <2013>. As the model shows, this notation describes the situation in which the pitches in the upper staff flank the pitches in the lower staff, one in which the right hand's notes encompass the left hand's notes.

Figure 6-4 lists the six possibilities for the four-note configurations in this model, along with the number of occurrences of each configuration in sections 1 (mm. 1-22), 5 (mm. 60-79) and 7 (mm. 102-113). I identify each pattern in Figure 6-4 with an upper-case letter in order to compare them more easily.

Figure 6-4. Six Possibilities for Four-Note Configurations

A = <0123>

B = <2301>



C = <0213>

D = <2031>



E = <0231>

F = <2013>



Appendix G identifies the pattern for each combination of successive dyads in sections 1, 5, and 7. It lists the four patterns for each bar that are formed between each consecutive pair of dyads between the two staves (e.g., dyads 1-2; 2-3; 3-4; and 4-1 of the next bar).¹⁶ As in my analyses of Crawford's quartet, third movement and of "Chinaman, Laundryman," my method calculates the contour of a particular musical situation with the same cardinality and compares each of these situations to a norm in order to chart a narrative of the piece. The frequency of the patterns C, <0213>, and F, <2013>, is apparent from the listing; the other patterns occur infrequently.¹⁷ The total number of occurrences of both C and F is $57 + 18 = 75$ out of 81 four-note patterns, or ninety-three per cent of all hand positions in section 1.

Figure 6-5 gives the number of occurrences of each configuration in sections 1, 5, and 7, sections in which hand crossing is prominent.

Figure 6-5. Number of Occurrences of Csegs
in Sections 1, 5, and 7

	<u>section 1</u>	<u>section 5</u>	<u>section 7</u>
A = <0123>	4	7	2
B = <2301>	0	0	0
C = <0213>	57	32	24
D = <2031>	5	0	4
E = <0231>	0	0	0
F = <2013>	18	12	12

Several pieces of information in Figure 6-5 are significant: first, <0123>, the position in which the hands do not cross, occurs rarely--in 4 of the 84 four-note groups in these twenty-two bars. Second, the pattern occurring most frequently is <0213>, the pattern of the opening bar; it occurs 57 times. This position may be thus understood to be the "standard" or normative relationship between the hands in this section. Third, there is a notable disparity between the two models given in the third row, <0231> and <2013>. <0231> is never asserted, in contrast to its inversion, <2013>, which is stated relatively frequently--a total of 18 times.

Both of the patterns occurring most frequently in section 1, <0213> and <2013>, require that the right hand be placed over the left. If the key domains were reversed so that the right hand were assigned the white keys and the left hand the black keys--for example, transposing m. 1 up a tritone results in the left hand playing two black notes, (F#4-A#4), the right hand playing two white notes (G4-C5), and the left hand playing one black note and one white note, (G#4-B4), then the left hand would be dominant. That is, patterns <0213> and <2013> could theoretically be played with either the right or left hand on top. But because of their position on the keyboard, the distribution of white and black keys to each hand ensures that these <2013> situations result in right hand dominance.

This division of black and white keys between the hands serves two purposes. Not only does it strengthen the characterization of the hands as maximally opposed, but the right hand's stubborn adherence to the black keys in this and subsequent sections that I shall discuss shortly underscores its resolution to preserve its place as the dominant hand. If one hand is situated on the white keys, playing the black keys ensures that the other hand will be dominant. Only by later appropriating the black-key material for itself would the left hand have any chance to become the dominant hand, which it does in section 6, the section containing the piece's climax.

In m. 9, the left hand begins a stepwise descent by thirds from F5-A5 on the white keys. The right hand's second dyad in m. 9, E♭5-D♭6, closes around the left hand's E5-G5 dyad in an attempt to check its movement, a move the left hand resists by moving lower still, to D5-F5 in m. 10. During this passage, the right hand continues to shadow the left, inching down after it, which results in a short chain of <0213> positions.

In m. 11, the right hand again encloses the left hand's pitches and pursues it down the keyboard in a series of C and F (<0213> and <2013>) hand positions. Pattern D, <2031>, occurs in m. 15 between the left hand's E4-G4 and the right hand's D♭4-G♭4; it is also in a right-hand dominant position.

Measure 17 sets off the final descent by both hands toward the cadence in m. 22. In these six bars, the right hand's intervals expand to their largest intervals yet--sixths and sevenths in mm. 17-20 and octaves in mm. 21-22. The last three bars of section 1 give a steady stream of <0213> patterns, seven in all. The left hand continues to sound its diatonic thirds, then in mm. 21-22 plays larger intervals, still on white keys, of a fifth, seventh, and sixth. But because the right hand's G $\flat$ 3-G $\flat$ 4 dyad is large and is played on the black keys, the left hand must still remain the non-dominant hand.

Sections 2, 3, and 4 mark an abrupt change in this imbalanced situation. Beginning in m. 23, the hands are drawn apart into distinct registers, a situation that continues until section 5. As a result, the right hand forgoes its dominant position. In addition, pitch material is now shared between the two parts; each hand partakes of both black and white keys.

Measure 23 launches section 2. Here the right hand remains in the register in which it concluded section 1, while the left hand dives down to a lower register to free itself from being pinned underneath the right hand as it was for most of section 1. Both hands completely abandon the dyad texture: the right hand's G $\flat$ octave is changed into an F $\sharp$ octave which is divided at the fourth by B; the left hand plays the octave B which is divided at the fifth by F $\sharp$.

The double statement of F# and B in both parts emphasizes the balance between them. Both hands play the same pitch classes; the distinction between the hands as a performer of either white-key or black-key material has dissolved. Furthermore, the harmonies in both parts are based upon the intervals of a fourth or a fifth: in m. 24, for example, the left hand moves up from B-F#-B to D-A-D and the right hand moves down from F#-B-F# to E-A-E.

Measure 34 introduces section 3, which continues the cooperative effort by the two parts. As in section 2, the hands keep to their separate registers. However, the left hand takes the initiative to move closer to the right hand-- in m. 34 its uppermost voice moves up from B3 to D4, a second away from the right hand's E4, and in m. 36 it moves even higher, leaping up a major ninth from B2 to C#4 to land four semitones from the right hand's F4. Beginning in m. 37, the roles of pursuer and pursued are reversed: the left hand follows the right hand upward, but the right hand quickly avoids capture, moving higher still to seek refuge in m. 43's D6-G6-D7. Again, the piano's pitch material, based upon fifths and fourths, is shared by the two hands.

In m. 44, which begins section 4, the left hand first plays ascending major ninths, the interval it used in section 3 to climb upwards rapidly. The right hand remains in its high register, keeping its distance from the left hand, which now assumes a more accompanimental role.

Beginning in m. 47, the left hand moves up once again toward the right hand: on the last eighth note of m. 49, the left hand's C#5 comes very close to the right hand, within a semitone. But this time, the right hand answers the left hand's ascent with its descending gesture in m. 50, and rather than risk being positioned again under the right hand, the left hand beats a hasty retreat in mm. 51-52. In mm. 53-59, the right hand continues its descent, but the left hand manages to keep a safe distance of at least four semitones between them.

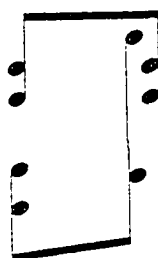
Measure 60, the first bar of section 5, returns to the earlier distribution of white keys. Initially, the two parts work together to present a composite line comprising the two ninths (E2-F#3-B2-C#4) that the left hand presented in mm. 44-45; this process does not last long. As Appendix G shows, the position that had characterized section 1, C, <0213>, reappears in mm. 62-63.¹⁸ Position F, <2013>, returns in m. 65 between the third and fourth eighth notes and also makes an appearance in m. 66 and 67. The final bars of section 5, mm. 77-79, give four more instances of F, which lead immediately to the next section.

In section 6, the issue of hand dominance from sections 1 and 5 comes again to the fore. But the left hand's new pitch domain makes possible a significant change in the musical narrative. The right hand's opening dyad, m. 80's D♭3-G♭3, recalls section 1, in which its first dyad was also

D $\flat$ -G $\flat$. However, unlike section 1, the left hand is no longer confined to the white-key world it formerly inhabited; instead, it stations itself on the black keys. It begins the passage by playing B $\flat$ 1 and B $\flat$ 2 for the duration of a half note. The pianist's hands begin in the uncrossed <0123> position; after the left hand initially strikes the low B $\flat$ s in m. 80, the right hand responds with the three dyads in a register clear of the left hand's B $\flat$ s.

The relation of the hands, <0123>, is then transformed. In m. 81, the left hand reaches over the right to play the B $\flat$ s that lie an octave above its previous B $\flat$ pairing, B $\flat$ 1-B $\flat$ 2, while the right hand remains in position, repeating the three dyads it played in m. 80. Example 6-3 illustrates this registral transfer in contour space.

Example 6-3. Registral Transfer from cseg <0123> to <0231>



<0123>

<0231>

The resulting four-note structure now formed by the hands is <0231>, labelled as E. (Depicting the motion from one contour to another is similar to the process I describe in Chapter 2, Examples 2-6, 2-7, and 2-8). As Figure 6-5 shows, this position is one that did not occur at all in sections 1 or 5; in fact, measure 81 contains its first occurrence in the piece.

Measured according to the model of dominance I presented earlier, this particular position, <0231>, is the one in which the left hand's dyad contains the right hand's dyad; it occurs here for the first time. With this measure, the left hand successfully inverts the right hand's dominance established earlier in the piece; the left hand is now in control of the right.

The novel situation of the right hand being immobilized by the left governs mm. 81-85. In m. 82, the left hand moves back to its original pair of B $\flat$'s, a move that uncrosses the hands and frees the right hand to ascend from D $\flat$ 3-G $\flat$ 3 to the next pair of black keys, E $\flat$ 3-A $\flat$ 3. In m. 83 the left hand responds by moving up an octave and a semitone, to C $\flat$ 3 and C $\flat$ 4, which again produces the <0231> position.¹⁹ (As did mm. 80-81, these bars recall the opening section, in which D $\flat$ -G $\flat$ also moved up to E $\flat$ -A $\flat$ in m. 3.)

The next two-bar grouping, mm. 84-85, repeats this two-step gesture of uncrossing followed by enclosing. The left

hand's motion constrains the right hand, causing it to reiterate its three-dyad statement from the previous bar while the left hand gains more and more freedom to move: in m. 85 it leaps up a tenth, from the B $\flat$ 2-B $\flat$ 3 octave statement to D $\flat$ 3-D $\flat$ 4, and supplants its half notes with the more active quarter notes of m. 85. This new quarter-note rhythm incites the right hand also to move in quarter notes, as suggested by the diagonal line drawn in the score that joins m. 85's E $\flat$ s to the G $\flat$ s in the upper staff.

Measure 86 offers a momentary respite for the right hand. The hands are kept separate in the <0123> formation; in m. 87, the left hand even backs away from the right hand. Rather than maintaining the pattern of moving up an octave to enclose the right hand, the left moves down an octave, to strike B $\flat$ 0 and B $\flat$ 1, and the right hand is permitted to play its three dyads unimpeded by the left hand. The left hand begins here to draw upon white keys as well as black keys-- in m. 87, it plays D3-G3 followed by D $\flat$ 3-G $\flat$ 3. This statement mirrors the right hand's material: it plays a pair of dyads, C4-F4 followed by D $\flat$ 4-G $\flat$ 4, simultaneously with the left hand.

But this return to the original <0123> situation does not last long. In m. 88, the right hand continues upon its linear course of ascending octaves. Here it also presents an additional series of dyads of either a major third or perfect fourth that fills in the second eighth note beat

against the right hand's octaves in the upper voice.

After unexpectedly remaining silent on the downbeat of m. 88, the left hand enters again on beat two with Ab3-Eb4-Ab4. The chain of octave-plus-dividing-fifths it plays in mm. 88-90 occupies the second quarter note beat. In m. 89, the left hand returns to its former task of stating octave Bbs for the duration of a half note while continuing to present this new series of three-note chords built from either a fifth plus a fourth or two fourths.

Example 6-4 depicts in contour space the interlocking relationship of the pitches in m. 88, beat two.

Example 6-4. Relationship of the pitches in m. 88, beat 2



The left hand's uppermost note, Ab4, wedges itself just midway between the right hand's Gb4 and Bb4, bringing the left thumb over the right thumb and creating a contour situation that can be classified as <0213>.²⁰

As soon as the left hand strikes this three-note chord which brings it closer toward recapturing its former role of covering the right hand, the right hand emphatically

repositions itself. It moves up in m. 88 from G $\flat$ 4-B $\flat$ 4 to the octave G $\flat$ 4-G $\flat$ 5, which not only shakes itself free of the position of being covered by the left hand, but in fact reverses its position in relation to the left: the lower note of its new octave, G $\flat$ 4, places itself on top of the left hand's A $\flat$ 4, so that the right hand now covers the left thumb.

The right hand's determination to elude the left hand is evident in this gesture, which we might think of as an *échappée* in contour space rather than in pitch space. It is repeated twice, in mm. 89 and 90; each time, the same three events take place: on the second eighth note of the bar, the right hand plays the interval of a fourth; on the third eighth note, the left hand plays a three-note group in which its upper two pitches surround the lower note of the right hand's dyad and covers the right thumb; and on the fourth eighth note of the bar, the right hand pries itself from under the left hand to play a new dyad, an octave, whose lower note lies between the upper two notes of the left hand, so that the right hand now covers the left thumb.

Having had the tables turned, the left hand abandons in m. 91 the idea of encroaching into the musical space of the right hand. In mm. 91-92, the hands do not intersect; the closest they come in these two bars is the whole step in m. 92 between the right hand's B $\flat$ 4 and the left hand's A $\flat$ 4.

Measure 93 presents for the last time in section 6 an

instance of pitch crossing between hands. On the first quarter note, the right hand's lower note, C5, appears between the left hand's A♭4 and D5; and on the second quarter note, the right hand's F5 appears between the left hand's D♭5 and G♭5. In both of these cases, a pianist would place the left hand over the right hand in playing the black keys forward on the keyboard.

As a response to being placed underneath the left hand for this brief moment, in mm. 94-100 the right hand darts up to the highest register of the piece, one unencumbered by the left hand. The hands do not cross in these seven bars but move in contrary motion to the more distant reaches of the keyboard. This passage occurs as the piece builds to m. 98's climactic eight-note chord, played *fff*, which is sustained for three half notes. This chord, which consists of B♭♭3-E♭4-G♭4-C♭5 in the left hand and G♭6-C♭7-E♭7-G♭7 in the right hand, suggest the left hand's ultimate failure--while the right hand has succeeded in clinging to pitch class G♭, the left hand's bass pitch has slipped down from B♭ one semitone to B♭♭; it cannot continue to maintain its grip upon the crucial B♭. Even if the right hand had remained within reach, the left hand's inability to remain on B♭ prevents it from again being the dominant hand.

After a measure-long rest, the seventh and final section begins in m. 101. It restates the material from the opening of the piece but at a *presto tempo*. In m. 106,

section 7 diverges from the corresponding moment in m. 5; here, pitches of both hands proceed up by step. As Appendix G notes, measures 107-111 are comprised entirely of patterns C <0213> and F <2013>, the two hand positions that predominated section 1. Both hands clamber up to the top of the keyboard. Significantly, their rush to a higher register culminates with the left hand returning triumphantly to black key material: in m. 113, it plays a B $\flat$ 5-B $\flat$ 6 octave divided at the fourth, E $\flat$, while the right hand plays F6-B $\flat$ 6-E $\flat$ 7. Because the left hand is once again positioned on black keys and because the right hand's note that crosses the left hand's note falls on a white key (F6), the piece ends with a <0213> final position, in mm. 113-114, but is one in which the left hand crosses over the right thumb, recalling mm. 88-90.

The Toccata then concludes in mm. 117-120 with the hands withdrawing into separate registers. Both hands join in playing the two six-note chords of the final cadence--the penultimate chord consists of all white-key notes based upon the now familiar principle of the octave divided at the fifth--the left hand plays G2 and G3 with D3 as its interior pitch, and the right hand plays A3 and A4 with E4 as its interior pitch--and the final chord is composed of five black-key notes, F4-B $\flat$ 4-E $\flat$ 5 in the right hand and E $\flat$ 2-B $\flat$ 2-E $\flat$ 3 in the left. The piece concludes with the hands separating into distinct registers, and thus with an

equalizing of their relationship.

* * *

My reading of Bauer's Toccata has offered a formal model of how the performer's body can be integrated into analysis. The approach introduced here suggests a narrative in which the pianist's hands function as its musical agents; the continually shifting relationship of the hands in terms of which is on top ensures that one never exclusively controls the other; instead, power is continually passed between them.

In a diary entry from February, 1930, Crawford reflects upon her friendship with Bauer, writing:

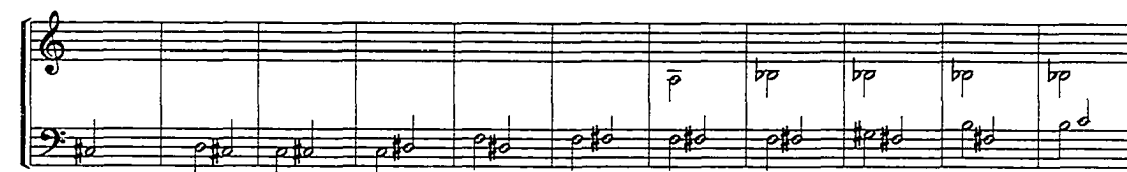
I am Marion's child. Gnome, gypsy, monkey, she calls me. I am not young enough to be her child, in years, and yet--I am. But strange ... I wonder if she knows that often I feel very much as tho she were my child, and feel that I really am the older one?²¹

In light of Crawford's musings on the dual nature of their relationship and Bauer's dedication of her Toccata to Crawford, we might contemplate whether the work can be understood as giving musical expression to the relationship between women that Suzanne Cusick describes, one that permits the "flow of power in both directions." Heard in this way, the Toccata suggests that the act of composing might have given a women modernist like Bauer the means to fashion "a room of one's own"--not Woolf's physical space,

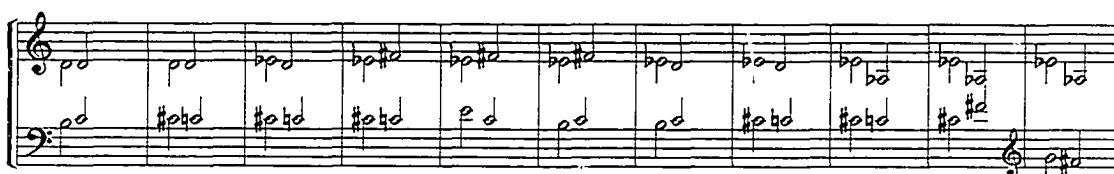
but a musical one--by giving her both the technical means and aesthetic freedom to forge an innovative and subtle musical narrative.

APPENDIX A

LIST OF SONORITIES, CRAWFORD STRING QUARTET, MVT.3



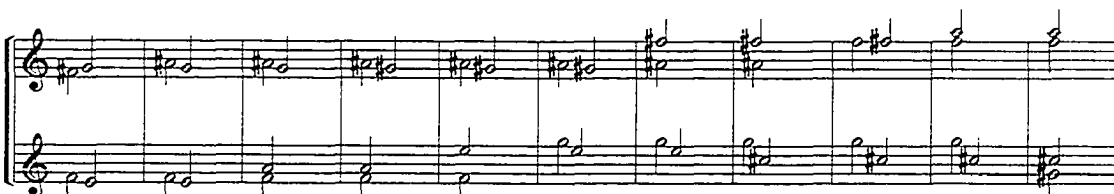
measure	1	3	5	8a	8b	13a	13b	14a	14b	15	18
sonority	1	2	3	4	5	6	7	8	9	10	11



19a	19b	20	21	22	24	25	26	29	30	32
12	13	14	15	16	17	18	19	20	21	22



33	34	37a	37b	39a	39b	40	43	45	46	47
23	24	25	26	27	28	29	30	31	32	33



49	50a	50b	51	53	56a	56b	57	58a	58b	59
34	35	36	37	38	39	40	41	42	43	44



60	61a	61b	62a	62b	63a	63b	64	65a	65b	66
45	46	47	48	49	50	51	52	53	54	55

67 68 69 70a 70b 71a 71b 72 73 75a
56 57 58 59 60 61 62 63 64 65

75b 75c 75d 76 77a 77c 77b 77c 77d 78a 78b 78c 78d
66 67 68 69 70 71 72 73 74 75 76 77

79a 79b 79c 79d 80a 80b 80c 81a 81b 81c 82a
78 79 80 81 82 83 84 85 86 87 88

82b 82c 83a 83b 84a 84b 85a 85b 86a 86b 87a
89 90 91 92 93 94 95 96 97 98 99

87b 88a 88b 90a 90b 90c 91 94a 94b 96a 96b
100 101 102 103 104 105 106 107 108 109 110

APPENDIX B

DATA SUMMARY, CRAWFORD STRING QUARTET, MVT. 3

<u>Meas.</u>	<u>Sonority</u>	<u>Strand Pattern</u> [hi-mid-lo]	<u>Permutation</u>	<u>Degree of Twist</u>	<u>Max</u>	<u>N</u> = Degree/Max
13b	7	<2-3-4>	()	0	3	0
14a	8	<2-3-4>	(34)	0	3	0
14b	9	<2-4-3>	(24)	1	3	.33
15	10	<4-2-3>	(243)	2	3	.67
18	11	<3-4-2>	(243)	2	3	.67
19a	12	<2-3-4> (1)	(34)	0	3	0
19b	13	<2-4-3> (1)	--	1	3	.33
20	14	<2-1-4-3>	(12)	2	6	.33
21	15	<1-2-4-3>	(24)	1	6	.17
22	16	<1-4-2-3>	(234)	2	6	.33
24	17	<1-2-3-4>	(12)	0	6	0
25	18	<2-1-3-4>	(34)	1	6	.17
26	19	<2-1-4-3>	(13)	2	6	.33
29	20	<2-3-4-1>	(23)	3	6	.5

<u>Meas.</u>	<u>Sonority</u>	<u>Strand Pattern</u> [hi-mid-lo]	<u>Permutation</u>	<u>Degree of</u> <u>Twist</u>	<u>Max</u>	<u>N</u>
30	21	<3-2-4-1>	(234)	4	6	.67
32	22	<4-3-2-1>	(234)	6	6	1.0
33	23	<2-4-3-1>	(34)	4	6	.67
34*	24	<2-3-4-1>	(14)	3	6	.5
37a	25	<2-3-1-4>	()	2	6	.33
37b	26	<2-3-1-4>	(132)	2	6	.33
39a	27	<1-2-3-4>	(34)	0	6	0
39b	28	<1-2-4-3>	(142)	1	6	.17
40	29	<4-1-2-3>	(142)	3	6	.5
43	30	<2-4-1-3>	(13)	3	6	.5
45	31	<2-4-3-1>	()	4	6	.67
46	32	<2-4-3-1>	()	4	6	.67
47	33	<2-4-3-1>	(1342)	4	6	.67
49	34	<1-2-4-3>	(12)	1	6	.17
50a	35	<2-1-4-3>	(134)	2	6	.33
50b	36	<2-3-1-4>	()	2	6	.33

* There appears to be a misprint in the published version of the score in m. 35: in the composer's personal copy (Library of Congress, Seeger Collection), C5 in Violin 2 is crossed out and a B4 is written in, and is tied to the B4 in m. 34.

<u>Meas.</u>	<u>Sonority</u>	<u>Strand Pattern</u> [hi-mid-lo]	<u>Permutation</u>	<u>Degree of</u> <u>Twist</u>	<u>Max</u>	<u>N</u>
51	37	<2-3-1-4>	(23)	2	6	.33
53	38	<3-2-1-4>	(1234)	4	6	.67
56a	39	<4-3-2-1>	(123)	6	6	1.0
56b	40	<4-1-3-2>	()	4	6	.67
57	41	<4-1-3-2>	(23)	4	6	.67
58a	42	<4-1-2-3>	(14)	3	6	.5
58b	43	<1-4-2-3>	(234)	2	6	.33
59	44	<1-2-3-4>	()	0	6	0
60	45	<1-2-3-4>	()	0	6	0
61a	46	<1-2-3-4>	()	0	6	0
61b	47	<1-2-3-4>	()	0	6	0
62a	48	<1-2-3-4>	()	0	6	0
62b	49	<1-2-3-4>	(12)	0	6	0
63a	50	<2-1-3-4>	()	1	6	.17
63b	51	<2-1-3-4>	()	1	6	.17
64	52	<2-1-3-4>	()	1	6	.17
65a	53	<2-1-3-4>	()	1	6	.17
65b	54	<2-1-3-4>	()	1	6	.17

<u>Meas.</u>	<u>Sonority</u>	<u>Strand Pattern</u> [hi-mid-lo]	<u>Permutation</u>	<u>Degree of</u> <u>Twist</u>	<u>Max</u>	<u>N</u>
66	55	<2-1-3-4>	()	1	6	.17
67	56	<2-1-3-4>	()	1	6	.17
68	57	<3-1-2-4-5>	--	2	9	.22
69	58	<3-1-2-4-5-6>	--	2	13	.15
70a	59	<3-1-4-2-5-6-7>	--	3	18	.17
70b	60	<3-1-4-2-7-5-6-8>	--	5	24	.21
71a	61	<3-1-4-2-7-5-8-6>	(68)	6	24	.25
71b	62	<1-3-2-7-4-5-8-6>	(13) (274)	5	24	.21
72	63	<1-3-2-7-4-5-8-6>	()	5	24	.21
73	64	<1-3-2-4-5-7-6-8>	(457) (68)	2	24	.08
75a	65	<1-4-5-2-7-6-8-3-10-9-11-12>	--	9	46	.20
75b	66	<2-1-3-4>	--	1	6	.17
75c	67	<3-4-2-1>	(14) (23)	5	6	.83
75d	68	<5-6-7-3-1-8-4-2>	--	17	24	.71
76	69	<2-3-1-4>	--	2	6	.33
77a	70	--	--	-	-	-
77b	71	--	--	-	-	-
77c	72	<1-2-3>	--	0	3	0
			(12)			

<u>Meas.</u>	<u>Sonority</u>	<u>Strand Pattern</u> [hi-mid-lo]	<u>Permutation</u>	<u>Degree of</u> <u>Twist</u>	<u>Max</u>	<u>N</u>
77d	73	<2-1-3>	(132)	1	3	.33
78a	74	<1-3-2>	()	1	3	.33
78b	75	<1-3-2>	(13)	1	3	.33
78c	76	<3-1-2>	()	2	3	.67
78d	77	<3-1-2>	(123)	2	3	.67
79a	78	<1-2-3>	()	0	3	0
79b	79	<1-2-3>	(23)	0	3	0
79c	80	<1-3-2>	(23)	1	3	.33
79d	81	<1-2-3>	()	0	3	0
80a	82	<1-2-3>	(23)	0	3	0
80b	83	<1-3-2>	(23)	1	3	.33
80c	84	<1-2-3>	(123)	0	3	0
81a	85	<2-3-1>	(23)	2	3	.67
81b	86	<3-2-1>	(132)	3	3	1.0
81c	87	<2-1-3>	(13)	1	3	.33
82a	88	<2-3-1>	()	2	3	.67
82b	89	<2-3-1>	(13)	2	3	.67
82c	90	<2-1-3>	(13)	1	3	.33

<u>Meas.</u>	<u>Sonority</u>	<u>Strand Pattern</u> [hi-mid-lo]	<u>Permutation</u>	<u>Degree of</u> <u>Twist</u>	<u>Max</u>	<u>N</u>
83a	91	<2-3-1>		2	3	.67
83b	92	<2-3-1>	()	2	3	.67
84a*	93	<3-2-1>	(23)	3	3	1.0
84b	94	<1-3-2>	(123)	1	3	.33
85a	95	<1-2-3>	(23)	0	3	0
85b	96	<1-3-2>	(23)	1	3	.33
86a	97	<3-2-1>	(132)	3	3	1.0
86b	98	<3-1-2>	(12)	2	3	.67
87a	99	<1-2-3>	(123)	0	3	0
87b	100	<2-3-1>	(123)	2	3	.67
88a	101	<2-3-1-4>	--	2	6	.33
88b	102	<2-3-1-4>	()	2	6	.33
90a	103	<2-3-1-4>	()	2	6	.33
90b	104	<3-1-2-4>	(123)	2	6	.33
90c	105	<1-2-3> (4)	--	0	3	0
91	106	<1-2-3-4>	--	0	3	0
94a	107	<1-3-4>	--	0	3	0

* In the composer's score (Seeger Collection, Library of Congress), a slur connects violin 2's pitch in m. 84 to its last note in m. 83, making the pitch a B $\flat$ rather than B $\sharp$.

APPENDIX C

MORRIS'S CONTOUR REDUCTION ALGORITHM*

Definition: Maximum pitch: Given three adjacent pitches in a contour, if the second is higher than or equal to the others it is a maximum. A set of maximum pitches is called a maxima. the first and last pitches of a contour are maxima by definition.

Definition: Minimum pitch: Given three adjacent pitches in a contour, if the second is lower than or equal to the others it is a minimum. A set of minimum pitches is called a minima. The first and last pitches of a contour are minima by definition.

Algorithm: Given a contour C and a variable N:

step 0: Set N to 0.

step 1: Flag all maxima in C; call the resulting set the max-list.

step 2: Flag all minima in C; call the resulting set the min-list.

step 3: If all pitches in C are flagged, go to step 9.

step 4: Delete all non-flagged pitches in C.

step 5: N is incremented by 1 (i.e., N becomes N+1).

step 6: Flag all maxima in max-list. For any string of equal and adjacent maxima in max-list, either: (1) flag only one of them; or (2) if one pitch in the string is the first or last pitch of C, flag only it; or (3) if both the first and last pitch of C are in the string, flag (only) both the first and last pitch of C.

step 7: Flag all minima in min-list. For nay string of equal and adjacent minima in min-list, either: (1) flag only one of them; or (2) if one pitch in the string is the first or last pitch of C, flag only it; of (3) if both the first and last pitch of C are in the string, flag (only) both the first and last pitch of C.

step 8: Go to step 3.

step 9: End. N is the "depth" of the original contour C.

The reduced contour is the prime of C; if N=0, then the original C has not been reduced and is a prime itself.

*From Robert D. Morris, "New Directions in the Theory and Analysis of Musical Contour," Music Theory Spectrum 15/2 (1993), 212.

APPENDIX D

PRIME CONTOURS OF VOICES I AND II, CRAWFORD, QUARTET, MVT. 4

<u>measure(s)</u>	<u>Voice I</u>	<u>Voice II</u>	<u>measure(s)</u>
2	<01>		
		<1201>	3-5
6	<102>		
		<102>	7-9
9-10	<201>		
		<2031>	10-12
13	<1302>		
		<102>	13-16
16-17	<201>		
		<1032>	17-19
19-20	<1032>		
		<201>	20-21
21-23	<102>		
		<1032>	23-25
24-25	<1032>		
		<1302>	25-26
26-27	<10>		
		<1032>	27-28
28-29	<10>		
		<1302>	29-30
30-31	<120>		
		<102>	31-33
31-34	<021>		
		<10>	34-36
35-37	<021>		
		<021>	37-38
38-40	<2031>		
		<102>	40-41
41-43	<2031>		
		<01>	43-44
44-46	<120>		
		<10>	46-47
46-49	<2301>		
		<021>	49
50-52	<2301>		
		<102>	52
52-54	<102>		
		<01>	54
55	<10>		

<u>measure(s)</u>	<u>Voice I</u>	<u>Voice II</u>	<u>measure(s)</u>
60-62	<01>		
63-65	<201>	<10>	63
65-68	<1032>	<201>	65
68-71	<1032>	<120>	68
71-73	<021>	<01>	70-71
74-76	<1302>	<10>	73-74
77-79	<1302>	<201>	76-77
80-82	<120>	<120>	79-80
83-86	<120>	<01>	81-83
86-87	<021>	<201>	84-86
88-89	<01>	<2031>	87-88
90-91	<01>	<2301>	89-90
92-93	<2301>	<2031>	91-92
94-96	<201>	<2301>	93-95
97-98	<2301>	<102>	96-97
100-102	<102>	<2301>	98-100
104	<2031>	<201>	101-103
107-108	<102>	<1302>	105-107
111	<201>	<201>	108-110
115	<10>	<1021>	112-115

APPENDIX E

CONTOUR DATA FOR PIANO IN CRAWFORD, "CHINAMAN, LAUNDRYMAN"

EXPLANATORY NOTE: The boss's text is italicized.

<u>meas.</u>	<u>contour</u>	<u>prime</u>	<u>text</u>	<u>deviance</u>
Section 1 -- T.				
1	[rest]		"Chinaman!"	
2	[rest]		"Laundryman!"	
3	[rest]		[rest]	
4	<8 7 6 4 1 5 3 0 2>	<2 0 1>	Don't call me "man!" I am	[norm]
5	<7 6 4 1 5 3 0 2 8>	<1 0 2>	worse than a slave.	
6	<6 4 1 5 3 0 2 8 7>	<1 0 3 2>	Wash!--- Wash!---	
7	<5 2 6 4 1 3 0 8 7>	<1 0 3 2>	Why can I wash away the	
8	<2 6 4 1 3 0 8 7 5>	<1 0 3 2>	dirt of others' clothes but	
9	<6 4 1 3 8 0 7 5 2>	<2 3 0 1>	not the hatred of my heart?	
10	<5 2 4 8 1 7 6 3 0>	<1 2 0>	My skin is yellow,--- Does my	
11	<4 6 3 2 1 8 5 0 7>	<1 3 0 2>	yellow skin color the clothes?	
12	<7 4 3 2 8 6 1 0 5>	<2 3 0 1>	Why do you pay me less	

<u>meas.</u>	<u>contour</u>	<u>prime</u>	<u>text</u>	<u>deviance</u>
Section 2 -- T₁₁				
13	<4 3 2 8 6 1 0 5 7>	<1 3 0 2>	for the same work?	
14	<1 8 7 4 0 6 3 5 2>	<1 3 0 2>	Clever boss!	
15	<7 6 4 0 5 3 4 2 1>	<2 0 1>	You know how to scatter the	
16	<7 4 0 6 3 5 2 8 1>	<2 0 3 1>	seeds of hatred among your	
17	<8 3 1 7 0 6 5 4 2>	<2 0 1>	ignorant slaves.	
18	<2 0 6 8 5 4 3 1 7>	<1 0 3 2>	Iron!--- Iron!---	
19	<0 6 8 5 4 3 1 7 2>	<0 2 1>	Why can I smooth away the	
20	<0 1 5 4 3 8 6 2 7>	<0 2 1>	wrinkle of others' dresses but	
21	<8 6 5 4 2 7 3 1 0>	<1 0>	not the miseries of my heart?	[norm ends]
Section 3 -- T₁₀				
22	<8 7 6 4 1 5 3 0 2>	<2 0 1>	Why should I come to America to	0
23	<7 6 4 1 5 3 0 2 8>	<1 0 2>	wash clothes? Do you think	0
24	<6 4 1 5 3 0 2 8 7>	<1 0 3 2>	Chinamen in China	0
25	<5 2 6 4 1 3 0 8 7>	<1 0 3 2>	wear no dresses?	0
26	<2 6 4 1 3 0 8 7 5>	<1 0 3 2>	I came to America	0
27	<6 4 1 3 8 0 7 5 2>	<2 3 0 1>	three days after my marriage.	0

<u>meas.</u>	<u>contour</u>	<u>prime</u>	<u>text</u>	<u>deviance</u>
28	<5 2 4 1 8 7 6 3 0>	<1 2 0>	When can I see her again? Only the 3	
29	<4 6 3 2 1 8 5 0 7>	<1 3 0 2>	almighty dollar knows!	0
30	<7 4 3 2 8 6 1 0 5>	<2 3 0 1>	Dry!--- Dry!---	0
Section 4 -- T₈				
31	<4 3 2 8 6 1 0 5 7>	<1 3 0 2>	Why do clothes dry, but	0
32	<0 8 6 3 7 5 2 4 1>	<0 2 1>	not my tears?	2
33	<8 6 3 7 5 2 4 1 0>	<1 0>	I work	2
34	<7 4 0 6 3 5 2 8 1	<2 0 3 1>	twelve hours a day,	0
35	<8 3 1 7 0 6 5 4 2>	<2 0 1>	he pays	0
36	<2 0 6 8 5 4 3 1 7>	<1 0 3 2>	fifteen dollars a week. My	0
37	<0 6 8 5 4 3 1 7 2>	<0 2 1>	boss says:	0
38	<0 1 5 4 3 8 6 2 7>	<0 2 1>	[rest]	0
39	<8 6 5 4 2 7 3 1 0>	<1 0>	"Chinaman,	0
Section 5 -- T₅				
40	<8 7 6 4 1 5 3 0 2>	<2 0 1>	go back to China, if you	0
41	<7 6 4 1 5 3 0 2 8>	<1 0 2>	don't feel satisfied!	0
42	<6 4 1 5 3 0 2 8 7>	<1 0 3 2>	There, un-	0

<u>meas.</u>	<u>contour</u>	<u>prime</u>	<u>text</u>	<u>deviance</u>
43	<3 0 4 2 8 1 7 6 5>	<1 0 3 2>	<i>limited</i>	4
44	<8 3 1 7 0 6 5 4 2>	<2 0 1>	<i>hours of toil:</i>	5
45	<1 7 5 0 4 3 2 8 6>	<1 0 3 2>	<i>two silver dollars a week,</i>	4
46	<0 5 7 4 3 2 1 6 8>	<0 1>	[rest]	5
47	<4 6 3 2 1 8 5 0 7>	<1 3 0 2>	<i>if you can find a job."</i>	0
48	<3 0 8 7 5 2 6 4 1>	<2 0 3 1>	[rest]	4
Section 6 -- T,				
49	<8 7 6 4 1 5 3 0 2>	<2 0 1>	Thank you, boss,--	0
50	<7 6 4 0 5 3 1 2 8>	<1 0 2>	for you remind me.	0
51	<3 1 7 2 0 6 8 5 4>	<1 0 3 2>	I know	4
52	<2 8 3 1 7 0 6 5 4>	<1 3 0 2>	bosses are robbers	6
53	<7 2 1 6 0 5 4 3 8>	<1 0 2>	ev'rywhere!	6
54	<0 5 2 4 1 8 7 6 3>	<0 2 1>	<i>Chinese boss says:</i>	4
55	<6 3 5 2 1 8 7 4 0>	<1 2 0>	[rest]	1
56	<4 6 3 2 1 8 5 0 7>	<1 3 0 2>	<i>"You Chinaman,</i>	0
57	<6 3 2 1 8 5 0 7 4>	<2 3 0 1>	<i>me Chinaman,</i>	2

<u>meas.</u>	<u>contour</u>	<u>prime</u>	<u>text</u>	<u>deviance</u>
Section 7 -- T₇				
58	<8 7 6 4 1 5 3 0 2>	<2 0 1>	come work for me	0
59	<0 7 5 2 6 4 1 3 8>	<0 1>	work for your fellow countryman!	1
60	<7 5 2 6 4 1 3 0 8>	<1 0 2>	By the way,	2
61	<4 1 5 3 0 2 8 7 6>	<1 0 3 2>	you 'Wong', me 'Wong',	2
62	<0 4 2 8 1 7 6 5 3>	<0 2 1>	do we not belong to same family?	4
63	<0 7 4 6 3 2 1 8 5>	<0 2 1>	Ha! Ha!	4
64	<7 4 6 3 2 1 8 5 0>	<1 2 0>	We are cousins!	3
65	<2 4 0 1 8 6 3 7 5>	<1 0 3 2>	O yes!	5
66	<3 1 0 7 5 4 6 4 2>	<2 0 3 1>	You 'Hai Shan', me 'Hai Shan',	4
Section 8 -- T₄				
67	<8 7 6 4 1 5 3 0 2>	<2 0 1>	do we not come from same district?	0
68	<7 6 4 1 5 3 0 2 8>	<1 0 2>	O come work for me;--	0
69	<5 3 0 4 2 8 1 7 6>	<1 0 3 2>	I will treat you better!"	2
70	<2 8 3 1 7 0 6 5 4>	<1 3 0 2>	[rest]	6
71	<1 5 3 0 2 8 7 6 4>	<1 0 3 2>	Get away from here!	2
72	<8 6 3 5 2 1 0 7 4>	<2 0 1>	What is the difference when you	3

<u>meas.</u>	<u>contour</u>	<u>prime</u>	<u>text</u>	<u>deviance</u>
73	<7 4 6 3 2 1 8 5 0>	<1 2 0>	come to exploit me?	3
74	[rest]		[rest]	--
75	[rest]		"Chinaman!"	--
76	[rest]		"Laundryman!"	--
77	<3 5 2 1 0 6 4 7 1>	<2 0 3 1>	Don't call me "Chinaman!"	2
78	<1 5 6 5 3 7 4 2 0>	<1 2 0>	Yes, I am a "Laundryman!"	5
Section 9 -- T₆				
79	<8 7 6 4 1 5 3 0 2>	<2 0 1>	The "working man!"	0
80	<7 6 4 0 5 3 1 2 8>	<1 0 2>	Don't call me "Chinaman!"	0
81	<5 3 0 4 2 8 1 7 6>	<1 0 3 2>	I am the worldman!	2
82	<2 8 3 1 7 0 6 5 4>	<1 0 3 2>	[rest]	6
83	<6 1 0 5 7 4 3 2 8>	<1 0 2>	[rest]	4
84	[rest]		[rest]	--
85	[rest]		"Chinaman!"	--
86	[rest]		"Laundryman!"	--
87	<0 6 3 5 2 1 8 7 4>	<0 2 1>	All you working men!	2
88	<5 2 4 1 0 8 6 3 7>	<1 0 3 2>	Here is the brush	2

<u>meas.</u>	<u>contour</u>	<u>prime</u>	<u>text</u>	<u>deviance</u>
89	<0 1 6 5 4 2 7 3 8>	<0 1>	made of study.	3
90	<0 5 4 3 8 7 2 1 6>	<0 2 1>	Here is the soap	1
Section 10 -- T₀				
91	<8 7 6 4 1 5 3 0 2>	<2 0 1>	made of action.	[return to norm]
92	<7 6 4 1 5 3 0 2 8>	<1 0 2>	Let us all	
93	<6 4 1 5 3 0 2 8 7>	<1 0 3 2>	wash with the brush!	
94	<5 2 6 4 1 3 0 8 7>	<1 0 3 2>	Let us all	
95	<2 6 4 1 3 0 8 7 5>	<1 0 3 2>	press with the iron!	
96	<6 4 1 3 8 0 7 5 2>	<2 3 0 1>	Wash!	
97	<5 2 4 8 1 7 6 3 0>	<1 2 0>	Brush!	
98	<4 6 3 2 1 8 5 0 7>	<1 3 0 2>	Dry!	
99	<7 4 3 2 8 6 1 0 5>	<2 3 0 1>	Iron!	
100	[rest]		Then we shall have a clean	
101	[rest]		world!	

APPENDIX F

PRIME CONTOURS OF VOICE IN CRAWFORD, "CHINAMAN, LAUNDRYMAN"

EXPLANATORY NOTE: The boss's text is italicized.

<u>meas.</u>	<u>prime</u>	<u>text phrase</u>
1	<0 1>	"Chinaman!"
2	<0 1>	"Laundryman!"
4	<1 0>	Don't call me "man!"
4-5	<1 2 0>	I am worse than a slave.
6	<1 0> <1 0>	Wash!--- Wash!---
7	<1 0>	Why can I wash away
7-8	<0 1 0>	the dirt of others' clothes
8-9	<1 2 0>	but not the hatred of my heart?
10	<1 2 0>	My skin is yellow,---
10-11	<0 1 0>	Does my yellow skin color the clothes?
12	<1 0>	Why do you pay me less
13	<1 2 0>	for the same work?
14	<1 0>	Clever boss!
15	<1 0>	You know
15-16	<1 2 0>	how to scatter the seeds of hatred
16-17	<1 0>	among your ignorant slaves.
18	<1 0> <1 0>	Iron!--- Iron!---
19	<1 0>	Why can I smooth away
19-20	<0 1 0>	the wrinkle of others' dresses
20-21	<1 2 0>	but not the miseries of my heart?
22	<1 0>	Why should I come to America
22-23	<0 1 0>	to wash clothes?

<u>meas.</u>	<u>prime</u>	<u>text phrase</u>
23-24	<1 2 0>	Do you think Chinamen in China
25	<1 2 0>	wear no dresses?
26	<1 0>	I came to America
27	<1 0>	three days after my marriage.
28	<1 0>	When can I see her again?
28-29	<1 0>	Only the almighty dollar knows!
30	<1 0> <1 0>	Dry!--- Dry!---
31	<2 0 1>	Why do clothes dry,
31-32	<1 2 0>	but not my tears?
33	<0 1>	I work
34	<1 0>	twelve hours a day,
35	<0 1>	he pays
36	<1 0>	fifteen dollars a week.
36-37	<0 1>	<i>My boss says:</i>
39	<0 1>	<i>"Chinaman,</i>
40	<0 1>	<i>go back to China,</i>
40-41	<0 1 0>	<i>if you don't feel satisfied!</i>
42	<2 0 1>	<i>There, unlimited</i>
44	<0 1>	<i>hours of toil:</i>
45	<0 1>	<i>two silver dollars a week,</i>
46-47	<0 1>	<i>if you can find a job."</i>
49	<1 0 2>	Thank you, boss,--
50	<1 0>	for you remind me.
51	<1 0>	I know
52-53	<1 2 0>	bosses are robbers

<u>meas.</u>	<u>prime</u>	<u>text phrase</u>
53	<1 0>	ev'rywhere!
54	<0 1>	<i>Chinese boss says:</i>
56	<0 1>	<i>"You Chinaman,</i>
57	<0 1>	<i>me Chinaman,</i>
58	<1 2 0>	<i>come work for me</i>
59	<1 0>	<i>work for your fellow countryman!</i>
60	<0 1>	<i>By the way,</i>
61	<0 1> <0 1>	<i>you 'Wong', me 'Wong',</i>
62	<1 0 2>	<i>do we not belong to same family?</i>
63	<1 0>	<i>Ha! Ha!</i>
64	<1 2 0>	<i>We are cousins!</i>
65	<0 1>	<i>O yes!</i>
66	<0 1> <0 1>	<i>You 'Hai Shan', me 'Hai Shan',</i>
67	<1 0 2>	<i>do we not come from same district?</i>
68	<1 0>	<i>O come work for me;--</i>
69	<1 0 2>	<i>I will treat you better!"</i>
71	<1 0>	<i>Get away from here!</i>
72	<1 0>	<i>What is the difference</i>
73	<1 0>	<i>when you come to exploit me?</i>
75	<0 1>	<i>"Chinaman!"</i>
76	<0 1>	<i>"Laundryman!"</i>
77	<1 2 0>	<i>Don't call me "Chinaman!"</i>
78	<1 2 0>	<i>Yes, I am a "Laundryman!"</i>
79	<1 0>	<i>The working man</i>
80	<1 2 0>	<i>Don't call me "Chinaman!"</i>

<u>meas.</u>	<u>prime</u>	<u>text phrase</u>
81	<1 2 0>	I am the worldman!
85	<0 1>	"Chinaman!"
86	<0 1>	"Laundryman!"
87	<1 0>	All you working men!
88	<0 1>	Here is the brush
89	<1 0>	made of study.
90	<0 1>	Here is the soap
91	<1 0>	made of action.
92	<0 1>	Let us all
93	<1 0>	wash with the brush!
94	<0 1>	Let us all
95	<1 0>	press with the iron!
96-99	<0 1>	Wash! Brush! Dry! Iron!
100-101	<1 2 0>	Then we shall have a clean world!

APPENDIX G
HAND POSITIONS IN BAUER, TOCCATA, SECTIONS 1, 5, AND 7

Abbreviations:

A = <0123> B = <2301> C = <0213>
D = <2031> E = <0231> F = <2013>

Section 1 (mm. 1-22)

<u>measure</u>	<u>position</u>				
1a	C	9a	C	17a	C
1b	F	9b	--	17b	C
1c	F	9c	F	17c	C
1d	C	9d	C	17d	C
2a	C	10a	C	18a	A
2b	F	10b	C	18b	C
2c	F	10c	C	18c	C
2d	C	10d	C	18d	C
3a	C	11a	F	19a	C
3b	F	11b	F	19b	A
3c	C	11c	C	19c	A
3d	F	11d	C	19d	C
4a	D	12a	F	20a	C
4b	D	12b	F	20b	C
4c	D	12c	C	20c	C
4d	C	12d	--	20d	C
5a	C	13a	F	21a	C
5b	D	13b	F	21b	C
5c	F	13c	C	21c	C
5d	--	13d	C	21d	C
6a	C	14a	C	22a	C
6b	C	14b	C	22b	C
6c	F	14c	C	22c	C
6d	C	14d	F	22d	---
7a	C	15a	F		
7b	A	15b	D		
7c	C	15c	C		
7d	C	15d	C		
8a	C	16a	C		
8b	C	16b	F		
8c	C	16c	C		
8d	C	16d	C		

Section 5 (mm. 62-79)

<u>measure</u>	<u>position</u>		
62a	C	73a	C
62b	C	73b	C
62c	C	73c	C
		73d	F
63a	C		
63b	C	74a	F
63c	C	74b	F
		74c	A
64	C		
		75a	A
65a	C	75b	A
65b	C	75c	A
65c	F	75d	A
65d	--		
		76a	C
66a	C	76b	F
66b	C		
66c	F	77a	F
66d	--	77b	F
67a	C	78	F
67b	C		
67c	F	79	F
67d	C		
68a	C		
68b	A		
68c	C		
68d	C		
69a	C		
69b	C		
69c	C		
69d	C		
70a	C		
70b	F		
70c	C		
70d			
71a	C		
71b	C		
71c	C		
72a	C		
72b	A		
72c	C		

Section 6 (mm. 102-112)

<u>measure</u>	<u>position</u>		
102a	C	111a	C
102b	F	111b	C
102c	F	111c	C
102d	C	111d	C
103a	C	112a	A
103b	F	112b	C
103c	F	112c	A
103d	C		
104a	C		
104b	F		
104c	C		
104d	F		
105a	D		
105b	D		
105c	D		
105d	C		
106a	C		
106b	D		
106c	C		
106d	F		
107a	C		
107b	C		
107c	C		
107d	F		
108a	C		
108b	F		
108c	C		
108d	F		
109a	C		
109b	C		
109c	C		
109d	F		
110a	C		
110b	F		
110c	C		
110d	C		

NOTES

Chapter 1. *Introduction: Cultural Analysis and Post-tonal Music*

1. Sandra M. Gilbert and Susan Gubar, The Madwoman in the Attic: The Woman Writer and the Nineteenth-Century Literary Imagination (New Haven: Yale University Press, 1979, 2nd edn. 1984).
2. Jan Montefiore, "Case-histories versus the 'Undeliberate Dream': Men and Women Writing the Self in the 1930s," in Difference in View: Women and Modernism, ed. Gabriele Griffin (London: Taylor & Frances, 1994), 56-74. Other explorations of the relationship between women and literary modernism are Sandra M. Gilbert and Susan Gubar, No Man's Land: The Place of the Woman Writer in the Twentieth Century, Vol. 1: The War of the Words (New Haven: Yale University Press, 1988) and Sandra M. Gilbert and Susan Gubar, ed., The Female Imagination and the Modernist Aesthetic (New York: Gordon and Breach, 1986).
3. Milton Babbitt, Words About Music, ed. Stephen Dembski and Joseph N. Straus (Madison: University of Wisconsin Press, 1987), 9, 167-68.
4. Ruth Crawford is also known by her married name, Ruth Crawford Seeger. Because she composed the works analyzed here under the name "Ruth Crawford," I shall refer to her as such throughout my dissertation.
5. In her article "Why Can't We Listen to Marion Bauer's Music?", Providence Journal-Bulletin (Rhode Island), dated August 23, 1994, music historian Susan Pickett writes that Marion Bauer lied about the year of her birth and maintains that Bauer was born on August 15, 1882 rather than on August 15, 1887. Pickett supports this assertion in an unpublished typescript entitled "Marion Bauer Lecture" by referring to a local newspaper's announcement in 1882 that "On August 15, born to the wife of J. Bauer, a daughter" (3). Since this evidence does not clearly state that "a daughter Marion" was born on this day, the possibility remains that another daughter--not Marion--was born on August

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- 15, 1882. The question of Bauer's birth year is not answered by consulting the birth records of her hometown--the Walla Walla, Washington health department does not have a birth certificate for Marion Bauer on file, and informed me that before 1907, it was not required to register either births or deaths there. The year of Bauer's birth remains unverified, and requires further research. I wish to thank Professor Pickett for providing me with a copy of her typescript.
6. Joan Wallach Scott, Gender and the Politics of History (New York: Columbia University Press, 1987), 2.
 7. A date of composition has not yet been firmly established for Bauer's Four Piano Pieces. In a Works Progress Administration Composers' Forum-Laboratory of January 22, 1936 in which Bauer was the featured composer, the program gives the date of 1930 for her Four Piano Pieces, which I am using provisionally as the date of its composition (program in Harrison Potter file, Library Archives, Mount Holyoke College).
 8. The most comprehensive biographical study of Bauer currently available is given in Nancy Stewart, The Solo Piano Music of Marion Bauer (Ph.D. diss., University of Cincinnati, 1990), 3-81; information on Bauer also appears in Christine Ammer, Unsung: A History of Women in American Music (Westport, Conn.: Greenwood Press, 1980), 123-27; David Ewen, American Composers Today (New York: H. W. Wilson, 1949), 20-22; Madeline Goss, Modern Music-Makers: Contemporary American Composers (New York: Dutton, 1952), 19-20; and Claire R. Reis, Composers in America (New York: MacMillan, 1938), 19-20. Interviews with Martin Bernstein, who was Bauer's colleague at New York University for twenty-five years (interview with the author, Riverdale, New York, March 22, 1994) and with Maurice Peress, who studied with Bauer at New York University (interview with the author, Flushing, New York, April 11, 1994) yielded additional information about Bauer.
 9. Matilda Gaume's Ruth Crawford Seeger gives biographical information about Crawford (Metuchen, N.J.: Scarecrow Press, 1986). Judith Tick's more recent biography is entitled Ruth Crawford Seeger, A Composer's Search for American Music (New York: Oxford University Press, forthcoming).
 10. Christine Ammer, Unsung, 267.

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11. Marion Bauer, Twentieth Century Music: How It Developed, How to Listen to It (New York: G. P. Putnam, 1947 [1933]). In a recent interview, Babbitt states that reading Bauer's book was for him "one of the great turning points," convincing him to transfer from the University of Pennsylvania to New York University, from which he graduated in 1935. Quoted in William Duckworth, Talking Music: Conversations with John Cage, Philip Glass, Laurie Anderson, and Five Generations of American Experimental Composers (New York: Schirmer Books, 1995), 62. Babbitt provides an introduction to the 1978 reissue of Twentieth Century Music (New York: Da Capo Press, 1978).
12. Ammer, Unsung, 98.
13. In The Music of Ruth Crawford Seeger (Cambridge: Cambridge University Press, 1995), Joseph N. Straus discusses the relationship between Crawford's music and Charles Seeger's theories of dissonant counterpoint and new music composition, as outlined in Seeger's article "On Dissonant Counterpoint," Modern Music 7/4 (1930), 25-31 and in his treatise "Tradition and Experiment in (the New) Music," in Charles Seeger, Studies in Musicology II: 1929-1979, ed. Ann M. Pescatello (Berkeley: University of California Press, 1994), 39-273. Judith Tick explores the impact of Seeger's theories on Crawford's String Quartet, Mvt. 1, in her essay "Dissonant Counterpoint Revisited: The First Movement of Ruth Crawford's String Quartet 1931," in A Celebration of American Music: Words and Music in Honor of H. Wiley Hitchcock, ed. Richard Crawford, R. Allen Lott, and Carol J. Oja (Ann Arbor: University of Michigan Press, 1990), 405-22.
14. Bauer's 1933 book Twentieth Century Music is an example of her pro-modernist writing.
15. Letters to her publisher Arthur P. Schmidt dated September 29, 1916 and October 6, 1916 attest to Schmidt's preference for a more conservative musical style than Bauer wished to maintain (cited in Stewart, The Solo Piano Music of Marion Bauer, 17). In addition, Bauer describes her unfortunate experience of having her violin sonata marked down from first to second place in the 1928 Society for the Publication of American Music competition expressly for its "modern tendencies" (letter by Bauer dated June 18, 1927 to Henry R. Austin of the Arthur P. Schmidt Publishing Company; cited in Stewart, 39-40).

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16. Two works that Bauer composed in Paris in 1924, Quietude and Turbulence, demonstrate her departure from tonality.
17. As Nancy Stewart notes, the rhythm and doubling of the melody in Bauer's third Prelude is strikingly similar to Ruth Crawford's 1932 Piano Study in Mixed Accents (Stewart, The Solo Piano Music of Marion Bauer, 136).
18. Robert D. Morris, Composition with Pitch-Classes: A Theory of Compositional Design (New Haven: Yale University Press, 1987); Morris, "New Directions in the Theory and Analysis of Musical Contour," Music Theory Spectrum 15/2 (1993), 205-28; Michael L. Friedmann, "A Methodology for the Discussion of Contour: Its Application to Schoenberg's Music," Journal of Music Theory 29/1 (1985), 223-48; Elizabeth West Marvin and Paul Laprade, "Relating Musical Contours: Extensions for a Theory of Contour," Journal of Music Theory 31/2 (1987), 225-67; and Friedmann, "My Contour, Their Contour," Journal of Music Theory (1987), 268-71.
19. Morris, Composition with Pitch-Classes, 341.
20. Elaine Showalter, "Feminist Criticism in the Wilderness," in The New Feminist Criticism: Essays on Women, Literature, and Theory, ed. Elaine Showalter (New York: Pantheon Books, 1985), 263.
21. Suzanne G. Cusick, "On a Lesbian Relationship with Music: A Serious Effort Not to Think Straight," in Queering the Pitch: The New Gay and Lesbian Musicology (New York: Routledge, 1994), 67-83.
22. Indeed, composers do not always provide the most convincing interpretations of their music, nor are they necessarily cognizant of the analytical implications of their music: Crawford once remarked that sounds in the third movement of her String Quartet were "inspired by noises emanating from a New Year's Eve celebration" (quoted in Gaume, Ruth Crawford Seeger, 25); Bauer dismissed the last two chords of her Toccata as "arbitrary chords at the point of movement and repose" (Bauer, Twentieth Century Music, 119). My analyses of both of these pieces address different readings than their composers articulate. (I discuss portions of Crawford's own analysis of her string quartet in Chapter 2, note 14 and in Chapter 3, 47 and 59.)

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23. Catherine Parsons Smith, "'A Distinguishing Virility': Feminism and Modernism in American Art Music," in Cecilia Reclaimed: Feminist Perspectives on Gender and Music, ed. Susan C. Cook and Judy S. Tsou (Urbana: University of Illinois Press, 1993), 99.
24. Smith, "'A Distinguishing Virility'," 93. Although the reasons that Crawford stopped composing might well extend beyond her commitment to raising her family, I do not believe that a desire to be free of modernism's alleged misogyny was one of them.

Chapter 2. *The Question of Climax in Ruth Crawford's String Quartet, Mvt. 3*

1. Judith Tick has discovered that the third movement's climax over mm. 68 through 75 was not present in the 1931 version but was added several years later. The version included in Example 2-1 was published in 1941. Her findings appear in "The Evolution of Ruth Crawford's String Quartet 1931," presented at the 1987 national meeting of the American Musicological Society.
2. Many feminist theorists have argued against the standard academic writing style that takes on a disembodied voice of authority. Instead, as in my discussion here, the first-person narrative and an explicit subjective position is often crucial to a feminist stance. I hope it will become apparent that I hear the piece in the way I am suggesting because of the construction of my own identity. Recent examples of this style of writing include bell hooks, Yearning: Race, Gender, and Cultural Politics (Boston: South End Press, 1990); Trinh T. Minh-ha, Woman, Native, Other: Writing Postcoloniality and Feminism (Bloomington: Indiana University Press, 1989); Michele Wallace, Invisibility Blues: From Pop to Theory (London: Verso, 1990); and Patricia J. Williams, The Alchemy of Race and Rights (Cambridge, Mass.: Harvard University Press, 1991).
3. In The Music of Ruth Crawford Seeger (Cambridge: Cambridge University Press, 1995), Joseph N. Straus analyzes the third movement of Crawford's quartet (158-72). His examination differs from mine by focusing on a composite melody formed by all the instruments, pitch and duration contours, and harmonic and motivic organization, rather than on the aesthetic issue of the climax's inclusion, relative register of the instruments, and gender narrative; in chapter 4, Straus discusses some of the issues encountered in bringing feminism to music theory. Suzanne G. Cusick, Marion A. Guck, Marianne Kielian-Gilbert, and Susan McClary have offered dazzling insights into this fledgling area of research in their panel "Towards a Feminist Music Theory," 1992 national meeting of the Society for Music Theory, Kansas City. Their papers appear in Perspectives of New Music 32/1 (1994), 8-85.
4. One such writer who has questioned the compatibility of rationalism and formalism with feminism is Mary Daly, Beyond God the Father: Toward a Philosophy of Women's Liberation (Boston: Beacon Press, 1973).

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5. Biographical information on Crawford is provided in Matilda Gaume, Ruth Crawford Seeger: Memoirs, Memories, Music (Metuchen, N.J.: Scarecrow Press, 1986) and Judith Tick, Ruth Crawford Seeger, A Composer's Search for American Music (New York: Oxford University Press, forthcoming).
6. Seeger recalls how Henry Cowell convinced him to give Crawford composition lessons despite his negative view of women composers in Ray Wilding-White, "Remembering Ruth Crawford Seeger: An Interview with Charles and Peggy Seeger," American Music 6/4 (1988), 446. Dane Rudhyar describes his efforts to persuade the director of the Guggenheim Foundation, Henry Allen Moe, to review Crawford's application in Gaume, Ruth Crawford Seeger, 41.
7. Gaume, Ruth Crawford Seeger, 196. A supra scale is a scale based on the twelve tone scale in which the half steps are divided further into microtones. Some of Yasser's ideas about music are developed in his book A Theory of Evolving Tonality (New York: Da Capo Press, 1975 [1932]). Contrary to what Crawford had apparently been told, Yasser's supra scale was not the only topic discussed that day. In a 1972 interview, Charles Seeger mentioned that at the meeting the men had founded the New York Musicological Society, an organization that eventually developed into the American Musicological Society, and stated that he had purposefully excluded Crawford from this important event because he wanted to avoid the incipient criticism that musicology was "women's work." (She was permitted to attend subsequent meetings to organize the Society.) Seeger's remarks appear in Reminiscences of an American Musicologist, interviewers Adelaide Tusler and Ann Briegleb, Oral History Program, University of California at Los Angeles, 1972. I would like to thank Taylor Greer for passing on this information.
8. Elaine Showalter, "Feminist Criticism in the Wilderness," in The New Feminist Criticism: Essays on Women, Literature, and Theory, ed. Elaine Showalter (New York: Pantheon Books, 1985), 263.
9. Some of Rose Rosengard Subotnik's work may illuminate my argument about the relationship between this quartet movement and Crawford's subject position. She reflects upon what she understands to be structural parallelisms between a person's life and work in Developing Variations: Style and Ideology in Western Music

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(Minneapolis: University of Minnesota Press, 1991).

10. Edwin Ardener, "Belief and the Problem of Women" in Perceiving Women, ed. Shirley Ardener (New York: John Wiley & Sons, 1975), 1-18, and his "The 'Problem' Revisited" in the same volume, 19-28. The term "muted group" was suggested by Charlotte Hardman.
11. Showalter, "Feminist Criticism in the Wilderness," 261-63. Sandra M. Gilbert and Susan Gubar suggest that nineteenth-century writing by European and American women, including Jane Austen, Mary Shelley, Emily Brontë, and Emily Dickinson, generally displayed a normal surface design but often concealed other less accessible and acceptable levels of meaning. They present this argument in The Madwoman in the Attic: The Woman Writer and the Nineteenth-Century Literary Imagination (New Haven: Yale University Press, 1979, 2nd edn. 1984).
More explicit expressions of women's feelings of exclusion and invisibility in male-dominated social spaces have recently appeared in collections intended to provide a forum for such writings. Three such books are This Bridge Called My Back: Writings by Radical Women of Color, ed. Cherrie Moraga and Gloria Anzaldúa (Watertown, Mass.: Persephone Press, 1981; 2nd ed. Latham, N.Y.: Kitchen Table, Women of Color Press, 1983); All the Women Are White, All the Blacks are Men, But Some of Us Are Brave: Black Women's Studies, ed. Gloria T. Hull, Patricia Bell Scott, and Barbara Smith (Old Westbury, N.Y.: The Feminist Press, 1982); and The Forbidden Stitch: An Asian American Women's Anthology, ed. Shirley Geok-lin Lim and Mayumi Tsutakawa (Corvallis, Ore.: Calyx Books, 1989). Mitsuye Yamada describes her double invisibility as a Japanese-American woman in "Invisibility is an Unnatural Disaster: Reflections of an Asian American Woman" in This Bridge, 35-40; Barbara Smith writes of her exclusion as a Black lesbian in "Toward a Black Feminist Criticism," in But Some of Us Are Brave, 157-75.
12. Susan McClary has suggested reading musical climaxes in sexual terms in "Getting Down Off the Beanstalk: The Presence of a Woman's Voice in Janika Vandervelde's Genesis II," in Feminine Endings: Music, Gender, and Sexuality (Minneapolis: University of Minnesota Press, 1991), 112-31. Although I intend the traditional musical sense of "climax" here, another reading of the movement might usefully link it to sexuality.

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13. I mean "parody" in the sense proposed by Linda Hutcheon in her A Theory of Parody: The Teaching of Twentieth-Century Art Forms (New York: Methuen, 1985). In her examination of parody in twentieth-century painting, music, literature, and architecture, she suggests that modern parody does not necessarily ridicule, but possesses a range of intentions, including playfulness and irony as well as scorn.
14. In her own analysis of this movement, which she sent to Edgard Varèse in 1948, Crawford describes a melodic line extending through the piece whose tones are distributed among the four instruments. For example, the melodic line in mm. 12-15 is made up of the viola's D $\sharp$ -F $\sharp$ -violin 2's A-B $\flat$ -cello's G $\sharp$ -B. Crawford's analysis of the Quartet's third and fourth movements are available in the Library of Congress, Seeger Collection and will be published in Judith Tick, Ruth Crawford Seeger, A Composer's Search for American Music (New York: Oxford University Press, forthcoming).

Marion A. Guck has suggested that instead of conceiving of musical elements as competing with each other, we might alternatively read them as working cooperatively. In my reading, I use both models in describing different stretches of the music. Guck describes these possibilities for perceiving music in "The Model of Domination and Competition in Musical Analysis," a paper presented at "Feminist Theory and Music," University of Minnesota, Minneapolis, in June 1991. The relationship of competition to gender is also discussed in Competition: A Feminist Taboo?, ed. Valerie Miner and Helen E. Longino (New York: The Feminist Press, 1987).
15. I have assigned middle C the value of 0 on the y-axis and have measured pitches in semitones. For the double- and triple-stops, the graph displays the highest voice for the violins and the lowest voice for the viola and cello. My thanks to Tim Campbell for his suggestions on the graph. Margaret E. Thomas offers other types of graphic analyses in "The String Quartet of Ruth Crawford: Analysis With a View Toward Charles Seeger's Theory of Dissonant Counterpoint" (M.A. Thesis, University of Washington, 1991).
16. In Seeger's treatise "Tradition and Experiment in (the New) Music," which he drafted with Crawford's assistance during the summer of 1930, Seeger uses the term "twist" to indicate a single musical line consisting of at least three pitches whose contour goes

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up and then down, or down and then up. This treatise has recently been published in Charles Seeger, Studies in Musicology II, 1929-1979, ed. Ann M. Pescatello (Berkeley: University of California Press, 1994), 39-273. In contrast, I use "twist" to describe the pattern of all four voices at any given moment.

17. The following section of theory is derived from Daniel Harrison's work on permutations in "Some Group Properties of Triple Counterpoint and Their Influence on Compositions by J. S. Bach," Journal of Music Theory 32/1 (1988), 23-49. Permutations are an example of transformational theory, an area which David Lewin has explored in Generalized Musical Intervals and Transformations (New Haven: Yale University Press, 1989). Henry Klumpenhouwer lucidly engages Harrison's and Lewin's work in A Generalized Theory for Atonal Voice Leading (Ph.D. diss., Harvard University, 1991).
18. Babbitt employs order inversions to investigate properties of twelve-tone row forms in "Twelve-Tone Invariants as Compositional Determinants," Musical Quarterly 46 (1960), 246-59.
19. A performance can certainly bring out this reading. To consider one example, the recording by the Composers Quartet (Nonesuch H-71280, 1973) strives to keep each instrument's timbre indistinguishable from the others', making it more difficult to hear the twisting of voices from this performance than from one that preserves a separate identity for each instrument. The Composers Quartet's performance is based on a paradigm that Robert P. Morgan characterizes in the liner notes as a "sound mass" from which each voice emerges and recedes in turn.
20. Virginia Woolf, A Room of One's Own (San Diego: Harcourt Brace Jovanovich, 1989 [1929]), 35.
21. In mm. 13-15, the cello similarly moves from the lowest register to the highest register while the degree of twist increases from 0 to its local maximum of 2.
22. The first violin's ascent by a fourth in m. 49, bringing the degree down from 4 to a local low of 1, mirrors the cello's earlier drop of fourth in m. 24, which brought the degree down from 2 to 0.
23. What I want to emphasize in mm. 59-67 is the slowing and stopping of the twisting activity, not the

Notes: *The Question of Climax*

relatively low degree of twist. The moment of relative repose occurs because the weaving stops, not because it has reached degrees 0 and 1.

24. Although the maximum degree of twist for a five-voice strand (e.g., <5-4-3-2-1>) would be 10, the maximum number for the sonority in m. 68 is 9. Since a double-stop played by violin 1 would always be notated numerically as <1-2> and never as <2-1>, to count <2-1> as a twist would inflate the Max number. The ten twists that would be possible for five distinct instrumental voices is thus decreased by one when two of the voices are played by a single instrument, thus bringing the maximum number down to 9. The same reasoning applies when calculating the Max numbers for all the other double- and triple-stops in the passage. I am indebted to Jeff Stadelman for alerting me to this feature of Max numbers.
25. My thanks to Anton Vishio for his suggestions on how to apply my model to the inner pitches of m. 75.
26. Ray Wilding-White, "Remembering Ruth Crawford Seeger," 445. Seeger's designation of 1930 as the year that concluded men's dominance in European music composition may have had something to do with the fact that Crawford composed most of her mature works in the early 1930s: she wrote the String Quartet in 1931; the four Diaphonic Suites, Piano Study in Mixed Accents, and Two Chants for Women's Chorus in 1930; Rat Riddles over 1930-32; and her songs "Chinaman, Laundryman" and "Sacco, Vanzetti" in 1932. Matilda Gaume lists Crawford's oeuvre in "Ruth Crawford Seeger," in Women Making Music: The Western Art Tradition, 1150-1950, ed. Jane Bowers and Judith Tick (Urbana: University of Illinois Press, 1986), 387. Seeger further discusses the question of difference between the music of men composers and women composers in his essay "Ruth Crawford," in American Composers on American Music: A Symposium, ed. Henry Cowell (New York: Frederick Ungar, 1933; rpt. Stanford: Stanford University Press, 1962), 116-17.
27. Teresa de Lauretis, Alice Doesn't: Feminism, Semiotics, Cinema (Bloomington: Indiana University Press, 1984), 7.

Chapter 3. *Female Subjectivity in Crawford's
String Quartet, Mvt. 4*

1. Because of her extensive work on "Tradition and Experiment," Seeger suggested to Crawford that she be listed as co-author; after she declined the offer, Seeger dedicated the treatise to her (letter from Crawford to Seeger, September 20, 1930; quoted in Matilda Gaume, Ruth Crawford Seeger: Memoirs, Memories, Music (Metuchen, N.J.: Scarecrow Press, 1986), 152. Additional background information on the writing of "Tradition and Experiment in (the New) Music" is provided in Gaume, Ruth Crawford Seeger, 71, and in Ann M. Pescatello, "Introduction" to Charles Seeger, Studies in Musicology II: 1929-1979, ed. Ann M. Pescatello (Berkeley: University of California Press, 1994), 9.
2. Letter to Seeger of November 11, 1930, quoted in Judith Tick, "Dissonant Counterpoint Revisited: The First Movement of Ruth Crawford's String Quartet 1931" in A Celebration of American Music: Words and Music in Honor of H. Wiley Hitchcock, ed. Richard Crawford, R. Allen Lott, and Carol J. Oja (Ann Arbor: University of Michigan Press, 1990), 419.
3. Letter of January 29, 1933 (quoted in Gaume, Ruth Crawford Seeger, 64-65).
4. Seeger, "Tradition and Experiment," 161.
5. Crawford began the quartet in February, 1931 and completed it during the spring of 1931. During the question-answer period of the April 6, 1938 WPA Composers' Forum-Laboratory, she stated that she composed it in several months and that one of the movements had taken a week (quoted in Gaume, Ruth Crawford Seeger, 204).
6. Quoted in Tick, "Dissonant Counterpoint Revisited," 419. In this essay, Tick describes the circumstances of the quartet's composition, discusses the autograph draft of its first movement, and analyzes this movement in the context of Seeger's work in two versions of "Tradition and Experiment" and in his article "On Dissonant Counterpoint," Modern Music 7/4 (1930), 25-31.
7. Crawford's analyses of her String Quartet's third and fourth movements are housed in the Seeger Collection, Library of Congress.

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8. Ray Wilding-White, "Remembering Ruth Crawford Seeger: An Interview with Charles and Peggy Seeger," American Music 6/4 (1988), 446.
9. Seeger speculated about how Crawford reacted to his proposed contract for her studies: "I was not present but I could see her eyes flashing: 'Well, I'm going to show that son of a bitch something'" (Ray Wilding-White, "Remembering Ruth Crawford Seeger," 446).
10. Gaume, Ruth Crawford Seeger, 79-80. Crawford describes the visit to the offices of Universal in a letter to Seeger dated May 6, 1931.
11. Crawford, Diary entry, probably August 26, 1927 (quoted in Gaume, Ruth Crawford Seeger, 54).
12. Ibid.
13. Quoted in Gaume, Ruth Crawford Seeger, 198.
14. Letter to Seeger dated May 14, 1931; quoted in Gaume, Ruth Crawford Seeger, 82.
15. It is interesting to compare the fourth movement of Crawford's quartet to the second movement of Charles Ives's Second String Quartet (1901-1913). According to Ives, the instruments personified "4 men" whose vigorous "Arguments" in the second movement take place between the second violin and the other three instruments. See John Kirkpatrick, A Temporary Mimeographed Catalogue of the Music Manuscripts and Related Materials of Charles Edward Ives 1874-1954 (Library of the Yale University School of Music, New Haven, 1960), 60; cited in J. Philip Lambert, "Interval Cycles as Compositional Resources in the Music of Charles Ives," Music Theory Spectrum 12/1 (1990), 46-47.
16. Crawford's annotated score is housed in the Seeger Collection, Library of Congress.
17. In The Music of Ruth Crawford Seeger (Cambridge: Cambridge University Press, 1995), Joseph Straus suggests the possibility of gendering of Voice I as male and Voice II as female: "One might argue ... that the free melody in the first violin asserts a striving, autonomous individuality against the cyclical melody shared communally by the other instruments, and thus that the free melody should be lined up with the first

Notes: *Female Subjectivity*

terms in the dualities [of male/female, reason/emotion, stable/unstable]" (224). Straus proposes a different narrative hearing than mine: "Like the partners in many relationships, these melodies [of Voices I and II] conflict with each other, but nonetheless belong together. In this sense, the duality of the opposing melodies is created only to be subverted. The movement thus suggests, to an attentive listener, that even the most apparently irreconcilable conflict can in fact be mediated, indeed, can be heard to dissolve amid the subtle connections between the parties" (182). His analysis also includes some interesting observations about the serialization of rhythm in the quartet movement, a compositional strategy that is generally associated with Milton Babbitt.

18. Alternatively, the voices could have exchanged material after reaching the midpoint, with the first violin taking up the serialized eighth notes, and the instruments in Voice II playing the freer material.
19. Straus's analysis of this movement in The Music of Ruth Crawford Seeger asserts that while the two voices differ on the surface, they are also subtly linked through pitch elements (179-82); Straus shows that linear presentations of certain trichords also occur as simultaneities between the two voices.
20. Elizabeth West Marvin and Paul Laprade provide more detailed explanation of how to classify contours in "Relating Musical Contours: Extensions of a Theory of Musical Contour," Journal of Music Theory 31/2 (1987), 257-62.
21. Robert D. Morris, "New Directions in the Theory and Analysis of Musical Contour," Music Theory Spectrum 15/2 (1993), 205-28.
22. As Morris notes, the prime of each contour may be found more quickly by inscribing it within a rectangle (Morris, "New Directions," 218).
23. In m. 24, Voice II is missing the pitch class E, which should conclude the phrase according to Crawford's system. In her analysis, Crawford identifies this moment as a "missing thread in Persian rug"; in m. 94, which begins the corresponding phrase in the second half of the piece, the F is also absent. The presence of the E in m. 24 would result in the phrase's prime contour being <1023> rather than <1032>.

Chapter 4. *The Politics of Contour in Crawford's
"Chinaman, Laundryman"*

1. Excerpt from Vachel Lindsay, "The Chinese Nightingale: A Song in Chinese Tapestries" in The Chinese Nightingale and Other Poems (New York: Macmillan, 1917), 3. My thanks to Ed Marx for mentioning this poem.
2. Paul C. P. Siu, The Chinese Laundryman: A Study of Social Isolation, ed. John Kuo Wei Tchen (New York: New York University Press, 1987), 130. The speaker is a Chinese launderer living in Chicago whom Siu interviewed in the 1930s.
3. The following publications chronicle Charles Seeger's shift from his rejection of folk music in the 1920s as an area of musical interest to his later hearty support of it beginning in the 1930s through his participation in the Composers Collective: David K. Dunaway, "Charles Seeger and Carl Sands: The Composers' Collective Years," Ethnomusicology 24/2 (May 1980), 159-68; Dunaway, "Unsung Songs of Protest: The Composers Collective of New York," New York Folklore Quarterly (January 19, 1979); Robbie Lieberman, "My Song is My Weapon": People's Songs, American Communism, and the Politics of Culture, 1930-1950 (Urbana: University of Illinois Press, 1989); and Matilda Gaume, Ruth Crawford Seeger: Memoirs, Memories, Music (Metuchen, N.J.: Scarecrow Press, 1986), 95-103. Barbara A. Zuck's important study A History of Musical Americanism (Ann Arbor: UMI Research Press, 1980) presents a comprehensive portrait of this period in the chapter "Americanism Takes a Left Turn," 103-38.
4. Seeger was a member of the Collective from 1931 through 1935. According to Seeger, Crawford attended only a few meetings of the Collective (David K. Dunaway, "Charles Seeger and Carl Sands," 161).
5. Judith Tick suggests that Crawford called these songs *ricercari* not from any relation they might have to the sixteenth-century form of instrumental composition but from their concern with pre-compositional methods. Tick gives additional information on these songs in "Ruth Crawford's Proletarian Ricercari," Sonus 15/2 (Spring 1995), 54-79.
6. Charles Seeger, "On Proletarian Music" in Modern Music 11/3 (March-April 1934), 121-27. Seeger also presented his ideas about proletarian music in articles he published in the Communist paper The Daily Worker

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(January 31, 1934 and March 6, 1934).

7. Seeger, "On Proletarian Music," 121-22.
8. Seeger does not define the term "bourgeois music" in his essay but offers Schoenberg, Hindemith, and Stravinsky as examples of those who compose it (Seeger, "On Proletarian Music," 124).
9. Seeger, "On Proletarian Music," 125-26.
10. David K. Dunaway's interview with Charles Seeger about the Olympiad is published in "Charles Seeger and Carl Sands." (The 1935 date Dunaway cites for the Olympiad is incorrect.) A second Olympiad was reviewed by Ashley Pettis in "Second Worker's [sic] Music Olympiad," New Masses xi/8 (May 22, 1934), 28-29.
11. Carol J. Oja discusses the mass-song style in "Marc Blitzstein's The Cradle Will Rock and Mass-Song Style of the 1930s," Musical Quarterly 73/4 (1989), 450.
12. In April 1931, Crawford wrote to Seeger that she "could almost become a Communist herself" (quoted in Judith Tick, "Ruth Crawford's Proletarian Ricercari," 55).
13. John Kuo Wei Tchen convincingly argues that the terms "launderer," "laundry worker," or "laundry man" avoid the negative ethnic connotations of the single word "laundryman," a term coined "in an era when a gender tag was appended to ethnic identifications, as in 'Irishman' or 'Chinaman,' and blue collar trades, as in 'postman' or 'washerwoman.'" My terminology follows his example. Tchen's discussion appears in "Editor's Introduction" to Siu, The Chinese Laundryman, xxxv.
14. Hsi-tseng Chiang [H. T. Tsiang], Poems of the Chinese Revolution, Engl. ed. by H. T. Tsiang (New York: Liberal Press, 1929).
15. "Chinese Hand Laundry Alliance," in Dictionary of Asian American History, ed. Hyung-Chan Kim (New York: Greenwood Press, 1986), 197.
16. A useful resource for information on anti-Asian sentiment and legislation is Dictionary of Asian American History, ed. Hyung-Chan Kim. Benjamin B. Ringer gives a thorough history of racially discriminatory legislation in We the People and Others: America's Treatment of its Racial Minorities (New York:

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Tavistock, 1983).

17. John Kuo Wei Tchen, "Believing is Seeing: Transforming Orientalism and the Occidental Gaze" in Asia/America: Identities in Contemporary Asian American Art (New York: The Asia Society Galleries/New Press, 1994), 13. These stereotypes are described in William Purviance Fenn, Ah Sin and His Brethren in American Literature (Peking: College of Chinese Studies, 1933) and Dorothy B. Jones, The Portrayal of China and India on the American Screen, 1896-1955 (Cambridge, Mass.: Center for International Studies, 1955).
18. Paul Siu discusses the sexual lives of Chinese male launderers in Chicago during the 1930s including their relations with white women and the phenomenon of intermarriage in The Chinese Laundryman, 250-71 and 279-88.
19. Another member of the Composers Collective, Elie Siegmeister, employs *Sprechstimme* in his solo cantata Strange Funeral in Braddock, which was published in 1936. Its text was written by Michael Gold, a spokesman for the American Communist Party and an editor of New Masses. My thanks to Carol Oja for referring me to this composition.
20. These works include her Piano Study in Mixed Accents (1930), the Diaphonic Suite No. 1 for Flute or Oboe, mvt. 3 (1930), and her String Quartet, mvt. 4 (1931). Joseph N. Straus describes a number of structural and textual features of "Chinaman, Laundryman," including rotational serialism, rhythm, and motive, in The Music of Ruth Crawford Seeger (Cambridge: Cambridge University Press, 1995), 8-9, 75-76, 82-83, 117-18, and 150-51.
21. Straus identifies these three rhythms as X, Y, and Z (The Music of Ruth Crawford Seeger, 117-118).
22. Like the pitch organization in the piece, the rhythm occasionally does not follow the established rule: for example, the phrases that begin mm. 43, 52, and 67 withhold rhythmic pattern A, giving instead two statements of C; the phrase that begins in m. 82 withholds C, giving two statements of B.
23. Michael Friedmann, "A Methodology for the Discussion of Contour: Its Application to Schoenberg's Music," Journal of Music Theory 29 (1985), 226-27. Friedmann's

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CAS is equivalent to Marvin and Laprade's Int₁, which is described in their article "Relating Musical Contours: Extensions of a Theory for Contour," Journal of Music Theory 31 (1987), 228.

24. Eric J. Isaacson has introduced a similarity measure that is somewhat analogous to my contour deviance measure. In his article "Similarity of Interval-Class Content Between Pitch-Class Sets: The IcVSIM Relation," Journal of Music Theory 34/1 (Spring 1990), Isaacson measures the similarity of the interval content of two pitch-class sets by calculating the difference between corresponding entries in their interval vectors. My contour deviance tool measures the similarity of the "contour content" of two csegs by counting the number of changes in direction between corresponding adjacent cps.

In their article "Relating Musical Contours," Elizabeth West Marvin and Paul Laprade propose another way of measuring contour similarity, the contour similarity function (CSIM). CSIM measures the similarity between two csegs of the same cardinality by comparing their COM-matrices. Although CSIM could be applied to the piano's music in Crawford's song, it would measure the similarity of direction between corresponding non-adjacent cps as well as between adjacent cps, which would be more comprehensive than is necessary for my purposes. In comparison, the contour deviance tool measures change of direction only between adjacent cps, which I find more immediately perceptible than all possible pairs of cps in a ten-note phrase.
25. The idea of comparing various musical states to a norm is one that I also use in my analysis of Bauer's Toccata (Chapter 6).
26. As Figure 4-5 shows, I hear the singer's voice in the notated register rather than an octave lower as a male singer might perform the song. The premiere of Two Ricercari in 1933 with contralto Radiana Pazmor and Crawford at the piano supports such an interpretation; the desire to situate myself in the position of the narrator by placing the vocal part within my own "natural" singing register is also an important factor in this analytical decision.
27. Where Crawford indicates approximate rather than exact pitch, the graph shows the pitch approximated by the arrow noteheads.

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28. Straus argues that the launderer is depicted through the free vocal melody, and the cruel world in which he is trapped is represented in the strict rotational-transpositional scheme of the piano (The Music of Ruth Crawford Seeger, 75-76). My analysis shares this premise, but divides the vocal line into two speakers and adds the element of contour.
29. This swell toward the final cadence recalls the rhetorical structure of mass songs of the 1930s, which were designed to leave its audience stirred by the spirit of revolution. See Carol J. Oja, "Marc Blitzstein's The Cradle Will Rock," 446.
30. Robert D. Morris, "New Directions in the Theory and Analysis of Musical Contour," Music Theory Spectrum 15/2 (Fall 1993), 205-28.
31. Morris also identifies each prime with a number measuring its "depth," which indicates how many levels of pruning are required to reach the prime. In this song, there is little variation in the depth values (the depth of the piano primes is either 2 or 3).
32. I regard the narrator's introductions of his boss's statements as the boss's text.
33. David Lewin, "Women's Voices and the Fundamental Bass," Journal of Musicology, 10/4 (Fall 1992), 464-82.
34. Ellen Lupton, "Love, Leisure, and Laundry," in Mechanical Brides: Women and Machines From Home to Office (New York: Cooper-Hewitt National Museum of Design/Princeton Architectural Press, 1993), 16.
35. In The Yellow Peril: Chinese Americans in American Fiction, 1850-1940 (Hamden, Conn.: Archon Books, 1982), William Wu documents the feminizing of Asian men in American literature during the 1920s and 1930s.
36. In contrast to my reading, Straus maintains that "Crawford's politics did not impinge in any deep way on her music" in the sense that she still composed the piano part of "Chinaman, Laundryman" and "Sacco, Vanzetti" in the "ultra-modern idiom," as it was then called (Straus, The Music of Ruth Crawford Seeger, 211).

Chapter 5. *Relating Musical Structure and Social Attitudes
in Marion Bauer's Chromaticon*

1. The typescript for her book, Titans of Music, is housed among the Marion Bauer papers, 1936-1951, Bobst Library Archives, New York University, New York City, n.d. It appears to be nearly complete and remains unpublished.
2. These biographical sources include Christine Ammer, Unsung: A History of Women in American Music (Westport, Conn.: Greenwood Press, 1980), 123-27; David Ewen, American Composers Today (New York: H. W. Wilson, 1949, 20-22); Madeline Goss, Modern Music-Makers: Contemporary American Composers (New York: Dutton, 1952), 19-20; Claire R. Reis, Composers in America (New York: MacMillan, 1938), 19-20; and Nancy Stewart, The Solo Piano Music of Marion Bauer (Ph.D. diss., University of Cincinnati, 1990).
3. Bauer, Twentieth Century Music: How It Developed, How to Listen to It (New York: Da Capo Press, 1947 [1933]). In a recent interview, Milton Babbitt, a former student of Bauer at New York University, describes the importance of this book for him in the early 1930s, when he was unable to find other books in English giving examples of the twentieth-century music he wanted to study; he also mentions that it was Bauer who suggested that he contact Varèse and Sessions as potential teachers. See William Duckworth, Talking Music: Conversations with John Cage, Philip Glass, Laurie Anderson, and Five Generations of American Experimental Composers (New York: Schirmer Books, 1995), 62, 66.
4. In Rich and Strange: Gender, History, Modernism (Princeton: Princeton University Press, 1991), literary theorist Marianne DeKoven describes these competing arguments as claiming modernism to be either a "critique of culture" or an "altar of linguistic and intellectual complexity in search of transcendent formal unity" (12).
5. Martin Bernstein, who was Bauer's colleague on the music faculty of Washington Square College from 1926 until her retirement in 1951, does not recall Bauer expressing political views of any kind (interview by the author in Riverdale, New York, March 22, 1994). Maurice Peress, who studied with Bauer at Washington Square College, also did not find her political sentiments to be particularly in evidence (interview by the author in Flushing, New York, April 11, 1994).

Notes: *Relating Musical Structure*

6. Bauer, Twentieth Century Music, 128.
7. Bauer, Twentieth Century Music, 4.
8. Paul Rosenfeld, Musical Portraits: Interpretations of Twenty Modern Composers (New York: Harcourt, Brace and Howe, 1920).
9. Paul Rosenfeld, An Hour with American Music (Philadelphia: J. Lippincott, 1929), 8.
10. John Tasker Howard, Our Contemporary Composers: American Music in the Twentieth Century (New York: Thomas Y. Crowell Company, 1941). In its more general sections, the book mentions other composers, both men and women, and one brief section addresses the topic of "women composers."
11. Louis C. Elson, The History of American Music (New York: MacMillan Co., 1925 [1904]). In the chapter "American Women in Music" he singles out Beach for a relatively lengthy discussion (293-305).
12. Marion Bauer, "Contemporary Trends in Choral Composition," lecture given for the New York Federation of Music Clubs, Binghamton, New York, April 20-23, 1938 (Marion Bauer Papers, 1936-1951, Bobst Library Archives, New York University).
13. Marion Bauer, "American Piano Music," unpublished typescript (Marion Bauer Papers, 1936-1951, Bobst Library Archives, New York University, n.d.), 9.
14. Irwin Bazelon, "Woman With a Symphony," The Baton of Phi Beta Fraternity 30 (March 1951), 6; quoted in Nancy Stewart, The Solo Piano Music of Marion Bauer, 79.
15. Bauer, "Contemporary Trends in Choral Composition," 11-12; Bauer, Twentieth Century Music, 323.
16. Carol J. Oja examines Rosenfeld's changing views of Still, as well as Still's reception within American musical modernism more generally, in "'New Music' and the 'New Negro': The Background of William Grant Still's Afro-American Symphony," Black Music Research Journal 12/2 (Fall 1992), 145-69.
17. Fredric Stoessel, "In Memoriam Marion Bauer," Marion Bauer Papers, New York University, n.d.

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18. In his article "Reclaiming Walt: Marc Blitzstein's Whitman Settings," Journal of the American Musicological Society 48/2 (Summer 1995), David Metzger discusses Bauer's review of a concert of these pieces, which was published under the title "A Furious and Outraged Audience, a Debasing Program," The Musical Leader 56 (3 January 1929), 8. Metzger cites Bauer's description of the jazz idiom used to set two of the songs, "I Am He" and "Ages and Ages," as "incongruous and debasing," and then presents the following reading of Bauer's review: "By dismissing Blitzstein's songs with language employed to denigrate African American music, these critics [Bauer and New York Times music critic Olin Downes] sought to equate the two and to push the settings onto the 'Other' side of the racial/aesthetic divide, clearing the concert hall, and above all, the revered Whitman from such contamination" (252). Metzger's stern reading of Bauer's review as revealing a desire for musical segregation does not square with the sympathetic attitude to music by black Americans that she exhibits in other of her writings.
19. Considering the politics of race and class, David Mura discusses the practice of non-blacks hiring blacks as nannies, in "Strangers in the Village," in Multi-Cultural Literacy: Opening the American Mind, ed. Rick Simonson and Scott Walker (St. Paul, Minn.: Graywolf Press, 1988), 135-53.
20. These performances include concerts at the Harvard Musical Association on April 10, 1931; a recital given on November 24, 1931, which was part of a lecture-recital series on twentieth-century music given by Bauer and Potter at the homes of various New York women; a Works Progress Administration Music Project concert on January 22, 1936; a concert at the National Gallery in Washington, D.C. on December 3, 1944; and a concert at Pratt Music Hall, Mount Holyoke College on February 14, 1954. Programs for these concerts are in the Harrison Potter file, Library Archives, Mount Holyoke College.
21. A complete listing of Bauer's compositions has not yet been compiled. A partial chronology is provided in Stewart, The Solo Piano Music of Marion Bauer, 83-89.
22. Bauer's Violin Sonata was published by G. Schirmer in 1928 under the title Fantasia quasi una Sonata; her string quartet remains unpublished.

Notes: *Relating Musical Structure*

23. A bass clef appears to be missing in m. 35 in the published score.
24. As in m. 2, a dyad is considered to constitute a single contour pitch unless one of the other cps is positioned between the notes of the dyad; thus for m. 45, the first two triplets have contour <021>.

Chapter 6. Gender, Sexuality, and Performance
in Bauer's Toccata

1. Suzanne G. Cusick, "Feminist Theory, Music Theory, and the Mind/Body Problem," Perspectives of New Music 32/1 (Winter 1994), 14. The writings to which she refers are Joan Wallach Scott, "Gender: A Useful Category of Historical Analysis," in Gender and the Politics of History (New York: Columbia University Press, 1988), 28-50 and Judith P. Butler, Gender Trouble: Feminism and the Subversion of Identity (New York: Routledge, 1990).
2. Suzanne G. Cusick, "On a Lesbian Relation with Music: A Serious Effort Not to Think Straight," in Queering the Pitch: The New Gay and Lesbian Musicology (New York: Routledge, 1994), 67-83.
3. Nancy Stewart, The Solo Piano Music of Marion Bauer (Ph.D. diss., University of Cincinnati, 1990), 30-31, 76.
4. Personal communication with Judith Tick (April 7, 1995). See also her book Ruth Crawford Seeger, A Composer's Search for American Music (New York: Oxford University Press, forthcoming).
5. Interview with Martin Bernstein by the author, Riverdale, New York, March 22, 1994. The complete quote from the interview is: "Marion was a ... well ... she had no ... she didn't... as a female, she had very little interest in men.... At least if she had any romantic liaison with men, we don't know about it."
6. Interview with Milton Babbitt in William Duckworth, Talking Music: Conversations with John Cage, Philip Glass, Laurie Anderson, and Five Generations of American Experimental Composers (New York: Schirmer Books, 1995), 62.
7. Cusick, "On a Lesbian Relation with Music," 74, 77. Fred Everett Maus explores the gendered roles of dominant and non-dominant positions in musical experience in "Masculine Discourse in Music Theory," Perspectives of New Music 31/2 (Summer 1993), 264-93.
8. Cusick, "On a Lesbian Relation with Music," 70.
9. Cusick, "On a Lesbian Relation with Music," 72.

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10. In Generalized Musical Intervals and Transformations (New Haven: Yale University Press, 1989), David Lewin discusses Bartók's "Syncopation," No. 133 from Mikrokosmos, vol. 5, as regards the analytical significance of a pianist's hands playing white or black notes (225-26). In Musical Form and Transformation: 4 Analytic Essays (New Haven: Yale University Press, 1993), Lewin explores the contrast of black-note and white-note material in Debussy's "Feux d'artifice" (97-159).
11. Bauer's Four Piano Pieces were both published and premiered in 1930. Performances include concerts at the Harvard Musical Association on April 10, 1931; a recital given on November 24, 1931, which was part of a series on twentieth-century music given by Bauer and Potter at the homes of various New York women; a Works Progress Administration Music Project concert on January 22, 1936; a concert at the National Gallery in Washington, D.C. on December 3, 1944; and a concert at Pratt Music Hall, Mount Holyoke College on February 14, 1954. Programs for these concerts are housed with the Harrison Potter file, Library Archives, Mount Holyoke College.
12. A complete listing of Bauer's compositions has not yet been compiled. Nancy Stewart provides a partial chronology in The Solo Piano Music of Marion Bauer, 83-89.
13. Bauer's Violin Sonata was published by G. Schirmer in 1928 under the title Fantasia quasi una Sonata; her string quartet remains unpublished.
14. Stewart provides a brief analysis of Bauer's Four Piano Pieces in The Solo Piano Music of Marion Bauer, 153-64.
15. The numbering system I use here (starting with zero) is customary for contour models--it appears in Robert D. Morris, Composition with Pitch-Classes: A Theory of Compositional Design (New Haven: Yale University Press, 1987); Michael L. Friedmann, "A Methodology for the Discussion of Contour: Its Application to Schoenberg's Music," Journal of Music Theory 29/1 (1985), 223-48; and Elizabeth West Marvin and Paul Laprade, "Relating Musical Contours: Extensions for a Theory of Contour," Journal of Music Theory 31/2 (1987), 225-67.

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16. When two dyads are stated successively in one hand (e.g., mm. 5-6), no pattern is listed.
17. D occurs thrice in m. 4 because the dyad in each hand is repeated.
18. For simultaneous four-note clusters such as those in m. 71, I calculate the hand position for the simultaneity rather than for a non-simultaneous, diagonal grouping as I did before.
19. Since the Cbs are played on white notes, this measure might also be played with the right hand over the left.
20. To classify five-note pitch configurations, I conflate the left hand's lower two pitches into a single contour pitch.
21. Diary entry dated February 17, 1930; quoted in Matilda Gaume, Ruth Crawford Seeger: Memoirs, Memories, Music (Metuchen, N.J.: Scarecrow Press, 1987), 196.

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- _____. Letter to Arthur P. Schmidt of September 29, 1916. Cited in Nancy Stewart, The Solo Piano Music of Marion Bauer. Ph.D. diss., University of Cincinnati, 1990, 17.

- _____. Letter to Arthur P. Schmidt of October 6, 1916.
Cited in Stewart, The Solo Piano Music of Marion Bauer, 17.
- _____. Letter to Henry R. Austin of June 18, 1927. Cited
in Stewart, The Solo Piano Music of Marion Bauer, 39-
40.
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Ruth Crawford Seeger, 196.
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- _____. Letter to Charles Seeger, May 6, 1931. Quoted in
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- _____. Letter to Nicholas Slonimsky, January 29, 1933.
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