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Harmonic Organization in Les mamelles de Tirésias by Francis Poulenc

Volume 1

Diane Kipling

A Thesis submitted to the Faculty of Graduate Studies and Research in partial fulfilment of the requirements for the degree of Master of Arts in Music Theory

> Faculty of Music McGill University Montreal, Quebec, Canada September 1995

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ABSTRACT

The opéra bouffe Les mamelles de Tirésias (1944) by Francis Poulenc (1899-1963) stands at the crossroad between the composer's formative and mature works. The opera exhibits a number of harmonic features characteristic of Poulenc's eclectic, idiosyncratic style. There are very few analytical investigations of Poulenc's œuvre and only a handful of works that deal even remotely with Les mamelles de Tirésias. This thesis attempts to redress the lack of attention given this work in particular and Poulenc's output in general.

The thesis consists of two volumes. Volume 1 contains the introduction, three chapters and the conclusion. Volume 2 contains musical examples, analytical graphs and reproductions of Act 1, Scenes 1 and 2, and Act 2, Scenes 7 and 8 from the piano-vocal score of *Les mamelles de Tirésias*.

The first chapter of Volume 1 reviews two Ph.D. dissertations that examine Poulenc's harmonic language, Richard Bobbitt's *The Harmonic Idiom in the Works of 'Les Six'* (1963) and Warren Werner's *The Harmonic Style of Francis Poulenc* (1966), and summarizes the more recent analyses by Vivian Wood, Pamela Poulin and Keith Daniels. Figures (the musical examples) for Chapter 1 are given in Volume 2.

Chapter 2 of Volume 1 examines the large-scale harmonic organization in pivotal scenes that are representative of the musical language in the opera. It combines some tools and procedures employed by Werner with graphs that represent important harmonic, motivic and linear events in order to disclose the ways in which tonal areas and recurrent motives effect continuity and closure in the work. Figures (the musical examples) and Graphs (the analytical graphs) for Chapter 2 are given in Volume 2.

Chapter 3 of Volume 1 extends Werner's and Bobbitt's approach to show how local events and large-scale harmonic motions can be viewed as leitmotives that symbolize key events in the drama. Figures (the musical examples) and Graphs (the analytical graphs) for Chapter 3 are given in Volume 2.

The conclusion reviews the observations of the study and makes some general remarks about Poulenc's harmonic language.

RÉSUMÉ

L'opéra bouffe Les mamelles de Tirésias (1944) de Francis Poulenc (1899-1963) s'inscrit à la croisée de ses œuvres de jeunesse et de celles de maturité. Cet opéra met en relief des caractéristiques harmoniques propres à son style idiosyncratique et éclectique. L'œuvre de Poulenc n'a attiré que peu de recherches analytiques, dont seulement quelques unes traitent de Les mamelles de Tirésias. Ce mémoire tente de subvenir au manque d'attention attribué à cette composition en particulier et à l'œuvre de Poulenc en général.

Ce mémoire comprend deux volumes. Volume 1 contient l'introduction, trois chapitres et la conclusion. Volume 2 contient les exemples musicaux, les graphiques analytiques et les reproductions de l'Acte 1, Scènes 1 et 2, et de l'Acte 2, Scènes 7 et 8 de la partition pour piano et voix de *Les mamelles de Tirésias*.

Le premier chapitre du Volume 1 se penche sur les deux thèses de doctorat: The Harmonic Idiom in the Works of 'Les Six' de Richard Bobbitt (1963) et The Harmonic Style of Francis Poulenc de Warren Werner (1966), qui examinent le langage harmonique de Poulenc. Un résumé des études analytiques plus récentes de Vivian Wood, Pamela Poulin et Keith Daniels conclura ce chapitre. Volume 2 contient les Figures (les exemples musicaux) pour le premier chapitre.

Le deuxième chapitre du Volume 1 étudie l'organisation harmonique structurelle dans les scènes clés qui représentent le langage musical de l'opéra. Afin de démontrer comment les régions tonales et les motifs qui revient souvent effectuent la continuité et la clôture dans l'œuvre, l'approche adoptée combine un choix d'outils et de procédures employés par Werner, avec des graphiques illustrant les évènements harmoniques, motiviques et linéaires importants. Volume 2 contient les *Figures* (les exemples musicaux) et les *Graphs* (les graphiques analytiques) pour le deuxième chapitre.

Le troisième chapitre du Volume 1 élargit l'approche préconisée par Werner et Bobbitt afin de démontrer comment les évènements au niveau intermédiaire et les successions des régions tonales structurelles pourraient être interprétées comme leitmotifs qui symboliseraient les évènements clés du drame. Volume 2 contient les *Figures* (les exemples musicaux) et les *Graphs* (les graphiques analytiques) pour le troisième chapitre.

La conclusion propose un compte rendu des constations tirées du mémoire et offre des observations générales sur le langage harmonique de Poulenc.

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Written permission from Richard Bobbitt for the reproduction of musical examples from his Ph.D. dissertation *The Harmonic Idiom in the Works of 'Les Six'* (Boston University Graduate School, 1963) is still pending.

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INTRODUCTION

Les six, a French group which included Francis Poulenc (1899-1963), Darius Milhaud (1892-1974), Arthur Honegger (1892-1955), Georges Auric (1899-1983), Germaine Tailleferre (1892-1983) and Louis Durey (1888-1979), occupies an important place in the history of 20th-century music.¹ Although there was never any consistent aesthetic position taken by these six composers - they were bound together primarily by friendship - they were nonetheless a liberating force on French music, and were responsible in part for the decline of Wagnerism, impressionism and romanticism in France.²

Les six tended to regard musical composition as a craft, preferring to separate creation from the notion of mystery and inspiration. Actually, they found musical inspiration in their visits to the music hall and circus. They adopted Erik Satie (1866-1925) as their musical model, admiring the tunefulness, simplicity, and jazz and music-hall influences of his music. With the exception of Honegger the works of Les six tend to be short, unpretentious, simple and ostensibly tonal.

Today, the music of *Les six* is thought of as being almost entirely represented by the works of Poulenc and Milhaud, an extremely prolific composer whose creativity is displayed throughout his heterogeneous works. Poulenc is generally remembered as a

¹Most of them had been giving concerts as *Les nouveaux jeunes* beginning in June 1917. They became known as *Les six* after the critic Henri Collet, published an article in *Comoedia* (16 January 1920) entitled "Un livre de Rimsky et un livre de Cocteau - les cinq Russes, les six français et Erik Satie." So the group under both names existed for approximately five years, from 1917 to 1921.

²*Paradoxically, several of Les six went through neoromantic periods. Poulenc's romantic tendencies can be found during the years 1937-1948." Keith W. Daniel, Francis Poulenc: His Artistic Development and Musical Style. (Ann Arbor, Michigan: UMI Reasearch Press, 1982), 322.

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brilliant pianist and gifted melodist; his achievements as a composer are still largely unrecognized, and his music is often dismissed as superficial. Auric's involvement with *Les six* was the first phase of his musical growth; his later achievements included important contributions to the development of film music. Honegger had little sympathy for Satie and had little relation stylistically to the rest of the group. Due to their comparatively small output, Tailleferre and Durey are still not well known.

Few composers of the twentieth century exhibit a style as eclectic as that of Poulenc. Unlike the other members of *Les six*, who had been trained in composition at the Paris Conservatoire or the Schola Cantorum, Poulenc was virtually self-taught. His musical studies began at the age of five with piano lessons from his mother. In 1915 he studied piano with his first important teacher, Ricardo Viñes (1875-1943), a great interpreter of Gabriel Fauré (1845-1924), Claude Debussy (1862-1918) and Maurice Ravel (1875-1937). Viñes greatly influenced Poulenc's own manner of playing and of composing for the keyboard. Through Viñes, Poulenc met Auric and Satie; his musical circle soon widened to include Honegger, Tailleferre, Durey and Milhaud. Poulenc's musical style was influenced by the aesthetic of Satie, and by his visits to fairs, theaters, cafés, circuses and music halls which he began to frequent at about 15 years old; but the first composer whose style distinctly influenced Poulenc's was Emmanuel Chabrier (1841-1894). Poulenc was attracted to the antiromantic character, the charming melodies and popular café-concert atmosphere of Chabrier's music.³ These characteristics are displayed

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throughout Poulenc's repertoire in works like Les biches (1924), ballet with chorus and orchestra; Trio pour piano, hautbois et basson (1926); Banalités (1940), song cycle for voice and piano; and the opéra bouffc Les mamelles de Tirésias (1944).⁴

On several occasions Poulenc referred to *Les mamelles de Tirésias* as his favorite work: "If I had to name my favorite work, I would say *Les mamelles*. It sums up all my youth and my youthful experience; in spite of its *bouffe* appearance, it is a poetic work;"⁵ and "I have a definite weakness for *Les mamelles de Tirésias*; I really think that I prefer this over all my other works."⁶ This opera displays a great number of Poulenc's creative melodies and it also exhibits typical features of Poulenc's harmonic style. Poulenc made the following stylistic comment about this work: "Looking calmly over my rough drafts again, I can only tell you that this is 200% pure Poulenc."⁷ Despite his love of the opera, there are only a handful of analytical investigations that deal with *Les mamelles de Tirésias*; this is not so alarming since there are very few analytical studies of Poulenc's *cœuvre* in general.

⁴Melody plays an unusually important role in Poulenc's style and his gift for melodic inventiveness and freshness appears throughout these works.

⁵Eric Salzman, "The Many Paradoxes of Monsieur Poulenc," New York Times, February 28, 1960, Il: 9.

^{*}Francis Poulenc and Stéphane Audel, Moi et mes amis. (Paris: La Palatine, 1963), 69.

⁷Francis Poulenc, Selected Correspondence, 1915-1962, edited and translated by Sidney Buckland. (London: Victor Gollancz, 1991), 138.

CHAPTER 1: REVIEW OF THE LITERATURE

1.1 Review of the Literature

This chapter reviews and critiques the two most comprehensive studies that examine Poulenc's harmonic language, Richard Bobbitt's *The Harmonic Idiom in the Works of 'Les Six'* and Warren Werner's *The Harmonic Style of Francis Poulenc.**

1.1.1 Richard Bobbitt: The Harmonic Idiom in the Works of 'Les Six'

In his dissertation, Richard Bobbitt presents a descriptive outline of the principal harmonic devices employed by *Les six* with emphasis on techniques peculiar to each composer. The first chapter describes a special terminology for chord description that is employed in his analyses throughout the dissertation. Chapters 2 to 7 are devoted to the composers of *Les six*.⁹ In the concluding chapter, Chapter 8, Bobbitt attempts to correlate the harmonic devices of *Les six* to significant movements and trends in music that existed while *Les six* were most active as a group.¹⁰ The glossary at the end of the dissertation explains the musical terms that are employed in the analyses.

⁸Richard Bobbitt, The Harmonic Idiom in the Works of 'Les Six'. (Ph.D. dissertation, Boston University Graduate School, 1963); and Warren K. Werner, The Harmonic Style of Francis Poulenc. (Ph.D. dissertation, University of Iowa, 1966).

⁹Chapter 2, "Darius Milhaud," Chapter 3, "Arthur Honegger," Chapter 4, "Francis Poulenc," Chapter 5, "Georges Auric," Chapter 6, "Germaine Tailleferre" and Chapter 7, "Louis Durey."

¹⁰Ibid., 541-632. Chapter 8, "Conclusion," is divided into the following sections: The Arts of Transition vs. Juxtaposition, Juxtaposition and Self-Searching, From Tonality to Atonality, Paris before c.1900, *Fin de Siècle* - the Trend towards Diffusion, Primitivism and Stravinsky, Expressionism, Juxtaposition/Superposition as used by *Les six*, The Devices of *Les six* as used by other Composers and The Significance of *Les six*.

The point of departure for Bobbitt is that an harmonic idiom can be separated into

two principal areas:

the examination and identification of individual, static structures (triads, sevenths, ninths, elevenths, thirteenths, polychords, mixed interval structures, chords in fourths, etc.), and

the examination and identification of those originating and/or sustaining elements which either affect or clarify the function of harmonic structures (scale, symmetric patterns, contrapuntal mechanisms, linear chromaticism, activated intervallic area, tonality, superposition, etc.)¹¹

(1) Bobbitt's Chord Classification System. In Chapter 1, entitled "Special Terminology," Bobbitt explains the need for additional nomenclature for chords which appear throughout the music of the late 19th- and early 20th-century and which are not easily described by conventional Roman numeralization. He formulates a system for chords in thirds, fourths, fifths, and for chords in thirds with additional non-harmonic tones; he then presents a method of classifiying harmonic progressions.

His system of nomenclature for chords in thirds identifies triads, and 7th, 9th, 11th and 13th chords in root position with symbols that retain the same descriptive germinal units. Bobbitt's intention is to avoid what he calls cumbersome descriptions such as "D minor-major ninth with added raised 11th and flat 13th,"¹² but his system at times

¹¹Ibid., xx. In the glossary Bobbitt explains the terms "symmetric harmony" and "activation" as follows. Symmetric Harmony (p. 644): An harmonic progression whose chord roots and/or upper structures are based upon patterns of intervallic or structural symmetry, respectively. Activation (p. 633): The space-filling of harmonic or melodic intervals. Figure 1-1 is an example of activation (from Bobbitt: p. 633).

becomes just as cumbersome, as will now be explained. His system for labeling chords in thirds is as follows. The generic symbol for a chord is S (structure) and the specific symbol for a chord S is the letter name of its root (C, C#, D, etc.). The overall structure of a chord is described by a number which indicates the distance between its outer tones when this chord is in root position and in closed position. Thus S5 represents a triad, S7 represents a 7th chord, S9 represents a 9th chord, S11 represents an 11th chord and S13 represents a 13th chord. Superscripts provide further identification of five triad units: S5¹ represents a major triad, S5² represents a minor triad, S5³ represents an augmented triad, S5⁴ represents a diminished triad and S5⁵ represents a triad with a major third plus a diminished third (e.g. C-E-Gb). In actual practice, where the letter name of the root tone is used the "5" is unnecessary since any chord other than a 7th, 9th, 11th or 13th is understood to be a triad; also the superscript "1" is unnecessary if the triad is major. In summary, C, C², C³, C⁴ and C⁵ are the five basic triad units on the root C.

The identification of 7th chords depends upon two factors: the outer interval of a major (indicated by 7), minor (indicated by 7 in a circle), or diminished (indicated by 7 in a square) 7th; and the type of triad on the chord root (indicated by superscript numbers from 1 to 5). Thus C7² denotes a C7th chord whose outer interval is a major 7th and whose triad on the chord root is minor, C-Eb-G-B. By extension, identification of 9th, 11th and 13th chords depends on the outermost interval and the overlapping combination of 7th chords. For instance, the 9th chord C-Eb-Gb-Bb-Db which would be notated as $C9\frac{2}{24}$

becomes $C9^{\oplus}_{4}$ where the sevens are eliminated and the circles are transferred to 2 and 4. The circled 4 represents the 7th chord CO^4 , C-Eb-Gb-Bb, and the circled 2 represents the 7th chord EbO^2 , Eb-Gb-Bb-Db. The 11th chord C-E-G-Bb-D-F is indicated by the symbol $C11^{\oplus}_{1}$, where the circled 1 represents the 7th chord CO^1 , C-E-G-Bb, and the circled 2 represents the 7th chord GO^2 , G-Bb-D-F. The 13th chord C-E-G-B-D-F-A is represented by the symbol $C13^{\oplus}_{1}$, where the 1 represents the 7th chord $C7^1$, C-E-G-B, and the circled 4 represents the 7th chord BO^4 , B-D-F-A. Examples of the symbols for chords in thirds are shown in Figure 1-2.¹³

The most common additional non-harmonic tones contained by chords in thirds are the added 6th and the added 9th. Bobbitt applies his system of notation for chords in thirds with the addition of a superscript 6 or 9 to denote added 6ths and added 9ths, respectively. For example C2⁶ denotes the chord C-Eb-G-A, and C⁹₆ denotes the chord C-E-G-A-D. Some chords contain added notes which can not be accurately described by his system of symbolization; for example Bobbitt would describe the chord F-A-B-C-E as F7¹ with an added tritone.

¹⁹Figure 1-2 is from: Bobbitt, 13.

His system of symbolization for chords in fourths and fifths, and for chords in thirds with additional non-harmonic tones is similar to his method of describing chords in thirds. Bobbitt argues that chords in fourths and fifths do not form a basic part of the harmonic idiom of *Les six*, and therefore states that a system of terminology for chords based on these intervals would be rather ambiguous, because fourths and fifths are simply inversions of each other and do not lend themselves to the formation of clearly defined structural units. He sets up germinal structures that are limited only to chords in fourths, but remarks that there are instances in the music of *Les six* of mixed interval structures in fourths which exceed the limits of the system, for example the chord C-F-Bb-Db-G-C#-F# (these pitches are spelled from the lowest sounding note to the highest sounding note).¹⁴ He concludes that it is much simpler to label these structures by using words not symbols. So the chord C-F-Bb-Db-G-C#-F# would be referred to as a structure with mixed intervals, fourths predominating.

Having classified all of the chords, Bobbitt turns to the issue of progression. His classification of harmonic progressions is based, with very few changes, on a system proposed by Joseph Schillinger.¹⁵ In this last section of Chapter 1 Bobbitt names four

¹⁴Bobbitt is more concerned with the abstract registral "spacing" of the chord than with its pitch-class content. He considers Db and C# as two separate entities, for example. This is a much more "traditional" approach than later alternative methods of classification based on pitch-class collections, where the "total" intervallic structure of the unordered members of the chord is of prime importance. For example: Forte, Allen. The Structure of Atonal Music. New Haven and London: Yale University Press, 1973. Hanson, Howard. Harmonic Materials of Modern Music: Resources of the Tempered Scale. New York: Appleton-Century-Crofts, 1960. Martino, Donald. "The Source Set and its Aggregate Formations." Journal of Music Theory 5 (1961): 224-73. Rahn, John. Basic Atonal Theory. New York: Schirmer, 1987.

¹⁵Joseph Schillinger, The Schillinger System of Musical Composition, Volume I, Book V. (New York: Carl Fischer, 1946).

principal categories of harmony: diatonic, mixed diatonic, chromatic and symmetric. The four categories and associated terminology effectively describe types of harmonic progressions that occur in the works of *Les six*. Diatonic harmony is defined as "an harmonic progression whose chord roots and upper structures belong to the same scale."¹⁶ Mixed diatonic harmony is defined as "an harmonic progression whose chord roots and upper structures are not restricted to that scale;"¹⁷ Figure 1-3 shows examples of mixed diatonic harmony.¹⁸ Chromatic harmony is defined as "an harmonic progression resulting from chromatic, linear part movement, and not dependent upon scale, key or root motion."¹⁹ While symmetric harmony is defined as "an harmonic progression whose chord roots and/or upper structures are based upon patterns of intervallic or structural symmetry;"²⁰ Figure 1-4 shows examples of symmetric root patterns.²¹

(2) Analytical Approach and Critique of Bobbitt. Given the diversity of style in the works of *Les six* and the size of their output, defining a common harmonic idiom is an

¹⁷Ibid., 638.

¹⁹Bobbitt, 634.

²⁰Ibid., 644.

¹⁶Bobbitt, 636.

¹⁸Figure 1-3 is from: Bobbitt, 19.

²¹Figure 1-4 is from: Bobbitt, 21. Uniform symmetric root patterns are found in Poulenc's Promenades (1921), a set of piano pieces. Generalized symmetric root patterns are found in Poulenc's Les soirées de Nazelles (1930-36), another set of piano pieces.

imposing - if not impossible - task. While Bobbitt's analyses sometimes do not reach any great depth in dealing with Poulenc's works, the dissertation raises many issues worthy of further investigation and is a valuable source for understanding the harmonic devices employed by *Les six*.

Chapter 4 is reserved for the discussion and analyses of selected works by Poulenc and is divided into five sections: The Early Period, The Influence of Satie and Stravinsky, Conventional Features of Poulenc's Harmony, Poulenc's Style after 1940 and Summary. Bobbitt employs three analytical tools and descriptive techniques: the method of description for chords in thirds, fourths, fifths and for chords in thirds with additional non-harmonic tones; the classification of harmonic progressions based on Schillinger's four principal categories of harmony; and harmonic-reduction sketches modeled after Heinrich Schenker's concept of structural prolongation.²²

Bobbitt's approach is displayed in two analytical examples from Chapter 4, the first movement of the *Sonate* (1918), an early work for piano, and a passage from the third movement of the *Sonate pour piano et violoncelle* (1948). The following is an excerpt from the analysis of the *Sonate* (1918): "The folk-like, primitive quality of the first movement continues through the second movement as well, where the thematic material of mm.17-40 is used to establish an ostinato."²³ Figure 1-5 shows the thematic

²²Heinrich Schenker, Der Freie Satz, translated and edited by Ernst Oster. (New York and London: Longman, 1979).

²⁰Bobbitt, 326.

material of mm.17-40 that establishes an ostinato shown in Figure 1-6.²⁴ At the end of the analysis Bobbitt lists, without any further discussion or comments, the principal organizing factors of the first movement from *Sonate* (1918). They are diatonicism, percussive rhythmic accompaniment, folk-like thematic material and a pervading primitive quality accentuated by repetitive ostinato patterns.²⁵

Although the nature of analysis necessitates descriptions of surface musical events and techniques, they become less meaningful if relations are not made to larger structural units. For example, the end of the analysis of the first movement from *Sonate* (1918) would have been an appropriate place for Bobbitt not to merely list the principal organizing factors of the movement, but also to discuss the functional and structural roles that Poulenc's techniques possess in contributing to the organization of the movement and the coherence and unity of the work as a whole. Here, a section that includes musical examples might have been devoted to the common techniques that Poulenc employs, such as ostinati and percussive rhythmic accompaniment, and analytical questions relating to the contextual importance and structural placement of these techniques might have been raised. For instance, how do ostinati and percussive rhythmic effects organize each movement and the work as a whole? What functions do they perform? Are they used for prolongational purposes (to prolong tonic, dominant or some other harmony in the piece) or for modulatory purposes? At what contextual and structural points are they

²³Bobbitt, 327.

²⁴Figure 1-5 and 1-6 are from: Bobbitt, 326.

most commonly found (in introductions, inner sections of movements, at cadences, at preor post-cadential points)? Answers to these questions would give more insight into the function these techniques possess and might lead to a deeper understanding of Poulenc's compositional techniques in general.

In the final part of Summary (Principal Techniques Used by Poulenc) from Chapter 4. Bobbitt presents various compositional techniques used by Poulenc and then refers to musical examples that illustrate these devices; he also applies his method of chord description and harmonic classification, and introduces some harmonic reductive graphs. He categorizes these techniques in terms of three general types: types of chord progressions, types of chord structures and scale relationships.²⁶ Here is a sample of his comments on types of chord progressions:

The types of chord progressions employed almost always belong to a tonal situation. We have already seen numerous instances of tonal progressions, many of them strictly diatonic.

Chromatic harmony is also featured a great deal. The majority of Poulenc's chromatic progressions do not fall within the free "half-step motion" category which was discussed in connection with Honegger's works. The chromatic harmonies are usually a means of embellishing diatonic textures, but there are occasions where a progression, begun tonally, wanders considerably farther afield.²⁷

²⁰The reader is able to glean more from this section since techniques are classified in principal categories and then illustrated in musical examples. Bobbitt still does not emphasize the ways in which these techniques contribute to the organization of the composition, although there is an attempt to do this at times.

He places types of chord progressions in the context where they most often occur then mentions the most common function of chromatic harmonies.²⁸ He then quotes a musical passage from the third movement of the *Sonate pour piano et violoncelle* (1948) with an accompanying condensed harmonic sketch as an example of Poulenc's usage of chromatic harmonies (see Figure 1-7).²⁹

The graphic analysis of the passage from the third movement of the *Sonate pour piano et violoncelle* (1948) is an example of a "Condensed Harmonic Sketch" (see Figure 1-7).³⁰ Bobbitt does not mention in the graph and accompanying verbal text the key or pitch centre of the musical passage under examination; nor does he take into account the function of the harmonies, that is, the effect that harmonies that precede or follow one another have in determining the function of each other. A closer look at the musical passage reveals that the first four measures display a model-sequence technique that can be analyzed with Roman numerals: I-iii-ii⁹-V⁷ in Db (model, mm.1-2) and I-iii-ii⁹-V⁷ in E (sequence, mm.3-4). Measure 5 contains chromatic passing chords, E7 and Eb7, that do not possess a tonal function. The chord in m.6, D7, would at first glance seem to be

²⁶This discussion would be more informative if it included mention of structural points where chromatic harmonies occur and wander considerably farther afield. In his discussion of types of chord structures, however, Bobbitt does refer to structural placement: "Incomplete chord structures are frequently used at cadences as a means of lightening the texture." Bobbitt, 377.

²⁹Figure 1-7 is from: Bobbitt, 373.

³⁰In the dissertation there is no explanation for the method of reducing a musical passage into a "Condensed Harmonic Sketch." These harmonic reductive graphs used in Chapter 4 contain only whole note values which do not expose prolongational motions and do not assign hierarchical and structural value to the notes in the musical examples. Overall these sketches do not relate linear aspects of the musical passage. A contrapuntal graphic depiction would reveal a structural view of the music where one can visually see the hierarchical values and organizational forces that the linear voices possess.

another chromatic passing chord but if it is analyzed in relation to the C# dominant harmony (octatonic) that follows, it can be understood as a pre-dominant augmented-6th chord. Surface chromatic motion is the only linear motion represented in the graph by dashes. Bobbitt does not explain what structural significance and functional role the chromatic movement possesses, nor its contribution to the structure of the passage. Different rhythmic durational note values along with slurs, solid and dotted lines, stems of different lengths, beams of different thickness could have been used to indicate important linear aspects of the passage, such as prolongation and/or compositional unfolding. By using these techniques the graph would reveal different levels of structural importance that the harmonies and linear voices possess. The chapter does provide important information about Poulenc's musical influences, discusses selected compositions in their historical context, and relates them to the significant movements in art and literature that influenced the music of Poulenc's time. However, these two analytical examples illustrate the main problems in Bobbitt's approach: his idiosyncratic and nonstandard terminology and the lack of relations to the larger context of the passage or overall piece.³¹

Lack of contextual relations is inherent in the method of description for chords in thirds. Bobbitt believes that his method of description for chords in thirds is advantageous because it uses a small number of basic elements which can be applied to multiple situations and because all 9th, 11th and 13th chords can be named by using the

³¹His observations prove to be more useful once the analytical approach is expanded.

symbols for overlapping 7th chords. He realizes that his method which uses two numbers in addition to the usual chord symbol, does not allow space for figured bass numbers; but he states that 9th, 11th and 13th chords are usually in root position, and the notation of inversions has little real value. Bobbitt's system also describes triads and 7th chords in root position only; but the notation of inversions for triads and 7th chords are significant since triads and 7th chords often occur in inversions.

The systematic method for describing chords in thirds does not contain too many basic elements in each symbol, and can be learned once the symbols for all 7th chords are thoroughly mastered. However, one tends to forget the meaning of the numerical symbols, especially those that contain combinations of natural, circled and/or squared numbers that range from 1 to 5, for example $S13\frac{3}{41}$. So although "D minor-major ninth with added raised 11th and flat $13th^{*32}$ (D-F-A-C#-E-G#-Bb) is admittedly a lengthy and cumbersome description, most musicians can understand what this means and accurately reconstruct the chord. The symbol $D13\frac{2}{21}$ is a more visually compact and abbreviated

description for the same chord but it is not derived from a widely known system of chord description, therefore it becomes difficult to construct and understand unless Chapter 1,

²²Bobbitt, 8.

"Special Terminology," and Table I from Bobbitt's dissertation, are next to the reader for constant reference.³³

Overall, the method of description for chords in thirds, fourths, fifths, and for chords in thirds with additional non-harmonic tones is not as efficient as Bobbitt would hope. The usefulness of his sytem diminishes because it only describes chords in root position and constant reference to Table I is needed. Since his method of classification does not go beyond mere descriptions of the vertical intervallic structure of a chord (cf. footnote 14), context is not a factor in determining the meaning and label of the chord. What follows is two examples in which the meaning and label of a chord may change depending on its context. When Bobbitt explains his method for labeling 13th chords, the 13th of the chord is only considered as an added note; but in many contexts this note might function as passing or upper neighbour note which resolves to the 12th of the chord. In these cases the label of the chord would change to reflect as much as possible, the different functions of each note. Chords in fourths and fifths are described in a general manner with words that communicate the intervallic structure of the chord. Bobbitt's reference to the chord C-F-Bb-Db-G-C#-F# as a structure with mixed intervals, fourths predominating is again an intervallic description. Other labels can be applied to this chord depending on its context; if this chord occurred in a tonal context it could be

³⁰The method of symbolization for chords in thirds with additional non-harmonic tones is easier to remember because the added 6th and added 9th are each represented by one element, a number that is indicative of the added interval that it is describing. However, in cases where chords contain added notes other than the 6th or 9th, the method of description can become lengthy and again reference to Table I might be required. For example the chord F-Gb-A-B-C-E could be classified as F7¹ with an added tritone and a flatted second.

considered as a dominant harmony in the key of F, then its label would also need to reflect its function.

1.1.2 Warren Werner: The Harmonic Style of Francis Poulenc

In his dissertation, Warren Werner isolates specific elements from which emerge the constructive and organizational principles of Poulenc's somewhat elusive harmonic style. Chapter 1, "Introduction to the Study," provides a biographical sketch of Poulenc's life and presents general stylistic characteristics of his music. In the second chapter, "Methods and Procedures," Werner lists various works to be analyzed, describes his analytical method and approach, cites 11 aspects of Poulenc's diversified tonal language and explains the terms and symbols that he employs. Chapter 3, "Harmonic Analysis of Representative Works," examines in greater depth the 11 aspects which Werner believes clarify the fundamental nature of Poulenc's harmonic style. In Chapter 4, "Conclusion," Werner summarizes and reviews the observations of the study and draws three main conclusions from his findings in Chapter 3.

(1) Analytical Approach of Werner. In Chapter 2 Werner discusses the purpose of his dissertation in more detail.³⁴ Werner believes that the detailed studies of tonal

³⁴He explains that he attempted originally to treat in equal depth such divergent aspects of style as phrase length, styles of writing for the various performing mediums, text settings, metrical and rhythmic considerations, as well as harmonic, melodic and architectonic elements; but he found himself so overextendend that effective consideration of any one aspect was impossible. So he decided to focus the investigation on the harmonic element, and to treat other matters of style peripherally or when they seem to play an important role in certain harmonic contexts. He selects works from the following categories in

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composers seem to suggest two basic analytical approaches: the statistical approach and the chronogical measure by measure analysis. The statistical approach tabulates the frequency of occurence of sonority types, root progressions and cadential formulas. Werner maintains that this approach is more valuable in the analysis of music by composers from the common practice period but is less suited to the extremely eclectic style of Poulenc. The second approach (the measure by measure analysis) treats harmonic events in order of occurence; Werner recognizes that this is a necessary preliminary step but feels that studies that do not go beyond mere narration become undiscriminating, repetitious and tedious to read.

He thus employs three analytical tools in the examination of Poulenc's compositions: the traditional technique, Schenker's theory of tonal music and Robert E. Müller's concept of tonal pillars.³⁵ Since the art of Poulenc is basically tonal, Werner employs:

a freely modified traditional harmonic analysis - grounded in key centers, with Roman numerals used to designate root movements, with voice leadings, inversions, and chromatic alterations expressed by Arabic numerals, and with nonharmonic notes isolated and identified.³⁶

³⁵Müller developed his concept of tonal pillars in his dissertation on tonality in the works by Debussy and Ravel: Müller Robert E., *The Concept of Tonality in Impressionist Music*. Ph.D. dissertation, Indiana University, 1954.



order to best represent Poulenc's various periods, both chronogically and stylistically: songs, choral works (both a cappella and accompanied), piano works, orchestral works, chamber music and opera. Werner, 48-49.

Werner argues that many passages of Poulenc's music resist this traditional approach and

are best analyzed by modifying neo-Schenkerian reduction procedures that distinguish

between chord grammar and chord function in the manner of Salzer.

Chord grammar denotes the usual type of analysis in which separate designations and labels are assigned to triads, seventh chords, etc. It is a purely descriptive means of registering and labeling each chord and relating it to different key centers... Chord significance, since it discloses the function of a chord, goes far beyond grammatical description by pointing out the special architectonic purpose of a chord within a phrase.³⁷

Thus, chords that prolong or contrapuntally elaborate a motion are not confused with

chords that perform structural duties. In passages where contrapuntal or horizontal

musical forces are most prevalent Werner also adopts a modified Schenker-Salzer voice-

leading graph, where:

Note values indicate structural rather than rhythmic significance of notes and chords.

The largest note values in a graph indicate notes and chords of the highest structural order. With notes of equal value, the height of the stems differentiates structural values.

Dotted or solid slurs, lines, arrows, and brackets indicate the relation between identical and different notes or chords, specifying their structural connection.

The driving tendency of a bass line is indicated by horizontal, solid arrows.

Only harmonic (structural) chords are labeled with Roman numerals.³⁸

³⁷Ibid., 54-55. Felix Salzer, Structural Hearing, 2 vols., with a foreword by Leopold Mannes. (New York: Charles Boni, 1952), 10.

³⁶Ibid., 62. Werner describes vertical non-functional voice-leading chords in a manner suggested by Kohs, Ellis B. *A Syllabus for Teacher and Student*. 2 vols. New York: Oxford University Press, 1961. This method uses symbols such as T (major triad) and t (minor triad). Werner identifies non-functional 7th chords according to Allen Irvine McHose, *The Contrapuntal Harmonic Technique of the 18th Century*.

Werner applies Müller's concept of tonal pillars to pieces which seem to be organized around a non-tonal referential sonority that functions as a tonic center, but which lack any sense of direction or resolution. Müller defines tonal pillars as: "Melodic-harmonic entities, usually of a fragmentary nature - whose variations and reappearances form the texture of each individual work,"³⁹ and names four types:

Pseudo-traditional centers (triads and diationic progressions reminiscent of majorminor scale patterns).

Non-major-minor progressions and sonorities (modal patterns, mixed modes, exotic sonorities).

Sevenths and ninths of various kinds, as individual entities.

Most ambiguous structures (augmented triads, whole-tone sonorities, parallel dissonant structures).⁴⁰

(2) Werner's Analyses. Chapter 3, "Harmonic Analysis of Representative Works," is devoted to an examination of Poulenc's harmonic language in terms of the following 11 categories: (1) root movements, (2) cadence types, (3) construction of tertian sonorities,
(4) non-tonal constructions (whole-tone scales, tonal pillars, fourths and fifths), (5) ecclesiastical modes, (6) modal mixtures, (7) pedal and ostinato figures, (8) bitonality, (9)

*Tbid., 58.

⁽New York: F.S. Crofts, 1947), 142-143. This method of classification employs symbols such as M/m^2 (dominant 7th) and d/d^2 (fully diminished 7th). Werner does not feel that it is essential to isolate and identify each and every non-harmonic note or chord. However, in cases where identification was needed to clarify a harmonic meaning he uses symbols such as ant. (anticipation) and p.n. (passing note).

³⁹Ibid., 57.

contrapuntal or voice-leading chords, (10) pace of harmonic activity and (11) form. Root movements and cadence types deal with the harmonic movement of the music; construction of tertian sonorities, non-tonal constructions (whole-tone scales, tonal pillars, fourths and fifths), ecclesiastical modes, modal mixtures, pedal and ostinato figures, and bitonality are concerned with the structure of sonorities; whereas contrapuntal or voice-leading chords, pace of harmonic activity and form treat contrapuntal, temporal and architectonic matters. Werner believes that the constructive and organizational principles of Poulenc's harmonic style emerge from these 11 specific elements of composition.⁴¹ An example from the ninth category (contrapuntal or voice-leading chords) of Chapter 3 will serve to illustrate Werner's approach.

Werner presents the concepts of contrapuntal or voice-leading chords by using three musical examples, each representing a successively deeper structural level.⁴² Through analysis of these three examples Werner wants to demonstrate how Schenkerian principles can describe the linear forces in certain passages of Poulenc's music.

For his second example Werner uses a passage from the "Tenebrae factae sunt" in the choral work *Quatre motets pour un temps de pénitence* (1938-39) to demonstrate the prolongation of a I-II⁷-V half cadence (see Figure 1-8).⁴³ Werner notes that the

⁴¹He had originally hoped to define Poulenc's harmonic style in two or three broad stylistic principles, but thought that in a style as eclectic as Poulenc's, panoramic analytical methods would overlook details that are essential to its nature.

^C^{*}The first example expresses the simple prolongation of a single chord; the second, a more extensive elaboration of a cadence; and the third, the architectonic plan of an entire section.^{*} Werner, 167.

^oFigure 1-8 is from: Werner, 170.

harmonic progression I-II⁷-V, is first elaborated by a change of register, producing a widely spaced M/m^7 sonority (mm.7-8). Afterward, the bass begins a rapid ascent outlining the VII⁰⁷/V (F equals E#) and ends on a $V_{\frac{3}{2}}^4/V$ (V⁹ in third inversion).⁴⁴ A

passing chord then leads to the structural II_3^4 -V cadence in mm.11-12, not shown in Figure 1-8. The structural V of m.10 is accented by the change of direction in the outer voices in mm.11-12. The prolongational function of mm.9-10 is outlined by the clear and direct motion of the bass. Thus, a basic I-II⁷-V half cadence expands into a chromatic sevenmeasure passage by means of a register transfer and chord prolongation.⁴⁵

Werner believes that the voice-leading graph in Figure 1-8 discloses the importance of these structural and contrapuntal elements with a precision impossible with ordinary vertical analysis. The note values and height of stems indicate structural significance of notes and chords, the half notes bearing the highest degree of structural importance. The dotted line and bracket denote structural connections between notes and chords, and the arrow represents the driving tendency of the bass line. Werner's graph

⁴⁴Measure 8 can be understood as a fully diminished 7th chord, A-B#/C-D#-F#, that leads to the fully diminished 7th chord of mm.9-10, G#-B-D-F.

⁴⁵Werner could also mention the use of two different symmetrical structures in the right-hand and lefthand piano parts, G-E-C#-A#-G and G#-B-D-F-G#. These structures form an octatonic scale that is symmetrical about C#4/D4, the focal point of the "Jesus" chord.

visually differentiates between prolongational and structural chords, which are labeled with Roman numerals, revealing the linear aspect of the passage.⁴⁶

In the concluding chapter Werner synthesizes and consolidates the observations made in Chapter 3 and draws three conclusions. The first conclusion is that one of the strongest organizing forces in Poulenc's music, as well as in the music of Monteverdi, Bach, Mozart and Brahms, is the reciprocal interaction of tradition and innovation, of conservatism and modification, of stability and mutability.⁴⁷ Werner is referring to the ways in which Poulenc simultaneously worked within the established tonal framework, and deviated from it by incorporating unfamiliar or exotic elements into his own tonal language.⁴⁸ The second conclusion is that certain passages or complete works by Poulenc are not organized according to harmonic principles, but rather express contrapuntal or horizontal forces.⁴⁹ The third conclusion reaffirms that key relationships are replaced by tonal pillars in a limited number of works by Poulenc.⁵⁰

⁴⁶This aspect of the music was not revealed in Bobbitt's reductive graph. The symbols underneath each harmony provided only descriptive information about each chord and did not reveal chords which had a structural function.

[&]quot;Werner, 194.

[&]quot;Ibid., 198.

[&]quot;Tbid., 199. The three examples discussed in the ninth category (contrapuntal or voice-leading chords) of Chapter 3 typify Poulenc's use of this organizational principle.

³⁹Ibid., 200. Werner analyzes passages that are organized around tonal pillars in the fourth category (non-tonal constructions) of Chapter 3.

(3) Critique of Werner. Werner's approach to analysis is both more accessible and effective than Bobbitt's for several reasons. He reveals more about Poulenc's harmonic language and the compositional techniques that unify Poulenc's works because his categories and analytical tools are more refined. These refinements permit him to isolate specific harmonic events more easily and then address organizational and structural issues often ignored by Bobbitt. The 11 categories uncover many organizational aspects of Poulenc's harmonic style and are illustrated in musical examples. Whereas Bobbitt, save the final part of his chapter on Poulenc, usually presents musical examples and then refers to techniques or organizing principles, Werner does the opposite - he first isolates specific organizational elements and compositional techniques and then presents examples. Although both authors supply descriptive information about the music, Werner relates these surface events to their role in structuring and organizing the passage or work under examination.⁵¹

Werner's terminology and symbols are more traditional and familiar than those used by Bobbitt. Werner also explains in more detail the utility of his three analytical tools. He clearly presents the familiar terms and symbols that he draws from the

³¹As was stated before, Bobbitt clearly presents his first analytical tool, the method of description for chords in thirds, but this technique proved to have certain drawbacks in many respects. The method for harmonically reducing a musical passage into a "Condensed Harmonic Sketch" is never explained. As was seen, his sketches seem only to disclose surface harmonic movement when they could have revealed more about the compositions under examination. The classification of harmonic progressions effectively categorizes many harmonic progressions that occur throughout the works of Poulenc, but it does not explain the syntax of the harmonic or root progressions. This method of classification combined with his other two analytical tools does not offer as much insight as the three analytical tools presented by Werner. Overall, Werner is clearer and more sound methodologically; he offers more analytical tools, more accessible labeling schemes and a more flexible approach.

traditional technique. Müller's concept of tonal pillars, also clearly presented, appears to be necessary for the analysis of certain pieces that are not tonally organized. The greatest advantage to Werner's approach is the application of his second analytical tool, Schenker's distinction between chord grammar and chord function, which incorporates accompanying reductive graphs in which the difference between chord grammar and chord function, and between structural and prolongational (or contrapuntal) chords is clearly explained.⁵² Werner also addresses the syntax of harmonic progressions in his analyses by demonstrating how certain chord progressions or certain root movements are used and by explaining their function.⁵³

1.1.3 Other Studies

Research that deals with the analysis of Poulenc's music has been limited; only in the last 15 years have scholars begun to address his music in some detail. Three scholars in particular have done significant work: Vivian Wood, *Poulenc's Songs: An Analysis of Style*;⁵⁴ Pamela Poulin, *Three Stylistic Traits in Poulenc's Chamber Works for*

⁵²He states that the modified Schenker-Salzer voice-leading graphs are used when contrapuntal or horizontal musical forces seem to play the strongest organizational role in certain musical passages; he then clearly lists the symbols, and their accompanying meaning, that appear in these graphs.

³⁰Werner classifies root movements of a fifth according to the following categories: the series of descending fifths (or alternate ascending fourths and descending fifths), fulfilling a tonality-defining, a prolonging or a modulatory function; secondary dominant functions; and alternation of tonic and dominant roots in relatively static harmonic sections. Werner, 73.

⁵⁴Vivian Lee Poates Wood, Poulenc's Songs: An Analysis of Style. (Jackson: University Press of Mississippi, 1979).
Wind Instruments;⁵⁵ and Keith Daniel, A Preliminary Investigation of Pitch-Class Set Analysis in the Atonal and Polytonal Works of Milhaud and Poulenc.⁵⁶

Vivian Wood's book examines the melodic and harmonic structure, poetry and form in the songs of Poulenc. Her chapter entitled "Harmony" details the following compositional elements: pure diatonic chords, pedal points and ostinatos; polytonality; simultaneous major-minor and impure octaves; alterations of tertian chords; chord mixtures or free sound combinations; mediant connections and gliding chords; color chords and pure sound effects; cadences; modulations; nonharmonic tones; and dissonances. All of Wood's analysis is purely descriptive; she describes musical events "measure by measure" and does not address the ways in which these events contribute to the organization and structure of Poulenc's songs. Her analysis is verbal and is accompanied by musical examples that, unfortunately, do not contain Roman numerals or other analytical symbols.

Pamela Poulin's dissertation, *Three Stylistic Traits in Poulenc's Chamber Works* for Wind Instruments, reveals three significant stylistic traits in Poulenc's chamber works for wind instruments; these are labeled as experimental, neoclassical and popular. Before examining these traits in detail, Poulin devotes Chapter 2, "Form and Tonality," to formal design and tonal relationships existing within and between the individual movements of

³³Pamela Lee Poulin, Three Stylistic Traits in Poulenc's Chamber Works for Wind Instruments. (Ph.D. dissertation, The University of Rochester, Eastman School of Music, 1983).

⁵⁶Keith W. Daniel, "A Preliminary Investigation of Pitch-Class Set Analysis in the Atonal and Polytonal Works of Milhaud and Poulenc," In Theory Only 6/6 (1982): 22-48.

the nine works for wind instruments. Through her analysis of form and tonality Poulin draws informative conclusions about the ways in which certain tonal patterns and certain types of harmonic patterns and cyclic themes contribute to the structure and organization of the works.⁵⁷ The method of analysis includes reductive voice-leading graphs which provide insight into the linear workings of these pieces.

Poulin then discusses the nine chamber works for winds in relation to the three stylistic traits, most of which are included in each work. The experimental stylistic trait essentially refers to non-tonal features of Poulenc's earliest compositions. The discussion of these compositions focuses on linear aspects (exotic scales, intervalically derived elements, ostinato, atonal pitch segments, static melodies), vertical features (parallelism, free relation, chords in oscillation), texture and rhythm. Neoclassicism, the second stylistic trait, is a term generally used to characterize all of Poulenc's music. His neoclassical techniques include the use of diatonic melodies; cyclic themes; textures, rhythms and harmony reminiscent of classic music (although the harmony includes higher tertian structures); and quotations of themes.⁵⁸ The popular trait represents the types of music heard in cafés and music halls, and in the streets of Paris during Poulenc's youth.

⁵⁷Some of her conclusions include: "The unifying cyclic themes appear in all three-movement works, with increasing frequency in the middle and late works," and "Within movements, certain types of harmonic patterns tend to occur: the b6-5 bass motion which often appears at structural divisions (in the Brass Trio, Piano Trio, *Elégie*, Flute and Clarinet Sonatas), and (complete and incomplete) tetrachordal outlining (Piano Trio, Sextuor, Flute and Clarinet Sonatas)." Poulin, 124-26.



music-hall and circus music. During the examination of the three stylistc traits Poulin relates her findings to formal, tonal and structural issues employing musical examples, reductive graphs and charts that summarize her observations.

Daniel's article "A Preliminary Investigation of Pitch-Class Set Analysis in the Atonal and Polytonal Works of Milhaud and Poulenc," examines representative atonal and polytonal works by both composers in order to establish a framework for applying pitch-class (pc) set analysis.⁵⁹ Daniel uses this analytical tool to examine the song *Un poème* (1946) and *En avion*, a piece from the collection of 10 short piano pieces entitled *Promenades* (1921).

Daniel regards *Un poème* as Poulenc's only experiment in a non-tonal idiom. When the independent vocal line is added to dissonant trichords, tertian and quartal chord structures emerge; however, all remain unrelated to a tonal center.⁶⁰ Daniel concludes: "Set analysis, and set awareness on the composer's part, are far more important at the local or microformal level than as an overriding architectural technique in the song."⁶¹ Poulenc's experiments with polytonality occurred in the first five years of his career; *En avion* presents a clear-cut use of this technique. Daniel chooses vertical structures as the principal sets because of the extensive use of scales or chromatic motion in one or both

⁵⁹Pitch-class set or atonal analysis classifies all sonorities according to interval-class content.

⁶⁰Daniel, 36. The dissonant trichords are identified by the set-class labels: 3-2 [013], 3-3 [014], 3-4 [015], 3-5 [016], 3-8 [026], 3-10 [036] and 3-11 [037].

⁶¹Ibid, 41.

hands.⁶² Again, as in *Un poème*, Daniel argues that Poulenc has made little attempt to use sets as a macroformal structuring technique. His study reveals that pc set analysis is primarily used as a surface technique in Poulenc's atonal and polytonal works; there are no "Poulenc sets" which are predominant throughout these works, and there is no apparent use of complement relations except as isolated localized gestures.⁶³

^CIbid., 43.

⁶⁰Ibid., 48. "For any set, the pitch classes it excludes constitute its complement. The complement of the set {3, 6, 7}, for example, is {8, 9, 10, 11, 0, 1, 2, 4, 5}." Joseph N. Straus, *Introduction to Post-Tonal Theory*. (Englewood Cliffs, New Jersey: Prentice-Hall, 1990), 68.

1.2 Analytical Approach

The bulk of the research on Poulenc's music offers a variety of analytical tools such as traditional analysis, methods of chord classification, linear and harmonic reductive graphs, pc set analysis and the concept of tonal pillars. These have been applied with varying degrees of success to a diversity of Poulenc's works, including the chamber works for wind instruments (1918-62), the work for solo piano *Les soirées de Nazelles* (1930-36), the choral work *Mass in G* (1937) and the song set *Banalités* (1940). However, hardly any research has dealt with analytical investigations of *Les mamelles de Tirésias*.

This thesis addresses the large-scale harmonic organization of *Les mamelles de Tirésias*, paying particular attention to the ways in which key associations and recurrent motives and events effect continuity and closure in the work. Since focusing on the whole opera would exceed the scope of this thesis, Act 1, Scenes 1 and 2, and Act 2, Scene 7 (hereafter referred to as I/i, I/ii and II/vii, respectively) will be examined. These scenes are representative of the musical language used throughout the opera and are also key turning points in character and plot development. This investigation will extend the approaches used by Bobbitt and Werner in order to address in much greater detail the techniques that unify this rich work. The analytical approach combines some tools and procedures employed by Werner, whose work would seem the best suited to uncover many aspects of Poulenc's style, with reductive graphs that represent important harmonic, motivic and linear events.

2.1 Introduction

Keith Daniel divides Poulenc's music into four style periods.⁶⁴ The first three are characterized respectively by the influences of Satie,⁶⁵ Stravinsky⁶⁶ and neoromanticism;⁶⁷ while the fourth (1953-63) shows Poulenc's occupation with sacred choral works, a few songs and piano pieces, chamber works and two operas. His music in this last period "mellows," his harmony becomes richer, his tempi slower and more relaxed.⁶⁸ Les mamelles de Tirésias (1944) belongs to the third stylistic period.

The opera is based on the play Les mamelles de Tirésias by Guillaume Apollinaire (1880-1918). Apollinaire was regarded as a leader in the literary and artistic circles of the French avant-garde in the early twentieth century. His works and ideas helped to direct poetry into unexplored channels. Believing that "poetry should be read aloud and

⁴⁴Daniel, Francis Poulenc: His Artistic Development and Musical Style, 94-99.

⁴⁵The principal stylistic elements of this period (1917-22) include simple, often diatonic melodies; repetitive chordal accompaniment; the use of modality and ostinato; thin, linear textures; and circus, fair and music-hall influences.

⁴⁶Daniel claims the "Stravinsky or neoclassic period" (1923-35) possesses these characteristics: a return to earlier composers and styles for inspiration, a general thinness of texture, use of ostinato melodic and rhythmic patterns, a classical conception of structure and small closed forms.

⁶The characteristics of this period (1936-52) permeated Poulenc's works during the years 1937-48. There is an increased use of such devices as rolled chords, tempo rubato, and compound meter, and a more sustained lyricism. He did not abandon the simplicity of his early works or the neoclassicism of his second period; rather, he widened his scope of expression.

⁴⁸Despite these minor stylistic differences, Poulenc's overall musical style changed little throughout his career - a comparison of *Les biches* (1924) and the late wind sonatas shows (1957-62) a steady enrichment in the compositional language.

that its visual aspects were as much a part of its effect as its content,"⁶⁹ Apollinaire experimented with the placement of words on a page, typography and punctuation.⁷⁰

Apollinaire states in the preface that most of the play had been written in 1903, and that only the Prologue and the final scene were added in 1916; but the themes of feminism and repopulation seem more appropriate to the period of the First World War. The play is a call for repopulation in France, and for women to retain the role of traditional wives and mothers. Apollinaire called the play a "surrealist drama," employing a word that he had coined and applied five weeks earlier to the ballet *Parade* (1917) by Satie.⁷¹

Poulenc attended the premiere of the play on June 24, 1917, at the *Théâtre René* Maubel in Paris.⁷² Poulenc had the intention of writing an opera earlier in his career, but

⁷¹Surrealism: "A style of art and literature developed principally in the twentieth century, stressing the subconscious or nonrational significance of imagery arrived at by automatism or the exploitation of chance effects, unexpected juxtapositons, etc." *The Random House Dictionary of the English Language*, edited by Jess Stein. (New York: Random House, 1971), 1432.

Automatism: "The act or doctrine, especially of the Surrealists, of allowing the unconscious mind to find expression through uncontrolled or uncensored images." The Random House Dictionary of the English Language, 101.

Apollinaire first asked Satie, then Auric, to write incidental music for the play but both refused. The music was ultimately composed by Germaine Albert-Birot, a minor composer whose husband, Pierre Albert-Birot, was the creator of the literary review SIC which sponsored the première of the play. Daniel, 294. SIC is an abbreviation for sons-idées-couleurs.

⁷²Satie and Auric were also present, as were painters such as Henri Matisse (1869-1954), Pablo Picasso (1881-1973), Georges Braque (1882-1963); poets such as Jean Cocteau (1889-1963), Paul Eluard (1895-1952), Louis Aragon (1897-1982); and the Russian ballet producer and art critic Serge Diaghilev (1872-1929).

[&]quot;Wood, Poulenc's Songs: An Analysis of Style, 31.

 $^{^{70}}$ Calligrammes is an example of visual arrangements of 28 poems from which Poulenc set seven to music in 1948. The song cycle also entitled Calligrames, is a farewell to Apollinaire, the first poet that Poulenc set to music, as he felt his inspiration from the poet was diminishing. Although Poulenc met Apollinaire a number of times in 1918, the poet never heard any of his 35 poems that Poulenc set to music between 1918 and 1956.

like many other composers was unable to find the "right" libretto. He had begun thinking about the surrealist play as a possible libretto in the late 1930's, but the advent of the war and various commitments postponed the actual composition until May-October of 1944.⁷³ On June 3, 1947, *Les mamelles de Tirésias*, Poulenc's first opera, was premiered at the *Opéra-Comique* in Paris where it enjoyed a *succès de scandale*. The opera was well received by intellectual circles but the subscription ticket-holders and audiences at the *Opéra-Comique* were shocked. The scandalous nature of the *Les mamelles de Tirésias* was intensified by the more conservative operas with which it shared the double-bill, *La bohème* (1896) by Giacomo Puccini (1858-1924) and *Les pêcheurs de perles* (1863) by Georges Bizet (1838-75).

2.1.2 Synopsis

The story of *Les mamelles de Tirésias* concerns a young married couple living in "Zanzibar."⁷⁴ The opera has a Prologue and two acts, each containing eight scenes. In the Prologue the Theater Manager explains the significance of the opera, and urges the

⁷⁰Daniel, 44-45. Poulenc dedicated the opera to Milhaud, his close friend since 1919. Throughout their careers the two composers influenced each other, helped each other to have works performed and published, and exchanged personal and compositional advice.

^MPoulenc set most of the original play; the parts that were not included in the opera do not effect Apollinaire's storyline and message. Poulenc also made the following small changes on the original play.

Although the première of *Mamelles* took place near the end of World War I, I felt I had the right, since much of the play was actually written in 1903, to situate the action in a typically Apollinarian epoch, that is, during the period of 1910-14. I also feel that exoticism has little to do with the story, and that I am therefore free to situate Apollinaire's imaginary Zanzibar on the Côte d'Azur, next to Monte-Carlo, where the poet grew up. Monte-Carlo, which I adore, always accured to me to be the ultimate in exoticism.

Francis Poulenc, Entretiens avec Claude Rostand. (Paris: Julliard, 1954), 148.

French people to learn from the lessons of the war and make babies; he also states that the actors will do their best to amuse and entertain the audience. In Act 1, Scene 1 Thérèse leaves the house with a broom in hand, and decides that she is a feminist and that she will no longer recognize the authority of men or maintain a role as wife and baby producer. She lists a number of varied occupations that she would like to fulfill, such as a soldier, an artist, a lawyer, a senator and a head waiter. She opens her blouse and lets her breasts, in the form of colored children's balloons, fly away. She then completes her sex change by exploding her breasts with a lighter, and hooking on a beard and a moustache. The scene ends with Thérèse declaring that she is more virile than her husband. In Act 1, Scene 2 the husband leaves the house with a huge bouquet of flowers in hand and looks frantically for Thérèse. She soon reveals herself to her bewildered husband as a man and announces her name to be Tirésias.⁷⁵

Act 1, Scene 3 is extremely brief and contains no music to accompany the short exchange of spoken words between Tirésias who states that "she" is moving out as she

⁷⁵In Greek mythology, Tirésias was a highly renowned blind prophet of Thebes. There are alternative myths to explain his blindness. According to one, the gods blind him for revealing their secrets, which he had learned from his mother the nymph Chariclo. According to another, the goddess Athena blinds him because he had watched her undress to bathe. Later, she gives him a staff to guide him as well as if he could see. She also gives him the power to understand the speech of birds, endows him with a life seven generations long and grants him the gift of prophecy.

Another legend tells that he had been turned into a woman as the result of killing the female of two coupling snakes; on killing the male, seven years later, he regained his own sex. Zeus, the supreme deity of the ancient Greeks, and his wife Hera, the ancient Greek queen of heaven, asked Tirésias - since he was able to answer from his own experience - whether a man or woman derives the most pleasure out of lovemaking. Hera stated that a man enjoys it much more than a woman. So when Tirésias answers that a woman's pleasure was nine times greater than a man's, Hera strikes him blind in her rage. Zeus, however, gives him a long life and the gift of prophecy based on his understanding of the speech of birds.

In Apollinaire's play Thérèse appears as woman and man (Tirésias), and acts as a prophet by telling the people of Zanzibar to make babies or a bitter end awaits them.

throws a chamber pot and urinal from the window, and the husband who weakly adds with bowed shoulders that the situation is getting serious. The story line seems to take an abrupt turn in Act 1, Scene 4 where two typical French cardplayer types, Presto and Lacouf, leave the town café drunk, and dance, sing and argue amiably until the end of the scene where they both aim two huge revolvers and shoot each other dead. In Act 1, Scene 5 Tirésias, freshly shaven and dressed in an elegant smoking jacket, leaves the house in a hurry followed by her husband who is now dressed as a woman with his hands tied. They arrive at the town café where she signifies to her husband to take a chair at a table. She then buys the town newspaper, "Little Zanzibar," and reads about Presto and Lacouf. At the end of the scene she calmly expresses that the world, women, and administrative affairs are now hers, and rushes out of the café leaving her husband sitting slouched at the table.

At the beginning of Act 1, Scene 6 a gendarme inspects the scene of the crime around the café and notices a "woman" at a table with tied hands. Not knowing that this is the husband dressed in women's clothing, the gendarme takes an immediate liking to this "pretty girl" and begins to flirt with "her;" he eventually proposes marriage before finding out that "she" is a man. The scene closes with the people of Zanzibar hailing Tirésias as their new general and chanting "No more children!" In Act 1, Scene 7 the husband remarks that Zanzibar needs children and if women will not fulfill their procreative role than men must fill it. The newspaper vendor, the people of Zanzibar, the gendarme and the husband reassure the public, in Act 1, Scene 8, that they need not weep anymore and simply await the birth of babies born without the help of a woman.

Presto and Lacouf, the "dead" cardplayers, enter on roller skates at the end of the scene and join the confusing discussion of how nature can give children to a man without a woman.

The cries of newborn babies calling "Papa!," in the Entr'acte, lead into Act 2, Scene 1 where the husband dressed in a long nurse's gown and surrounded by baby cradles, expresses the joys of fatherhood and announces that he has produced 40,049 babies in a single day. In Act 2, Scene 2 a cocky correspondent from a Parisian journal appears at the husband's doorstep and inquires about the new method by which man alone can make children; the scene ends with the husband kicking the impolite journalist out of his home. Spoken dialogue begins Act 2, Scene 3 where the husband insists that babies do not bring poverty but wealth; he then creates a journalist for himself, using magicianlike techniques. Act 2, Scene 4 opens with a fast talking, "storytelling" journalist-son that tries to blackmail his father with threats of telling tales of theft, rape and murder and the like. The scene concludes as the son goes off to invent tomorrow's news.

In Act 2, Scene 5 a disappointed father thinks that a tailor-son would be of more use, soon after he bumps into an agitated gendarme. Act 2, Scene 6 begins by the gendarme telling the husband that his surplus of children will lead to starvation amongst the population of Zanzibar, the husband then reassures him that a fortune-teller will be able to help. In Act 2, Scene 7 Thérèse, absent since Act 1, Scene 6, reappears disguised as a fortune-teller and predicts that those who make babies will become very rich and those who do not will die in a horrible way. She then reveals herself to her husband, as Thérèse, in an elegant evening gown and welcomes him back into her life. In Act 2,

Scene 8 the opera ends "happily" as husband and wife express their love for each other and urge the audience, along with the people of Zanzibar, the newspaper vendor and the gendarme, to make babies.⁷⁶

2.2 Analysis

This chapter will study the large-scale harmonic organization in the pivotal scenes of the drama where Thérèse changes sex/gender to show how tonal areas and recurrent motives and events generate coherence in the work. In I/i Thérèse declares that she is a feminist and goes through her sex and gender change; in I/ii Thérèse reveals herself to her husband as a man with the name of Tirésias; and in II/vii, Thérèse disguised as a fortune-teller reveals herself to her husband as Thérèse and as his wife, and welcomes him back into her life. The analytical approach will use the tools and procedures employed by Werner in his examinations of root movements, pedal, and ostinato figures, and will also use graphs that represent important harmonic, motivic and linear events. In each of these scenes the primary focus will be large-scale key relationships, particularly those revolving around F# and F; sequential techniques; recurrent motives such as alternations of Eb-G, motives involving F-B and "sliding" fully diminished 7th

³⁶Thérèse, who has the main role in the opera, is the only character that has a personalized name. The others have generic titles such as, Le Mari (The Husband), Le Gendarme (The Gendarme) and La Cartomancienne (The Fortuneteller). The cardplayers are also given names, Presto and Lacouf, but these seem to be of a less serious nature.

chords; and recurrent events such as the conglomeration involving the pitches and keys of Eb, F and $F#.^{77}$

For purposes of discussion, most citations such as measure numbers and musical examples are made with reference to the piano-vocal score. Occasionally the full score is cited as a reference for comments on dynamics, orchestration and the like. Since numerous musical passages are cited in the analysis which follows, selected musical examples are provided to illustrate the events that are discussed. Should the reader wish to examine the scenes in full, I/i, I/ii and II/vii from the piano-vocal score have been reproduced in Volume 2.

2.2.1 Act 1, Scene 1

(1) Large-scale harmonic organization

(a) Main key areas. I/i divides into three main sections: (20)-(27), (28)-(31) and (32)-(33) (bracketed numbers refer to rehearsal numbers).⁷⁸ The key areas F#, Ab, and, to a lesser extent Eb, often mark beginnings of sections in I/i; here as in the majority of other scenes, formal divisions are announced by character entries, and by changes in plot, harmonies and keys, tempi, rhythm, meter,⁷⁹ texture and dynamics.⁸⁰ Graph 2-1a shows

⁷⁷Almost all keys in the opera are modally mixed, so references to key areas are made by using their letter name only.

⁷⁶The first main section exhibits a two-part division: (20)-(24) (mm.215-55) and (25)-(27) (mm.256-84); the second a three-part division: (28) (mm.285-314), (29) (mm.315-54) and (30)-(31) (mm.355-78); and the third a two-part division: (32) (mm.379-98) and (33) (mm.399-422).

⁷⁹The first main section of I/i is mostly in 4/4, the second in 3/4 switches to 2/2 then 6/4, before the third section begins in 3/4.

how the main key area of I/i, F#, appears throughout the scene, at (20) (mm.215-20), (22) (mm.232-33) and (24) (mm.248-49), and is firmly asserted at the beginning of the third main section, near (30)-(32) (mm.351-96).^{\$1} In Graph 2-1a the pitches are normalized so that C#5 and F#5 represent the pitches in the "voice" staff, while F#2 and C#3 represent the pitches in the "key areas" staff. The first section gravitates to the key of F# (see Graph 2-1a). The pitches C# and B at the end of the Prologue (mm.213-14) are heard retrospectively as members of a dominant chord that prepares for F# in m.215 (see Figure 2-1a and Graph 2-1a). F# is defined in mm.215-20 by sheer repetition in the voice, an F# pedal in the viola, an ostinato created by the double chromatic-neighbours in the accompaniment and alternations of chords on B and F#, which can be interpreted as iv-i motions (see Figure 2-1a). Although the pitch C# is stated in the vocal line in mm.215-20, the absence of V-I harmonic motions weakens the sense of key area (see

²⁰Most changes in plot will be examined in the following chapter.

⁸¹Read the neo-Schenkerian graphs in Chapters 2 and 3 with the following specifications. Note values (half, quarter and eighth notes; and black note-heads alone or in brackets) indicate different levels of structural importance of notes, chords and keys. The longest note value indicates notes, chords or keys of the highest structural order. For example, in the "key areas" staff, key areas can be indicated by half, quarter or eighth notes, or by black note-heads. The half note always indicates a key area that is asserted by a cadence; the quarter and eighth notes indicate a key area that is established or partly established without a cadence; while the black note-head indicates a pitch-class region that consists of a non-tonal collection of pitches, such as octatonic. Dotted or solid slurs, lines and brackets indicate the structural relation between key areas, chords or notes. Solid horizontal arrows indicate the driving tendency of the bass line. Only functional harmonies are labeled with Roman numerals.

F occurs throughout the opera, but it is never as strongly established as F; it also occurs in II/vii, as will be seen. Should the reader wish to examine the key of F# throughout the opera, the following list has been provided.

I/iv (as Gb): near (41), mm.478-83 and its repetition near (44), mm.517-22; near (42), mm.495-98 and its repetition near (45), mm.534-37. I/v (as Gb): near (52), mm.616-22. I/vi (as Gb): near (57), mm.700-03. Entr'acte: (3), mm.33-40. II/iv (as Gb): near (32), mm.355-58. II/vi: (41), mm.434-37.

Figure 2-1a). When the material "on" or "around" F# in mm.215-20 is transposed to C# (m.223), m.223 then sounds like "V" (see Figure 2-1b).⁸²

In mm.232-33 and mm.248-49, the key area of F# is again not functionally defined (see Graph 2-1a), but dynamic, textural and rhythmical changes help to signal the arrival of F# at (22) (m.232).⁸³ In mm.232-33 F# is somewhat asserted by minor chords in the voice and accompaniment, and by a V chord (m.231); but the chromatic side-step from the C chord (I in C, mm.229-30) to the C# chord (m.231) weakens the dominant

⁸²As stated earlier in Chapter 1, Chapter 3 of Werner's dissertation is devoted to an examination of Poulenc's harmonic language in terms of 11 categories. In Chapter 3, Werner divides his first category, root movements, into the following four sections: fifth relationship, third relationship, tritone relationship and harmonic "side-stepping," which he defines as "movement of the voice parts in a parallel, stepwise fashion from one tonal goal to another thereby eliminating the harmonic influence of the fourth and fifth." (Werner, 88.) He argues that "the tonal character of Poulenc's harmonic style is clearly defined by his heavy dependence upon root movements of a fifth." (Werner, 66.)

Werner classifies Poulenc's usage of root movements of a fifth according to the following categories: the series of descending fifths (or alternate ascending fourths and descending fifths), fulfilling a tonality-defining, prolonging or modulatory function; secondary dominant functions; and alternation of tonic and dominant roots in relatively static harmonic sections. Werner, 73.

Measures 218-223 contain a series of descending-fifth root movements. In mm.218-20 these root movements prolong F# (see Figure 2-1a). In mm.221-23 the descending-fifth root movements seem to possess a modulatory function.

Werner insists that pedal and ostinato figures, the seventh category, are so frequently used throughout Poulenc's works that they constitute an integral part of his harmonic language. These figures are often embellished by less restrictive motion in the upper parts which do not influence the underlying harmony. Werner divides Poulenc's usage of these devices into three categories that are not completely exclusive of any other: to unite tonally dissimilar sonorities under the aegis of one controlling harmony (this includes bitonal constructions), to prolong tonic or dominant functions in crucial structural areas, and to construct an entire piece of section thereof. Werner, 153-54.

The pedal and ostinato figures in the opera fall most often into the second category. Measures 215-18 contain an ostinato figure, the double chromatic neighbour figure F#-E#-F#-G, and an F# pedal in the viola (see Figure 2-1a). These serve to prolong tonic function in a crucial structural area.

²⁰Textural changes include the *léger* markings in the clarinet and bassoon lines, and the pizzicato markings in the string section; rhythmic changes include the absence of note values faster than the eighth note; and dynamic changes include the softer p marking in the orchestra and the *mf* marking in the voice. Notice that the dynamics in the voice and accompaniment decrease throughout (20) to (22).

preparation (see Figure 2-1c).⁸⁴ So the approach to F# in mm.231-32, via V-I motion, is analogous to mm.213-15 (see Figures 2-1c and 2-1a, and Graph 2-1a). The key area in mm.232-33 is destabilized by the tritone root movements and the descending m2 sequences (mm.234-35), from F# (i) - C (#iv) to F - B (V^7 of E) to E - Bb (V^7 of Eb and V^7/V of Ab) (see Figure 2-1c).⁸⁵ Measures 248-51 are a partial harmonic restatement of mm.232-35 (see Figure 2-1d and Graph 2-1a). The changes include an extra repetition of the F-B sequence (m.251); a break in the sequence by root movements of a third from Eb to G (mm.252-53); and the abscence in m.247 of the V chord that appeared in m.231 (see Figure 2-1d).⁸⁶ Similar events around Eb-G and F-B will be examined shortly.

The key of F# is finally solidified in the third main section, (32)-(33), which begins with a pastiche of a *Pas espagnol* that firmly establishes F# with alternating tonic and dominant chords, repetitions of C# in the voice, and a half cadence in m.393 (see

⁴⁴Werner states that Poulenc uses harmonic side-stepping primarily for three purposes: to effect a modulation; to carry out a voice leading, such as passing chord(s) that are produced by chromatic motions between two functional harmonies; and to prolong a sonority. (Werner, 88.) This side-step is not as commonly found as the previous root movements.

Measures 229-31 is an example of side-stepping, whose purpose is to effect a modulation (see Figure 2-1c).

³⁵Werner summarizes that Poulenc's use of tritone root relationships are the result of "chromatic freshenings" of standard diatonic progressions such as: I-#IV-V, #IV-I, bII-V-I and V-#I (or its secondary dominant equivalent). Werner, 88.

So mm.232-33 and mm.248-49 can be understood as i-#iv "in" F# (see Figures 2-1c and 2-1d, respectively).

⁶⁰Werner states that root movements of a third in Poulenc's music are usually used for the following purposes: to effect a modulation, to prolong a sonority and to construct a non-tonal coloristic alternation of sonorities. Werner, 80.

Measures 252-53 display a non-tonal coloristic alternation of sonorities that further destabilize the implication of F# as a key area (see Figure 2-1d).

Figure 2-1e and Graph 2-1a).⁸⁷ This half cadence is the only "true" cadence in I/i, so F# seems to be quite strongly defined.⁸⁸ The dominant arrival, for F# at (32), seems to be heard through most of the second main section, (28)-(31) (mm.285-378) (see Graph 2-1a). The beginning of the second main section (mm.285-304) is in Db, the dominant key region of F#, and mm.351-78 is an expansion of V of F# (see Graph 2-1a).⁸⁹ The dominant arrival is thus "suspended" between m.304 and m.351 where modulations occur.

(b) Secondary key areas. Two other key areas frequent the scene, Ab and Eb (see Graph 2-1b). In Graph 2-1b the pitches are normalized so that Bb4, Eb5 and G#5 represent the pitches in the voice staff, while G#2/Ab2, Bb2, Db3, Eb3 and C#3 represent the pitches in the key areas staff. The key of Ab marks the beginning of (23) (mm.238-41) (see Figure 2-2a and Graph 2-1b). This key is defined by a dominant arrival and an Eb pedal (mm.236-37), by descending-fifth root movements (mm.238-41)

⁸⁷Signaling the beginning of the third section at (32) are: the tempo change and "a tempo" marking, the addition of the piano, the pizzicato markings in the violins, the staccatissimo in other instruments and the three sixteenth-note figure at the end of m.378, which is reminiscent of the accompaniment figuration in m.215 at the beginning of the scene.

³⁹The root movements of fifths (mm.379-86) fulfill a tonality-defining and prolonging function (see Figure 2-1e). They are also an example of Werner's third category for root movements of a fifth, alternation of tonic and dominant roots in relatively static harmonic sections. These root movements also form an ostinato figure F#-C#-C#-C# that prolongs tonic function in a crucial structural area; and they also fall into Werner's third category of pedal and ostinato figures, insofar as they construct an entire section (see Figure 2-1e).

³⁹The C#/Db pedal in the double bass in mm.355-63 and mm.374-78 serve to prolong dominant function in a crucial structural area.

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and to a lesser extent by repetitions of Eb in the voice (see Figure 2-2a).⁹⁰ The dynamic changes and staccato markings and the more lyrical quality of the melodic line coincide with the arrival of this key (see Figure 2-2a). The key of Ab ends in m.242 where an ascending m2 sequence, based on m.238, begins in A (m.242) (see Figure 2-2a). The pitch of G# occurs throughout mm.244-47, where the husband's voice is heard for the first time (see Figure 2-2b and Graph 2-1b). Although this is not a key area, this pitch-class area is defined by repetition of the pitch G# in the voice and accompaniment; the pedal created by the oboe, timpani and violin 1 (mm.244-45) then transferred to the viola (mm.246-47); and loud dynamics, accent markings and timpani trills (see Figure 2-2b).⁹¹ So the pitch G# may be considered as a tonal pillar in this passage (mm.244-47) that can be interpreted as a continuation of the "Ab-ness" that began at (23) (m.238) (see Figure 2-2a). Measures 263-64, a compressed restatement of mm.238-41, signal a return to Ab (see Graph 2-1b). The dominant preparation at (25) (mm.256-59) is more extensive than the one in mm.236-37, so the key would be better prepared, but mm.260-62 delay the

arrival of Ab with sequential repetitions, including one in F#, and the key of Ab is only

⁵⁰The Eb pedal is heard in the trumpets (m.236) and is then transferred to the flutes, violin 2 and the viola (m.237). The root movements in mm.238-41 fulfill a tonality-defining function (see Figure 2-2a). Some also fall into Werner's second category of fifth relationships, secondary dominant functions, see mm.240-41 and also mm.235-36 (see Figure 2-2a).

⁹¹The collection of pitches in the voice and accompaniment (mm.244-45) is octatonic (G#-A-B#-D-D#), the vocal line (mm.246-47) is mostly octatonic except for the pitch E (G#-A-B-C-D-D#-"E"-F#) and the G# pedal (mm.244-47) prolongs "tonic" function (see Figure 2-2b).

The pitch F# is emphasized in the same way at (26) (mm.271-75) and is held through mm.276-77. It yields to Ab just before (27), the dominant of Db, key of the second main section. A mostly octatonic collection, except for the pitch of D, is formed in the voice and accompaniment (mm.271-72) (F#-G-C-"D"). The vocal line (mm.273-74) is mostly octatonic except for the pitches D and B (F#-G-A-"B"-C-"D"-E). The husband's text in mm.271-73 is the same as in mm.244-46.

stated in two measures, mm.263-64.⁹² In the beginning of the second main section (mm.285-304) the pitch of Ab plays a crucial role as the dominant of Db; the dominant arrival occurs just before the beginning of the second main section (mm.278-84) (see Graph 2-1b).⁹³

The key of Eb occurs at the end of I/i at (33) (mm.399-409) and the beginning of I/ii at (34) (m.423) (see Graph 2-1b).⁹⁴ It is approached by a direct modulation from the established key of F# to dominant harmony of Eb (mm.397-98) (see Figure 2-3). The key is defined by repetitions of Eb and Bb in the voice, the descending tetrachord Eb-Bb, and by the Bb pedal in the cello (mm.399-403), over which diatonic chords and non-diatonic passing chords are heard (see Figure 2-3). These lead to a i⁶ chord (m.404) where a descending series of parallel sixth chords begins (see Figure 2-3). This series ends on a ii⁶⁷-V⁷ progression (mm.408-09) where a tonic chord is expected (see Figure 2-3). Instead, destabilization of the key area occurs by a move to a C chord (m.410-11)

⁹²The Eb pedal in violin 2 and the viola and the ostinato figure Eb-Fb-Eb-Fb (mm.256-59) prolong dominant function in a crucial structural area. Notice how the rate of sequential repetitions accelerates in mm.256-62, each repetition being half the length of its predecessor.

⁹⁹The Ab pedal in the double bass (mm.279-83) prolongs the dominant in a crucial structural area. The tonality of Db is defined by descending-fifth root movements (mm.285-91) and is foreshadowed by a brief statement in mm.267-68.

⁹⁴The key of Eb is an important one in the opera and is established in I/i, I/ii and II/^{1/i}ii, as will be seen. Should the reader wish to examine the key of Eb throughout the opera, the following list has been provided.

Prologue: near (14), mm.149-56. I/iv: (40)-(41), mm.462-77 and its partial repetition at (44), mm.509-16; (42), mm.489-94 and its repetition at (45), mm.528-33. I/v: (51), mm.609-13 (sequence of model in C, beginning at (50) (m.593)). I/vi: near (57), mm.694-99 (note that the string section in mm.694-95 orchestrates the dominant harmony in the same way as was done at the beginning of I/ii at (34) (m.423)); (62)-(67), mm.752-82. I/viii: (85)-(88), mm.974-1007 (this occurrence seems to be part of a larger sequence beginning on F at (84) (m.958) to Bb in m.968 to Eb at (85) (m.974)). Entr'acte: (1), mm.1-6. II/i: (13), mm.128-39. II/iv: near (32) to (37), mm.351-412 (interrupted by the key of Gb in mm.355-58). II/viii: near (68) to (70), mm.675-707 (interrupted by the key of Ab in mm.698-703).

and a series of sliding diminished 7th chords (mm.412-14).⁹⁵ Measures 415-22 end the interruption of dominant harmony and bring Eb back to prepare for I/ii. The root movements by third, Bb-G (mm.415-22), seem to form a non-tonal coloristic alternation of sonorities but also create an ostinato, Eb-G, which prolongs the dominant of Eb, with a "destabilizing" G9th added 13th chord, in a crucial structural area.

(c) Sequences. Sequences occur throughout the scene and the opera, contributing to the harmonic structure on the large-scale and to the sense of tonal instability on the small-scale. Sliding in and out of tonalities because of their ability to effect fast, efficient and direct means of modulation, sequences occur most frequently as circle of fifths and/or descending second motions.⁹⁶ The following examples illustrate some of Poulenc's characteristic sequences. The sequences in mm.215-18, m.223 and m.224, and mm.225-27 are examples of how Poulenc moves away from and eventually back to F#. The

⁹⁵Measures 399-414 are a large-scale transposition down a m2 of mm.315-30, the second division of the second main section. Measures 315-30 are mostly in E and have the same harmonic and linear motions as mm.399-414. Measures 315-22 and mm.399-403 contain descending chromatic voices which form diatonic chords and non-diatonic passing chords, mm.323-26 and mm.404-07 include a tonic chord in first inversion which marks the beginning of a series of descending stepwise chords, and, mm.327-30 and mm.412-14 contain a series of sliding diminished 7th chords which undermine the established key area.

¹⁰The small-scale sequences are: near (21), mm.223-24 (ascending M2 sequence from V/F# to V/Ab); (21), mm.225-27 (descending M2 sequence from F to Eb using circle of fifths motion); (22), mm.232-35 (descending m2 sequence from F# to F to E to Eb); (23), mm.238-42 (ascending m2 sequence from Ab to A); (24), mm.248-53 (see mm.232-35, descending second sequence from F# to F to Eb); (25), mm.256-62 (descending M2 sequence from Ab to F# to E); near (26), mm.267-70 (descending M2 sequence from Db to B using circle of fifths motion); and near (29), mm.299-307 (ascending M3 sequence from Db to F); mm.323-26 (melodic descending m3 sequence prolonging dominant harmony of E from m.322 to m.326). Large-scale sequences are: mm.215-18, m.223 and m.224 (descending sequence from F# to V/F# to V/Ab); and mm.244-47 and mm.271-74 (descending M2 sequence from G# to F#).

model on F# (m.215) is repeated three times in mm.216-18 (see Figure 2-1a).⁹⁷ This model is sequenced on C# in m.223 (see Figure 2-1b) which sounds like V of F#, and then on Eb in m.224 which sounds like V of Ab. A brief move to F occurs in mm.225-26. These measures then serve as a model for a descending M2 sequence, using circle of fifths motion, to Eb in m.227. The sequence breaks in m.228 where a series of sliding diminished 7th chords resolves to a C chord (m.229) (see Figure 2-1c). A chromatic side-step to the C# chord (mm.230-31), which becomes V of F#, prepares the return of F# in m.232 (see Figure 2-1c). The descending m2 sequences in mm.234-35 slide out of "F#" again, prohibiting this key from being defined, and into Ab (mm.235-38) (see Figure 2-1c and 2-2a, respectively). This small-scale sequence consists of a two-measure model based on tritone root movements (F#-C, mm.232-33), that is sequenced down a m2 (F-B, m.234) and down another m2 (E-Bb, m.235) (see Figure 2-1c). The chord built on Bb (m.235), which functions as V⁷ of Eb and V⁷/V of Ab, moves to the dominant of Ab (m.236) and finally to the key area of Ab (m.238) (see Figure 2-2a).

(2) Other recurrent events

Among the events that contribute to the structure of the scene and recur in the later pivotal scenes as well are the alternation of Eb-G, an F-B motive, sliding fully diminished 7th chords and an "Eb-F-F#" conglomeration.

⁹⁷As was noted, mm.215-18 also function to establish the key of F#.

(a) Eb-G alternation. The Eb-G idea that occurs throughout the opera relates keys, pitches and chords.⁹⁸ The motive first appears in I/i in mm.252-53, near (24), as a nontonal alternation between an Eb minor and G7th added 13th chord that breaks the sequential pattern that began at (24) (m.248) (see Figure 2-1d). This motive then occurs as the bass notes in an ascending M3 sequence in mm.301-07 (Eb, m.301 and G, m.305), near (29), beginning on ii⁷ of Db sequencing to a V_3^4 of F, in retrospect also a V_3^4 /bII in E (see Figure 2-4a).⁹⁹ The Eb-G relationship is expanded at the end of I/i (mm.415-22) to an alternation of a V⁹ of Eb and a G9th added 13th chord prolonging the dominant of Eb (see Figure 2-4b). These measures are foreshadowed by a brief statement of similar chords in mm.409-10, near (33). In mm.415-22 Poulenc avoids both "suggested" tonics, Eb and C. The key of Eb is eventually heard at the beginning of I/ii, as will be seen, but the tonic chord of C never appears. However, it is hinted at by the high C (C6) in the voice (mm.415-19) (see Figure 2-4b).

This alternation and its various forms occurs in the following scenes and in I/i, I/ii and II/vii, as will be seen.

I/v to I/vi: v ends in G, near (56), m.689; vi begins in Eb, (57), m.695. I/viii: (85)-(88), mm.974-1007 in Eb with tonicization of G in m.993 ((85) is a sequence of the model on F at (84) (m.956)). Entr'acte: (8), mm.61-67. II/ii: near (18), m.205. II/iv to II/v: iv ends in Eb, near (38), m.412; v begins "on" G, (38), m.413. II/vi: near (41), mm.438-39. II/viii: (65)-(67), mm.634-57; near (68).

[&]quot;This passage falls into Werner's first category of uses for root movements of a third, to effect a modulation; in this case to the key of E.

(b) F-B motive. Similar to the Eb-G motive, the F-B motive occurs throughout the opera in various forms.¹⁰⁰ It first occurs as part of a descending m2 sequence in I/i at (22) (mm.232-35) (see Figure 2-1c); it is repeated at (24) (mm.248-50) (see Figure 2-1d).¹⁰¹ In both passages the tritone root movements and their sequential repetitions distort the key area of F#. This tritone relationship is expanded in mm.308-11, near (29), to an alternation between an E major chord in second inversion and a Bb major-minor 7th chord (see Figure 2-5). This leads to the key of E at (29) (m.315), as mm.308-11 "prepare" E by substituting a Bb dominant 7th chord for a B dominant 7th chord (see Figure 2-5). Thus, the progression of V(864)-(753) is weakened by a move to the "wrong" dominant that is then prolonged in the following measures (mm.312-14) by a Bb pedal in the double bass and a D and Ab pedal in the cello. Thus, tritone root movements distort the key area again.

(c) Sliding fully diminished 7th chords. A series of sliding fully diminished 7th chords is another characteristic feature of the opera.¹⁰² These chords seem to signal key

¹⁰⁰This motive and its various forms occurs in the following scenes and in I/i, I/ii and II/vii, as will be seen.

I/vii: (72), mm.826-28 (sequence from Eb to B); (75), mm.848-51 (sequence from F# to C). Entr'acte: near (6), mm.49-50 (bII-V in C). II/ii: near (18), m.206 (C# minor chord to G minor chord). II/iii: (24), mm.266-70 (melodic sequence in voice from the pitch C# to the pitch G; also G to C# in accompaniment, in mm.266-67, before model is introduced). II/vi: near (42), mm.444-45. II/viii: (76), mm.757-59; near (77), mm.765-66.

¹⁰¹These pitches appear in the Prologue in mm. 148-49, near (14), as F-Cb/B; the Cb ends the ascending M2 sequence that began in m. 145.

¹⁰²This series occur in the following scenes and in 1/ii and 11/vii, as will be seen. I/vi: near (58), m.714; near (62), m.749 and m.751; near (63), m.758; near (67), mm.784-85; near (68), m.787 and mm.790-91; near (69), mm.797-98. I/vii: near (72), mm.824-25; near (73), m.832, m.834

changes, to destabilize tonal regions that are already or partly established and/or to embellish harmonies that are prolonged. The following excerpts illustrate these examples in turn. Measure 228 bridges the change from the sequential pattern that ended in Eb and leads to the tonal region of C.¹⁰³ The succession of chords in mm.254-55, made of a model and two sequential repetitions, follows the destabilizing Eb-G motive and leads to an Eb pedal at (25) (m.256) that signals the key area of Ab (see Figure 2-6a).¹⁰⁴ The key of Ab is then disturbed by another set of fully diminished 7th chords in mm.265-66 which leads to Db (m.269). The series in mm.327-30 contains a half diminished 7th chord in m.328, and moves from the key of E to the key of F. The succession in mm.412-14 momentarily interrupts the key of Eb before the dominant prolongation of mm.415-22.

In mm.279-81, before the second main section begins at (28) (m.285), another series of diminished 7th chords occurs over an Ab pedal and embellishes dominant harmony of Db (see Figure 2-6b).¹⁰⁵ A group also occurs in mm.312-14 before the beginning of the second part of the second main section. These chords follow the expansion of the F-B motive of mm.308-11 and embellish the "wrong" dominant of E, a Bb dominant 7th chord that is being prolonged by a Bb pedal in the double bass and a

and mm.837-38; near (76), mm.859-62. Il/iii: near (27), mm.292-93. Il/iv: near (30), mm.326-27.

¹⁰⁰This first occurence is partial; it includes other chord qualities.

¹⁰⁴A. was noted earlier, the Eb pedal in violin 2 and the viola and the ostinato figure Eb-Fb-Eb-Fb (mm.256-3) prolong dominant function in a crucial structural area (see Figure 2-6a).

¹⁰⁵As was noted earlier, the Ab pedal in the double bass (mm.27^o-83) prolongs the dominant in a crucial structural area.

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D and Ab pedal in the cello, as was noted earlier (see Figure 2-6c). The succession in mm.369-70 occurs during the relatively lengthy dominant arrival of F#, mm.351-78.

(d) Eb-F-F# conglomeration. The linear arrangement of the referential pitches F#, F and Eb in the voice and accompaniment also structures the scene (see Graph 2-1c).¹⁰⁶ F# in the voice begins three conglomeration passages:

F# (m.215) - F (m.225) - Eb (m.227)

F# (m.232) - F (m.234) - E (m.235) - Eb (m.236) - F (m.238) - F# (m.242) - G# (m.244)

F# (m.248) - F (m.250) - Eb (m.252, m.256) - F (m.263) - F# (m.271). E (m.235) in the voice and accompaniment, and G# (m.244) in the voice, function as passing and neighbour notes, respectively. In Graph 2-1c the pitches are normalized so that Eb5, E5, F5, F#5 and G#5 represent the pitches in the voice staff, while Eb2, E2, F2, F#2, G#2/Ab2 and A2 represent the pitches in the "accompaniment" staff. Beams indicate groupings of the three conglomerate passages. Repetitions in the voice, pedals, ostinati, sequences, Eb-G alternations and F-B motives "support" these pitches, while sliding fully diminished 7th chords, a chromatic side-step and other sequences act as a short link or interruption between the three conglomerate passages.¹⁰⁷ Notice that the F# "tonic" chords (m.215, m.232 and m.248), the F-B motives (m.234 and mm.250-51) and the Eb-G alternations (mm.252-53), that support these pitches also express the conglomeration.

¹⁰⁰These referential pitches also appear in I/ii, as will be seen.

¹⁰⁷In all of the measure citations the pitches are supported by repetition in the voice.

The first F# is supported by the F# pedal in the viola (mm.215-18) and by the ostinati and the F# chords in the accompaniment (mm.215-18 and mm.219-20, respectively) (see Figure 2-1a and Graph 2-1c). F (mm.225-26) and Eb (m.227) are supported by a descending M2 sequence, from F to Eb, using circle of fifths motion (see Graph 2-1c). Measures 228-31 can be considered as an interruption or link, containing sliding diminished 7th chords and the chromatic side-step, back to F# at (22) (m.232) (see Figure 2-1c and Graph 2-1c).

In mm.232-35, F#, F and E are supported by a descending m2 sequence, from F# to F to E, incorporating the F-B motive (see Figure 2-1c and Graph 2-1c). Eb (m.236) is supported by a V of Ab in conjunction with the ostinati Eb-D-Eb-F (m.236) and the Eb pedal (mm.236-37) (see Figure 2-2a and Graph 2-1c).¹⁰⁶ At (23) F (m.238) - F# (m.242) are supported by an ascending m2 sequence from Ab to A (see Figure 2-2a and Graph 2-1c). A move to G# takes place in mm.244-47, which can be interpreted as another link or interruption back to F# at (24) (m.248) (see Figures 2-2b and 2-1d, respectively; and Graph 2-1c). G# is defined by repetition in the accompaniment and by a G# pedal (see Figure 2-2b and Graph 2-1c).¹⁰⁹

At (24) F# (m.248) - (F) m.250 are supported by a descending m2 sequence, from F# to F, based on the F-B motive (see Figure 2-1d and Graph 2-1c). Eb (m.252) is supported by the Eb-G alternating chords (see Figure 2-1d and Graph 2-1c). Measures

¹⁰⁸As was noted earler, the Eb pedal is heard in the trumpets (m.236) and is then transferred to the flutes, violin 2 and the viola (m.237).

¹⁰⁹As was noted the G# pedal is created by the oboe, timpani and violin 1 in mm.244-45, and is then transferred to the viola in mm.246-47.

254-55 contain sliding fully diminished 7th chords which suspend Eb momentarily until (25) (m.256) (see Figure 2-6a and Graph 2-1c). Eb (mm.256-59) is supported by an Eb pedal in violin 2 and the viola and by the ostinati in the accompaniment, F (mm.263-64) by diatonic harmonies of Ab, and F# (mm.271-74) by repetition in the accompaniment and by an F# pedal.¹¹⁰

The pitches F# and Eb also function to outline the keys which begin and end I/i: F# (20)-(32), the main key area, and Eb (33), the main key area of I/ii prepared at the end of I/i. As will be seen, this same conglomeration organizes the key relationships in I/ii.

2.2.2 Act 1, Scene 2

(1) Large-scale harmonic organization

(a) Main and secondary key areas, sequences, Eb-G alternation, F-B motive, and sliding fully diminished 7th chords. I/ii can be considered on a larger scale as a continuation of I/i because many of the key areas, recurrent motives, pitches and other characteristic features from I/i continue to play a structural role. The scene divides into two main sections: (34)-(36) and (37)-(38). The prominent key of F# in I/i gives way to the keys of Eb and F, the primary key of I/ii. Now, the conglomeration Eb-F-F# is

¹¹⁰The F# pedal is created by the oboe and clarinet (mm.271-72), and is then transferred to the viola (mm.273-74).

rearranged as F#-Eb-F and is enlarged to determine the succession of key areas; the scene ends in F, an important tonal area in the opera.¹¹¹

Graph 2-2a provides an overview of the scene, which shows key areas as well as some sequential passages, Eb-G alternations and F-B motives. In Graph 2-2a the pitches are normalized so that Bb2, C3, Eb3 and F4 represent the pitches in the voice staff, while Eb2, F2, Bb2 and C3 represent the pitches in the key areas staff which indicate tonic and dominant function. Square brackets indicate the Eb-G motive and its expansions, and other third relations in Graph 2-2a and the graphs which ensue in Chapters 2 and 3. Scene 2 opens with the husband singing onstage in the key of Eb.¹¹² Measures 423-25, at (34), prolong the dominant harmony of Eb, which "holds" despite the tritone root movements (see Figure 2-7a). Measures 426-29, at (35), adumbrate the key of Eb by a descending 5-6 sequence (see Graph 2-2a); then a series of sliding diminished 7th chords

¹¹¹Brian Alegant noticed how the conglomeration Eb-F-F# is rearranged to determine the succession of keys in 1/ii.

I/vii, I/viii, II/ii, II/ii begin in the key of F, which is strongly established in the beginnings of I/viii and II/iv. The final scenes of both acts, I/viii and II/viii, strongly end in this key. Following is a listing of passages in F throughout the opera. I/ii and II/vii are not included in the list since the occurrences of F in these scenes will be discussed shortly.

Prologue: near (11), mm.118-21 (this occurrence seems to be part of a larger sequence beginning on Bb in m.107 to Ab in m.113 to F at (11) (m.120) to G at (12) (m.129)). I/v: near (50), mm.601-04 (sequence of model in C that began at (49) (m.585)). I/vi: near (57), mm.704-19; near (61), mm.738-47. I/vii: near (70), mm.805-18. I/viii: near (77), mm.861-87; (81), mm.919-29; near (82), mm.946-49 (sequence of model in C that began at (82) (m.942)); (84), mm.956-67 (model for sequence on Eb that began at (85) (m.974)); (90), mm.1022-56 (beginning of (90) is a sequence of model in C that began at (89) (m.1014)). II/ii: (17), mm.193-98; near (18), mm.202-04; near (20), mm.229-40; near (23), mm.257-65. II/iii to II/iv: iii ends in ends in F, (27), mm.296-303; iv begins in F, (28), mm.304-21. II/iv: (30), mm.332-40. II/viii: (71)-(77), mm.708-66 (end) (beginning of (73) (m.722) is a sequence of model in Eb that began at (69) (m.685)).

¹¹²The beginning of this scene is marked by the husband's presence onstage as well as a reduction from a full orchestra at the end of I/i to the bassoons and string section at the beginning of I/ii, the change of tempo and meter from triple at the end of I/i to quadruple at the beginning of I/ii, and softer dynamic markings in both the voice and orchestra.

obscures the key area in mm.430-31. At (36) (mm.432-35) the key area of Eb is articulated by an alternation of Eb minor and G7th added 13th chords, and by repetitions of Eb in the voice (see Figure 2-7b and Graph 2-2a).¹¹³ A move away from Eb immediately begins with the sequences in mm.436-38 that are based on the F-B motive (see Graph 2-2a).¹¹⁴ The dominant harmonies of F (m.438 and m.442), the main key of the second section, are linked by an ascending M2 sequence (mm.439-41) that begins on Ab and ends on C (see Figure 2-7c and Graph 2-2a). This sequence is based on a $\frac{4}{2}$ -6 progression through the whole-tone scale; augmented triads occur in the right hand of the piano accompaniment and the $\frac{4}{2}$ -6 motion is implied in the left hand. In retrospect m.438 can also be heard as bii-V in F (see Figure 2-7c).

The tonic of F begins the second section at (37) (m.443), but it is weakened by the F-B motive, i-#iv in F, and its sequential presentations on Ab and Gb (mm.445-46) (see Figure 2-8a and Graph 2-2a).¹¹⁵ The key of F is hinted at in sequences that begin "in" F# in m.234 and mm.250-51 of I/i; it is tonicized more strongly in I/i in mm.339-

¹¹³It seems here that the root movements of a third serve to prolong a sonority by non-tonal coloristic alternation of sonorities. These root movements of a third also form an ostinato Eb-G, and prolong "i" in a crucial structural area (see Figure 2-7b and Graph 2-2a).

¹¹⁴As in I/i at (22), the appearance of the F-B motive occurs as part of a model-sequence presentation, but this time up a m2 from F to F#, not F# to F. Here as at (22) the pitch-collections are mostly octatonic: mm.232-33(F#-G-*Ab*-A-C-C#-Eb),mm.234-35(F-F#-*G*-Ab-B-C-D#),mm.436-37(F-F#-*G*-Ab-A-B-C-D) and m.438 (F#-A-*Ab*-Bb-C-C#-E) (see Figure 2-1c and 2-7c, respectively).

¹¹⁵The second section of this scene is not only marked by a change in keys but also by a reduction from a full orchestra at the end of the first section to the string section and timpani at the beginning of the second section, a slower tempo and the appearance of Thérèse's voice. Again as in I/i key areas, here Eb and F, mark beginnings of sections.

The pitch-collections in mm.443-46, are octatonic: mm.443-44 (F-F#-Ab-B-C-D#), m.445 (Ab-A-Cb-D-Eb-F) and m.446 (Gb-Bbb-C-Db-Eb-G) (see Figure 2-8a).

50, but yields to dominant harmony of F# via a harmonic side-step from a cadential $\frac{6}{4}$ chord in F (m.346) to dominant harmony in F# (m.351). Measures 447-49 of I/ii seem to function as a pre-dominant area of F, which contains a vii $\frac{64}{2}$ /IV (m.447), the Tristan chord (m.448) and an Italian augmented-6th chord (m.449) (see Figure 2-8b).¹¹⁶ The dominant of F is reached at (38) (mm.450-51) and cadences on I (m.452) (see Figure 2-8c and Graph 2-2a). The cadence incorporates the F-B motive which occurs in a diatonic collection (mm.452-53) (see Figure 2-8c). Thus, F is the most strongly established key area of I/i and I/ii because it achieves additional tonal closure by means of an imperfect authentic cadence. The progression in m.459 seems to be another cadential one, I⁶ - V⁷/IV - IV⁶ - V⁷, moving to a V-I in mm.460-61. The F-B idea seems to return in a primarily octatonic collection (B-Eb-F-Ab-A-C-"Db") as the last two chords of this scene (mm.460-61). The chords in mm.452-53 and mm.460-61 reappear in II/viii in mm.757-59, at (76), and in mm.765-66, as the last two chords of the opera.¹¹⁷

(b) Eb-F-F# conglomeration. Graph 2-2b shows how the referential pitches Eb, F and F# are worked into I/ii. In Graph 2-2b the pitches are normalized so that Eb3, F3 and F#3 represent the pitches in the voice staff, while Eb3, F3 and F#3 represent the pitches in the voice staff, while Eb3, F3 and F#3 represent the pitches in the accompaniment staff. Eb (m.426, m.432) - F (m.443) is expanded by F (m.436) - F# (m.438) (see Graph 2-2b). As in I/i these pitches are supported by repetitions in the

¹¹⁰The Tristan chord is of some importance and will be discussed in Chapter 3.

¹¹⁷The pitch-collections in m.460 of I/ii (B-"Db"-Eb-Ab) and m.765 of II/vii (B-C-"E"-F-A) differ, but each is made of a mainly octatonic collection and both of these chords "resolve" with the tritone root movement from B to F.

voice, sequences, Eb-G alternations and F-B motives; occasionally they are disrupted by sliding fully diminished 7th chords and other sequences.¹¹⁸ Eb at (35) (m.426) is supported by the beginning of the descending 5-6 sequence; the sliding diminished 7th chords in mm.430-31 weakens the key center until (36) (m.432) (see Graphs 2-2a and 2-2b). The main motives function to set up the other tonal regions: Eb (mm.432-35) is announced and supported by the Eb-G motive, F (mm.436-37) and F# (m.438) by the F-B motive and its sequential repetition (see Graph 2-2b). The F in m.443 is also supported by the F-B motive and is then solidified in the cadence in m.452 (see Graphs 2-2a and 2-2b, and Figure 2-8c).

Graph 2-2c shows how the conglomeration Eb-F-F# governs the principal key areas from I/i and I/ii to I/iv. In Graph 2-2c the pitches are normalized so that Eb2, F2 and F#2 represent the pitches in the key areas staff. F# is the main key of I/i, but this scene concludes in Eb to prepare for the beginning of I/ii. F is the primary key of I/ii and Eb of I/iv. Eb, at the beginning of I/iv, is supported by strong tonal progressions which lead to an authentic cadence (m.477).

2.2.3 Act 2, Scene 7

(1) Large-scale harmonic organization

(a) Main and secondary key areas, small-scale sequences, Eb-G alternation, F-B motive, and sliding fully diminished 7th chords. II/vii divides into three main

¹¹⁸In most of the measure citations the pitches are supported by repetition in the voice.

sections: introduction, (43)-(44), and section 1, (45)-(52); introduction, (53)-(55), and section 2, (56)-(58); and introduction, (59)-(60), and section 3, (61)-(62). As in I/i and I/ii the keys Eb, F# and now G mark the beginnings of sections, and are often accompanied by rhythmical, textural and dynamic changes.

Graph 2-3a shows how the keys of Eb and G permeate section 1 and its introduction. In Graph 2-3a the pitches are normalized so that Eb5 and G5 represent outlines of the Eb-G motive in the voice staff, while Eb2, F2, F#2, G2 and C#3 represent the pitches in the key areas staff.¹¹⁹ The Eb-G motive is now enlarged and determines how the main key area of II/vii, Eb, is expanded by the key of G. The introduction opens in G minor over a G pedal at (43) (m.456) and moves to predominant harmony of Eb at (44) (m.460) (see Graph 2-3a). G minor is asserted by dominant harmony at the end of II/vi (m.455), by repetitions of G in the voice, and by the pedal and the diatonic harmonies that are heard over it (mm.456-59) (see Figure 2-9). Eb is established by the progression ii^{67} -V⁷ (mm.460-65) which prepares for the tonic harmony at the beginning of section 1. Notice the appearance of the F-B motive as the pitches F-Cb/B of the bass line at (44) (mm.460-61) which support ii^{67} and ii^{64} .¹²⁰

Section 1 has a ternary division: A (mm.466-73) - B (mm.474-505) - A' (mm.506-10). The A section begins with Thérèse singing an eight-measure phrase (mm.466-73)

¹¹⁹Notice that the key areas G (m.469), F (m.494), F# (m.500) and G (m.509) are asserted by cadences but do not appear as half notes on the graph because they do not have as much structural importance as the key areas that are indicated by half notes.

¹²⁹The G pedal (mm.456-59) prolongs tonic harmony and the Bb pedal (mm.462-65) prolongs dominant harmony (see Figure 2-9).

which moves from Eb to G (mm.466-69), then to Eb and F# (mm.470-73) (see Figure 2-10 and Graph 2-3a).¹²¹ These keys are solidified by repetitions of tonic pitches in the voice, functional harmonies and authentic cadences (see Figure 2-10). The Gendarme begins the B section with the same tonal elusiveness as mm.215-20 of I/i. It is difficult to tell whether the key is F# or B in mm.474-75. While the root movements seem to suggest F#, there are no E# pitches anywhere, and although B is repeated in the voice, a tonic B chord never appears (see Figure 2-11). In m.476 an ascending M2 sequence begins with the model C#7 - F#7, so now mm.474-75 can be heard in retrospect as being "around" F# (see Figure 2-11).¹²² So mm.474-75 seem to be surrounded with "F#-ness" by the cadence in F# (m.473) and by the C# major-minor 7th chord (m.476) (see Figures 2-10 and 2-11, and Graph 2-3a). This sequence leads to dominant and tonic harmony of G in m.477 and m.478, respectively, where repetitions of G in the voice and the Eb-G motive are heard (see Figure 2-12). The Eb-G motive is presented in mm.478-79 as the prolongation of tonic harmony of G harmony through a common-tone augmented-6th chord on Eb (see Figure 2-12 and Graph 2-3a). Measures 478-79 are then transposed a M2 down, on F-Db, at (48) (mm.482-83) (see Graph 2-3a). This F-Db appearance can also be considered as a variant of the F-B motive without a B in the bass.

¹²¹The material in F# (mm.472-73) is an inexact sequence of that heard on G (mm.468-69). Notice that the V^{7} /bII (m..472) reminds the listener of the important key of G. Eb moves to F# again at (50) (mm.495-99).

¹²²This is analogous to the beginning of I/i where mm.215-20 are retrospectively heard "in" F# after the appearance of C# harmony (m.223) (see Figures 2-1a and 2-1b, respectively).

The key of F, which gained prominence in I/ii, is important in II/viii and appears in II/vii as well. It occurs at (48) (m.482) as part of the aforementioned sequence and is then broken off by a brief passage in Ab (m.m.484-87) (see Graph 2-3a). There is a strong cadential progression and cadence in F (mm.493-94) (see Figure 2-13 and see Graph 2-3a). It is interesting to note that mm.490-92 undermine this cadence with the harmonies V^7 /bII - bII of F, which emphasize Gb/F# instead (see Figure 2-13).¹²³ The key of F# returns in m.497 and there is an elided cadence at (51) (m.500) (see Graph 2-3a). Measures 500-01 harmonically resemble mm.474-75 (see Figure 2-11), but, because of the elided cadence, now sound more strongly as if they were "in" F#. The key of Eb returns at the end of the B section near (51) (mm.502-05) where the dominant is prolonged by altered dominant chords and by a Bb pedal in the double bass (mm.504-05) (see Figure 2-14 and see Graph 2-3a). This prepares for the A' section at (52) (m.506), a partial restatement of the opening eight-measure phrase, which moves from Eb to G and then back to Eb, and ends on a ii⁶⁷ of Eb that leads to a V⁶⁹ at the introduction to section 2, (53)-(55) (see Graph 2-3a and Figure 2-15).

Now the key of Eb virtually disappears for the rest of the scene while F# gains prominence (see Graph 2-3a). The introduction to section 2 begins in the key of Eb (mm.511-18) which is asserted by diatonic progressions and repetitive Eb's in the voice (see Figure 2-15); it concludes in the key of F# (mm.519-27) which is established by a

¹²⁵The key of F is briefly hinted at in mm.543-44. The F-B motive now occurs in m.543 and seems to be sequenced in m.545. Compare m.543 to m.482: now the augmented-6th chord has B in the bass and possesses pre-dominant instead of tonic prolongational function. Measures 543-44 are also sequenced up a m3 in mm.545-46.

cadential progression that leads to a V chord (m.522) (see Graph 2-3a).¹²⁴ The last measure of the introduction to section 2 (m.527) contains a series of sliding fully diminished 7th chords that prolong dominant harmony and lead to F# harmony and the beginning of section 2 at (56) (m.528) (see Figure 2-16 and Graph 2-3a). Measures 530-31 contain the "original" Eb-G motive from I/i at (24) (mm.252-53) (see Figures 2-16 and 2-1d, respectively). The indication tempo exact du (41) refers to the beginning of II/vi, and mm.528-29 and mm.530-31 are very similar to mm.434-36 and mm.438-39, respectively (see Figures 2-16 and 2-17). Measures 528-31 are also a transposition down a M2 of mm.442-45: mm.442-43 are in Ab momentarily, which is an important secondary key area of I/i, and are transposed down to F# in mm.528-29; and the F-B motive in mm.444-45 is transposed down to the Eb-G alternation in mm.530-31.¹²⁵ The ostinato figure F#-C#-F#-E#-D-C# (mm.528-29) prolongs F#, but this key is immediately thwarted by the appearance of the Eb-G motive (mm.530-31) and by an ascending m3 sequence (m.534) (see Figure 2-16 and Graph 2-3a). F# regains importance in section 3 and its introduction.¹²⁶ Throughout (59)-(61) (mm.553-74) the key of F# is asserted by two dominant pedals in mm.556-59 and mm.563-74 (see Graph 2-3a). The pedal in

¹²⁴The introduction to section 2 (mm.511-18) is analogous to the introduction that began the scene. The indication *très librement* reappears and Thérèse begins to sing the same words in a descending melodic line accompanied by an arpeggiated piano, now prolonging dominant harmony of Eb instead of tonic harmony of G (see Figures 2-9 and 2-15).

¹²⁵Notice that the melody in mm.528-29 is a P4 lower than it would have been in an exact transposition down a M2 of mm.442-43.

¹²⁴F# becomes Gb at (61) (m.563). The introduction to section 3 parallels the beginning of the introductions to sections 1 and 2 (see Figures 2-18a, 2-9 and 2-15, respectively). There is singing a descending line that begins in m.553 on a high pitch, an arpeggiated piano enters soon after prolonging the dominant arrival of F# (m.555) and the indication très librement appears.

mm.556-59 prolongs dominant harmony whereas the one in mm.563-74 is the basis for the entire section (see Graph 2-3a, and Figures 2-18a and 2-18b).¹²⁷ So the dominant arrival (mm.555-62) "resolves" to the dominant pedal (mm.563-74) where appearances of other diatonic harmonies, including tonic, and outlines of the tonic triad in the voice appear (see Figures 2-18a and 2-18b). The half cadence in m.570 simultaneously suspends and emphasizes the pedal note Db (see Figure 2-18b). The end of this scene, mm.584-601, near (62), contains an Ab pedal in the hrons and cello functioning as V of Db, the dominant arrival for Scene 8.¹²⁸

(b) Large-scale sequence. Before the beginning of the introduction to section 3 there is a sequential pattern that first occurs in I/ii. Compare mm.439-41, near (37), from I/ii with mm.549-52, at (58), from II/vii (see Figures 2-7c and 2-19, respectively). In both of these places there is an ascending M2 sequence, based on a $\frac{4}{2}$ -6 progression, that begins on Ab and ends on C. These are the two instances in the opera where the husband aggressively tries to attack Thérèse by throwing himself at her - without knowing that he is actually attacking his wife. In I/ii he wants to kill an imposter who is disguised in Thérèse's clothing. In II/vii he attacks the fortune-teller because she strangled the Gendarme, who was previously fighting with her. Thérèse in these passages is not

¹²⁷The double bass holds the C# pedal in mm.556-69; whereas the Db pedal in mm.563-74 is distributed between the following instruments: horns, violin 2 and viola (mm.563-59); and bassoon, violin 2 and viola (mm.571-74).

¹²⁸Here as near the beginning of the second main section in I/i, Ab functions as V of Db. Notice that the Ab pedal (mm.584-601) is suspended in mm.594-97 and resumes in m.598.
conforming to the traditional female role, the opera's main theme. In the first excerpt the husband is threatened because Thérèse is a "man;" she is seen as powerful, especially physically. In the second passage, she is a fortune-teller who is also powerful and threatening because of the supposed powers that she possesses. Chapter 3 examines musical representations of the text and plot in more detail.

(c) Eb-F-F# conglomeration. Graph 2-3b shows a linear ascent of the following pitches: G (m.456) - A (m.457) - B (m.458) - Cb (m.511) - C (m.555). In Graph 2-3b the pitches are normalized so that G2 and Bb2 represent the pitches in the "bass notes" staff. This linear ascent to C in II/vii seems to replace the grouping of the referential pitches Eb, F, and F# that were melodically present in I/i and I/ii (see Graphs 2-1c and 2-2b, respectively). The G is supported by the octave outline from G5 to G4 and by the pedal in the piano (mm.456-59) (see Figure 2-9 and Graph 2-3b). The A and B occur in the voice over the G pedal as passing note and chord tone, respectively (see Figure 2-9 and Graph 2-3b). The B is restated as Cb (m.511), outlined from Cb5 to Cb4, but it does not receive consonant support from the Bb dominant harmony (mm.511-12); it can be considered as an added flat 9th of this chord (see Figure 2-15 and Graph 2-3b). The C in m.555 is consonant above the A minor triad in mm.553-54, but is then confronted by dominant harmony of F# (see Figure 2-18a and Graph 2-3b).

Graph 2-3c summarizes how the the referential pitches Eb, F and F# and an expansion of the Eb-G motive govern key successions in the scene. In Graph 2-3c the pitches are normalized so that Eb2, F2, F#2, G2 and C#3 represent the pitches in the key

areas staff.¹²⁹ Eb, the key-goal of II/vii which is expanded by G, begins two conglomeration passages that move to F#:

G-Eb (mm.456-71) - F# (m.472) - G (m.478) - F (m.483, m.494) - Eb (m.495) - F# (m.500) -

Eb-G (m.506-18) - F# (m.528, m.555 as V/F#) (see Graph 2-3c).

¹²⁹Notice that the key areas G (m.469), F# (m.472), F (m.494), F# (m.500) and G (m.509) are asserted by cadences but do not appear as half notes on the graph because they do not have as much structural importance as the key areas that are indicated by half notes.

CHAPTER 3: LEITMOTIVES AND FEMININITY

3.1 Introduction

This chapter examines the musical representation of Thérèse's gender/sexual shifts through key areas, and salient motives, pitches and chords. Local events such as Thérèse's vocal climaxes on high C's (C6), the Tristan chord and the "masculine" rhythmic motive; and large-scale harmonic motions, such as movements to and from the key regions of F and F#, will be related to the plot. These significant features will be traced in I/i, I/ii, II/vii and throughout the opera. The local events can be regarded as leitmotives in the traditional sense, that is, coherent musical ideas that are clearly defined so as to retain their identity if modified on subsequent appearances;¹³⁰ whereas the large-scale harmonic motions seem to function as large-scale leitmotives. Selected musical examples are provided to show how these events appear individually and collectively in the composition's motivic and harmonic framework. The piano-vocal score of II/viii has been provided, in Volume 2, should the reader wish to examine the scene in full.

3.2 Leitmotives and Femininity

3.2.1 Local events

Thérèse's high C. The climax of Thérèse's vocal line occurs on a high C (C6) in
I/i, I/ii and II/vii.¹³¹ In I/i this pitch appears where Thérèse's masculinity manifests

¹³⁰They represent or symbolize a person, object, place, idea or state of mind, for example, in a dramatic work. The New Grove Dictionary of Music and Musicians, 6th ed., s.v. "leitmotif."

¹³¹The high C's in I/i, I/ii and II/vii are the only appearances of this pitch in the opera. In I/v, near (53) (m.632), Thérèse sings a high D (D6). This is the only time that she sings a pitch higher than C6; but this D6 does not have much structural weight because it only occurs once with a short durational value,

itself.¹³² She begins her gender/sexual transformation before the beginning of the second main section, near (27), where she sprouts a beard (m.276) and her breasts detach themselves (m.278) and fly out of her open blouse (m.279) (see Graph 3-1a). In Graph 3-1a the pitches are normalized so that F#2, G2, Ab2, Bb2, Db3 and D3 represent the pitches in the key areas staff. The high C in m.279 is supported by the dominant harmony of Db; it is embellished by a series of sliding fully diminished 7th chords (see Figure 3-1a and Graph 3-1a).¹³³ Thus, it is the leading tone of the new key, an active and unstable tone, eventually resolving to Db5 in the voice in m.289 (see Graph 3-1a). The pitch recurs near (32) (m.372), immediately after her moustache appears (completing her gender/sexual change) while she states that she looks like a field of wheat that is waiting for the harvesting machine (see Figure 3-1b and Graph 3-1a). Here, C6 is supported by a Tristan chord on D that yields to dominant harmony of F# in m.374 (see Figure 3-1b and Graph 3-1a).¹³⁴ C is made more unstable now, as it is not part of the dominant harmony of F# that is prolonged during this passage. C in the voice gives way to Bb the 13th of a V of F# (m.374); the D resolves to Db/C# in the accompaniment (m.374) (see Figure 3-1b and Graph 3-1a). The rhythmic approach to these notes in m.279 and

an eighth-note, and is part of an arpeggiation and octave outline from D5 to D6.

¹³⁵Recall that in the first section of I/i, Thérèse decides that she is a feminist and that she will no longer recognize the authority of men or maintian the role as wife and baby-producer. She begins to grow a beard before the beginning of the second section, where she lets her breasts fly away and completes her sex change by exploding her breasts with a lighter and hooking on a beard and a moustache. In the third and last section Thérèse declares that she is more virile than her husband.

¹³⁹The key of Db is reached at (28), the beginning of the second main section.

¹³⁴The key of F# is reached at (32), the beginning of the third main section.

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m.372 is the same: C6 is heard on the first beat of the measure and is approached from an octave below (see Figures 3-1a and 3-1b, and Graph 3-1a).

C6 ends I/i near (34) (mm.415-19), after Thérèse states that she is more virile than her husband and just before she runs to look at herself as a man in the mirror. It is heard again on the first beat of the measure, but is approached from a 7th below; it is then destabilized by alternating harmonies on Bb and G, an expansion of the Eb-G motive, that prolong dominant harmony of Eb (see Figure 3-1c and Graph 3-1a). So C6 receives less support than it did in the previous examples. This unstable tone is the 9th of a Bb dominant 7th chord that resolves to Bb in the husband's voice, also supported by Bb dominant harmony, at the beginning of I/ii at (34) (m.423) (see Graph 3-1a).¹³⁵

Thérèse's voice climaxes on a high C at the end of the I/ii near (38) (mm.455-58), after the authentic cadence in F (m.452), where she declares that her new name is Tirésias (see Figure 3-2 and Graph 3-1b).¹³⁶ In Graph 3-1b the pitches are normalized so that F2, C3 and E3 represent the pitches in the key areas staff. The high C now implies the dominant of the key of F, and thus resumes the stability it was afforded in I/i (see Figure 3-2). The high C is the impetus for the final cadence in F in m.460 (see Graph 3-1b). Again, as was the case in I/i, mm.278-79 and mm.371-72, the high C is heard on the first beat of the measure and is approached from an octave below (see Figure 3-2 and Graph 3-1b).

¹³⁵Tonic harmony of Eb is heard shortly after the beginning of I/ii, at (35) (see Graph 3-1a).

¹³⁶Recall that in the first section of I/ii the husband frantically looks for Thérèse. In the second and last section she reveals herself to her bewildered husband as a man, and announces her name to be Tirésias.

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In II/vii near (60) (m.555), Thérèse's vocal line climaxes on a high C.¹³⁷ However, this pitch signals the point at which Thérèse's femininity manifests itself again; she rids herself of her disguise as a fortune-teller and then reveals herself to her husband, as woman and wife, in an elegant evening gown (see Figure 3-3 and Graph 3-1c). In Graph 3-1c the pitches are normalized so that F#2, G2, Bb2 and C#3 represent the pitches in the bass notes staff. This pitch again occurs on the first beat of the measure and is approached from below by an arpeggiated A minor triad (see Figure 3-3 and Graph 3-1c). There are no other instruments sounding when this pitch is heard, so this pitch seems to be a chord tone belonging to the A minor triad that is arpeggiated in Thérèse's vocal line in mm.553-55; however, it is immediately "confronted" by the dominant arrival of F# (see Figure 3-3 and Graph 3-1c).¹³⁸ Unlike I/i and I/ii, this pitch does not appear "out of thin air" but is approached on the large-scale by a strong linear ascent discussed in Chapter 2: G (m.456) - A (m.457) - B (m.458) - Cb (m.511) - C (m.555) (see Graph 3-1c).

In summary, C's stability seems to be reinforced in its first occurrence in each scene. In I/i it appears in m.279 as an active chord tone, the third of V of Db (see Figure 3-1a). It then becomes more unstable with subsequent appearances in this scene.

¹³⁷Recall that in the first section of II/vii Thérèse, absent since I/vi, appears disguised as a fortune-teller and announces that she has good news to tell. In the second section she predicts that those who make babies will become very rich and those who do not will die in a horrible way. In the third and last section she reveals herself to her husband, as Thérèse, in an elegant evening gown and welcomes him back into her life.

¹³⁸As noted in Chapter 2, this dominant arrival never resolves to tonic harmony; instead it "resolves" to a dominant pedal in mm.563-74 over which diatonic harmonies, including tonic, of Gb/F# are heard.

In m.372 it is the "7th" of a Tristan chord built on D, but is not part of V of F# that is prolonged during this passage (see Figure 3-1b). In mm.415-19 it is heard over alternating harmonies on Bb and G and is the 9th of a Bb dominant 7th chord (see Figure 3-1c). In I/ii it regains its stability in mm.455-58, where it implies the dominant of F and ushers in the final cadence in F (m.460) (see Figure 3-2). The last appearance of C occurrs in II/vii in m.555 where it unfolds from an A minor triad; although it is immediately confronted by V of F#, it is approached and prepared by a strong linear ascent (see Figure 3-3).

(2) Tristan chord. The Tristan chord, another recurring element, signals Thérèse's loss of "womanhood" in I/i, I/ii and II/vii; it also suggests masculine references in other scenes. It occurs just before the appearance of the first high C in I/i near (27) (mm.275-77), built on F#, where Thérèse states that her beard is growing (see Figure 3-4 and Graph 3-1a). This chord, F#-A-C-E, seems to function as an altered pre-dominant harmony of Db, respelled as Gb-Bbb-Dbb-Fb, which resolves to dominant harmony in m.279 (see Figure 3-4 and Graph 3-1a). Immediately after Thérèse moustache materialises (m.370) the Tristan chord reappears on D as she sings a high C (m.372) (see Figure 3-1b and Graph 3-1a). As noted earlier, this chord resolves to dominant harmony of F# in m.374 (see Figure 3-1b and Graph 3-1a). A Tristan chord built on E occurs in I/ii near (38) (m.448), where Thérèse states that she is no longer a woman (see Figure 3-5 and Graph 3-1b). This vii⁶⁷ of F is part of the pre-dominant passage of mm.447-49 that leads to dominant harmony of F (mm.450-51) and to a cadence on I (m.452) (see

Figure 3-5 and Graph 3-1b). It occurs for the last time in II/vii near (59) (m.552) at the end of the ascending M2 sequence where the husband attacks Thérèse (see Figure 3-6 and Graph 3-1c). The chord, built on F#, occurs shortly before Thérèse's high C (m.555); it is missing the pitch A, which is supplied by Thérèse immediately after the chord stops sounding, in m.553, just as she reveals her true identity to her husband (see Figure 3-6 and Graph 3-1c).

The Tristan chord first occurrs in the Prologue near (15) (m.161), on F# (see Figure 3-7). Here the text makes reference to God, which might be interpreted as a masculine connotation. The chord is part of another pre-dominant passage that also includes vii⁶⁷/V (m.162), which leads to V(864)-(853) - i (mm.163-65) of A (see Figure 3-7). At the end of 1/iv, near (47) (m.550), a Tristan chord appears as part of the dominant of C, F-B-Eb-Ab over a G bass (see Figure 3-8a).¹³⁹ This chord is heard while the card players Presto and Lacouf prepare to aim two huge revolvers at each other. They shoot each other dead when the tonic of C arrives at the beginning of I/v, at (47) (m.552) (see Figure 3-8a). Thérèse, freshly shaven and dressed in an elegant smoking jacket, continues to prolong tonic harmony, near (47) (m.556), while she states that she has conquered liberty at last (see Figure 3-8b). In I/v near (54) (m.672), a Tristan chord appears as part of the dominant of G, C-F#-Bb-Eb over a D bass (see Figure 3-9). This chord resolves to tonic harmony of G in m.673 as Thérèse promenades calmly and states

¹³⁹Although mm.550-51 might sound as though they only form a V^{10} added flat-13th chord, Poulenc accentuates the Tristan chord by sustaining the root of the V chord, the lowest G in the double bass, for only one measure (m.550); and by sounding the Tristan chord in violins 1 and 2, the viola and the cello on beat 2 of m.550, and then in "inversion" on beat 1 of m.551 (in the full score a B3 appears in the cello in m.551 to complete the Tristan chord).

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her newly acquired "masculine" priveleges: "Maintenant à moi l'univers, à moi les femmes, l'administration..." (see Figure 3-9).

In II/iv at (32) (m.359) the chord, built on F#, is heard in "incorrect" spacing as the journalist-son announces a marriage between two women, the Princesse de Bergame and a woman she met in the metro (see Figure 3-10). The authentic cadence in Gb (mm.357-58), where the father was singing, is abruptly followed by the Tristan chord which could function as a pre-dominant, ii⁶⁷, of E; so a V of E would be expected to follow (see Figure 3-10). Instead, dominant harmony of Eb appears at (33) (m.364) as the father begins to state that he wants news about his friends and not about people that he does not know (see Figure 3-10). So the Tristan chord and the son interrupt the father. The interpretation of the text in mm.358-63 seems to suggest that the act of marriage, which should eventually lead to the production of babies, has been "deconventionalized" by having the traditional masculine element, the groom, removed and replaced by a woman. The last Tristan chord occurs in II/v near (38) (mm.417-19), over an F bass, after the son has just left and the disappointed husband states that he does not want useless mouths (see Figure 3-11). The chord does not seem to relate tonally to the passage that precedes it (mm.413-16), which is mostly octatonic around G, or to the passage that follows (mm.420-23), which seems to be in E phrygian.

(3) "Masculine" rhythmic motive. Another motive that has masculine connotations occurs in I/i near (24) (mm.244-45), where it begins on G#, and at (26) (mm.271-72),

on F# (see Figures 3-12a and 3-12b).¹⁴⁰ The husband's voice is heard for the first time in these passages, although he is not physically present on stage. The sudden change of dynamics to f, ff and fff, the pulsating rhythmic attacks and the more disjunct nature of the melodic line emphasize these pitches and accentuate the husband's command to Thérèse, "Donnez moi du lard je te dis." Near (24) Thérèse throws her broom in the wings, and at (26) she outlines a dance step as protests to his demand (see Figures 3-12a) and 3-12b, respectively). This motive, without text, also occurs near (31) (mm.363-64), while Thérèse runs and looks at herself in the mirror (mm.363-64) - immediately after she explodes her breasts (m.362) and just before she grows a moustache (m.370) (see Figures 3-12c and 3-12d). This time the motive is on a C# that prolongs the dominant of F# (see Figure 3-12c).¹⁴¹ Before the appearance of her moustache and the Tristan chord in mm.370-72, Thérèse hooks on a false beard while the series of sliding fully diminished 7th chords (mm.369-70), which have the same accented rhythmic attacks, dynamics (ff in orchestra), and *Feroce* indication as the previous masculine rhythmic motives, are heard (see Figure 3-12d). Thus, in mm.369-70 two recurrent motives, the sliding fully diminished 7th chords and the masculine rhythmic motive, are heard in conjunction while the dominant of F# is prolonged (see Figure 3-12d).

¹⁴⁰In I/i the pitch of G# seems to have some masculine reference in Thérèse's vocal line where she sings the word *homme* and *hommes* in m.222 and m.228, respectively.

¹⁴¹The occurrences near (24) and at (31) are octatonic, (G#-A-B#-D-D#) and (C#-D-E-E#-G-G#-B), respectively (see Figures 3-12a and 3-12c). The one at (26) implies an octatonic scale (F#-G-C-"D") (see Figure 3-12b).

This "masculine" rhythmic motive also occurs in the following scenes, primarily set to the octatonic collection {C#-D-E-E#-G-G#-A#-B}, where male characters voice there love, disappointment and anger. In I/vi at (68), the Gendarme declares his love for the husband-in-a-dress and his desire to marry "him" after a series of fully diminished 7th chords (mm.792-96) (see Figure 3-13). In II/v near (38) (mm.414-17), the husband voices his disappointment and his desire to disinherit his recently departed journalist-son (see Figure 3-14a). Here the motive is heard twice and appears before the Tristan chord in m.417. In II/v at (40) (mm.432-33), the husband bumps into the Gendarme while the motive is being heard (see Figure 3-14b). The agitated Gendarme then announces, in II/vi near (42) (mm.446-47), that the population of Zanzibar will starve to death because of the surplus of new mouths that need to be fed (see Figure 3-15). This occurrence recalls the previous one (mm.432-33) and the one in I/i at (31) (mm.363-64), but its rhythmic values consists only of eighth-notes (see Figure 3-14b and 3-12c, respectively).

3.2.2 Large-scale harmonic motions

(1) Movements to F#. Movements toward the key region of F# in I/i seem to signify Thérèse's emerging maleness. I/i begins at (20) in the region of F#, where Thérèse states that she will not do what her husband wants and that she is a feminist (mm.215-20) (see Figure 2-1a and Graph 3-2a). In Graph 3-2a the pitches are normalized so that F#2 and C#3/Db3 represent the pitches in the key areas staff. In mm.232-33, at (22), she announces that she wants to be a soldier; in mm.248-49, at (24), she calls her husband an imbecile and then says she wants to be an artist, deputy, lawyer, senator, minister and president (see Figures 2-1c and 2-1d, and Graph 3-2a). Notice that the passages at (22) and (24) are based on the F-B motive (see Figures 2-1c and 2-1d). In mm.260-61, near (25), Thérèse states, over a sequential repetition on a dominant pedal of F#, that making children and working in the kitchen is too much (see Figure 3-16a and Graph 3-2a). In mm.271-72, at (26), the husband orders Thérèse to give him meat while the masculine rhythmic motive is heard on F#, and shortly after, near (27) (m.276), her beard begins to grow over the Tristan chord built on F# (see Figure 3-16b and Graph 3-2a).

The second main section begins in Db, the dominant key region of F#, at (28) (m.285). At the beginning of this section Thérèse sings about her breasts flying away and states that they are birds of woman's weakness (see Graph 3-2a). During the lengthy dominant arrival of F# in mm.351-78, near (30) to (32), Thérèse's gender/sex change is completed, when her breasts explode (m.362) and her moustache appears (m.370) (see Graph 3-2a). During this dominant prolongation the masculine rhythmic motive (mm.363-64 and mm.369-70, see Figures 3-12c and 3-12d, respectively), the high C (m.372, see Figure 3-12d) and the Tristan chord (m.372, see Figure 3-12d) are also heard. Thérèse states that she feels virile in mm.379-94, at the precise arrival of the tonic of F# at (32) (see Figure 3-16c and Graph 3-2a).

(2) Movements from Eb to F. In I/ii the movement to the key of F seems to be a move to another masculine "region." The first half of the scene, (34)-(37) (mm.423-42), is mostly in the key of Eb (see Graph 3-2b). In Graph 3-2b the pitches are normalized so that Eb2, F2, Bb2 and C3 represent the pitches in the key areas staff. At (34) the

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husband demands meat once again; at (35) he immediately realizes that he is not speaking to his wife, though he is mistaken; at (36) he begins to frantically search for her; and just before (37) he tries to kill what he thinks is an imposter disguised in Thérèse's clothing while dominant harmony of F is expressed (see Graph 3-2b). A tonic of F and the F-B motive are heard at (37) (m.443), where Thérèse states that she is no longer his wife (see Figure 3-17a and Graph 3-2b). After an authentic cadence in F (m.452) which incorporates the F-B motive, she declares while singing a high C that her new name is Tirésias (see Figure 3-17b and Graph 3-2b).

The conglomeration Eb-F-F#, discussed in Chapter 2, is rearranged as F#-Eb-F to organize the large-scale key relationships in I/i and I/ii. The following plot events occur as the principal keys are being defined: F#, the principal key of I/i, is established while Thérèse goes through her sex/gender change; I/i ends in the key region of Eb to prepare for the first half of I/ii where the husband appears onstage, demands meat from Thérèse, frantically looks for and then tries to kill her; and F appears as the principal key of I/ii when Thérèse reveals herself to her husband as a man (see Graph 3-2c). In Graph 3-2c the pitches are normalized so that Eb2, F2 and F#2 represent the pitches in the key areas staff. There are other passages in the opera where F# and Eb appear as relationships between chords or keys ϵ nd where the family seems to be the subject matter of the text. In the Prologue at (5) (mm.40-47) there is a series of alternating open fifth sonorities on F# and Eb (see Figure 3-18). Here the theater manager states that the play is about children in the family, a domestic subject (see Figure 3-18). The juxtaposition of these two pitches, F# and Eb, is presented in I/iv, (40)-(42) and (44)-(45), as an

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alternation between the keys of Eb and Gb. Here the two drunk card players "struggle" by arguing amiably. This struggle might be interpreted as a reflection of what Apollinaire believes to be the ridiculous battle that feminist women create.

(3) Movements to and from F#. In II/vii movements to F# seem to represent children and family issues in the text. In mm.519-29, near (54) to (56), the key of F# is asserted quite strongly. Here, Thérèse declares that those who make babies will receive the fields and fruits of the earth and will become very rich (see Graph 3-2d). In Graph 3-2d the pitches are normalized so that F#2 and C#3/Db3 represent the pitches in the key areas staff. Just before the dominant arrival of F# in mm.555-62, near (60), Thérèse reveals herself to her husband, as woman and wife, in an elegant evening gown (mm.553-55) (see Figure 3-3 and Graph 3-2d).¹⁴² Immediately following in mm.563-74, at (61), the key of Gb/F# is established over a dominant pedal, as Thérèse welcomes her husband back into her life (see Figure 2-18b and Graph 3-2d).¹⁴³ The end of II/vii, mm.519-29 and mm.555-74, is similar to the end of I/i, near (30) to (32), where the key of F# was also strongly prepared and asserted.

At the end of II/vii a move away from F# through an ascending progression of fifths eventually leads to the key of F in II/viii through a "mirror" progression of descending fifths, while the husband and wife express their love for each other and urge

¹⁴CAs noted the Tristan chord and the high C also appear while she is disrobing in m.552 and m.555 (see Figures 2-19 and 3-3, respectively).

¹⁰As was noted in before, the Db pedal in mm.563-74 is distributed between the following instruments: horns, violin 2 and viola (mm.563-69); and Jassoon, violin 2 and viola (mm.571-74).

the audience to make babies (see Graph 3-3a).¹⁴⁴ In Graph 3-3a the pitches are normalized so that Eb2, F2, F#2, G2, Ab2, A2, C3 and C#3/Db3 represent the pitches in the key areas staff. The gradual move from F# to F, might be associated with a move away from "out of placeness," that is woman/Thérèse as fortune-teller or "non-wife," and back to "reality," to woman/Thérèse as wife. F# (mm.519-29) moves to V/F# (C#/Db, mm.555-74), which is unresolved; then to V/V/F# (Ab, mm.584-601), and to V/V/V/F# (Eb, mm.602-21). It is as if Poulenc is "backing out" of F# via extended pedal points. Once he reaches Eb, he begins the drive to F by moving through a mirror progression of fifths from V/V/V/F (A, mm.626-33) to V/V/V/F (D, mm.634-41) to V/V/F (G, mm.646-57) and to V/F (C, mm.658-72 and mm.708-11), which finally resolves to F (mm.712-end). In summary the ascending progression of fifths away from F# is: F# (mm.519-29) -> C#/Db (mm.555-74) --> Ab (mm.584-601) --> Eb (mm.602-21);and the mirror progression of descending fifths back to F is: A (mm.626-33) -> D (mm.634-41) -> G (mm.646-57) -> C (mm.658-72) - C $(mm.708-11) \rightarrow F (mm.712-cnd)$ (see Graph 3-3a and annotated pages, at the end of

II/vii and throughout II/viii, of the piano-vocal score in Volume 2).145

¹⁴⁴Brian Alegant noticed that the move from F# to F occurs through an ascending and then descending progression of fifths.

Notice that the key areas Eb (m.467), G (m.469), Eb (m.472), Eb (m.507) and G (m.509) are asserted by cadences but do not appear as half notes on the graph because they do not have as much structural importance as the key of F that is indicated by half note.

¹⁴⁵The "middle" notes are mostly dominant pedals: C#/Db (mm.555-74, V/F#) - Ab (mm.584-601, V/Db) - Eb (mm.602-25, V/V-V-l in Db) - A (mm.626-33, V/D) - D (mm.634-41, V/G) - G (mm.646-56, V/C) - C (mm.658-72 and mm.708-11, V/F).

An expansion of the Eb-F-F# conglomeration rearranged as Eb-F#-Eb-F, and the Eb-G motive expressed as Eb-G, G-Eb, Eb-C and C-Eb, enlarge and embellish the progression from the beginning of II/vii to the end of II/viii:

Eb-G (mm.456-518) - F# (mm.519-29) - C#/Db (mm.555-74) - Ab (mm.584-601) - Eb-C (mm.602-25) - A (mm.626-33) - D (mm.634-41) - Eb-G (mm.643-56) - C (mm.658-72) - G-Eb (mm.673-707) - C (mm.708-11) - F (mm.712-end) (see Graph 3-3a).

There is a parallel large-scale descending fifth progression from and to F# in I/i, embedded in the conglomeration F#-Eb-F that outlines main keys in I/i and I/ii, discussed in Chapter 2:

F# (mm.215-49) - Eb (mm.256-59) - Ab (mm.279-84) - Db (mm.285-304) - C# (mm.351-78) - **F#** (mm.379-92) - Eb (mm.399-435) - **F** (mm.442-61) (see Graph 3-3b).¹⁴⁶ In Graph 3-3b the pitches are normalized so that Eb2, F2, F#2, Ab2, and C#3/Db3 represent the pitches in the key areas staff. In I/i and I/ii the move from F# to F might be associated with a move from "reality," that is, woman/Thérèse as wife becoming a feminist, to "out of placeness," that is, woman/Thérèse as a feminist becoming a man. Whereas in II/vii and II/viii the move from F# to F is reversed or "fixed," as F to F#, and it represents a move from "out of placeness," non-wife," to "reality," wife.

There is a parallel move from F to F# in the Prologue, expressed as D minor to F#; and from the Prologue to I/i, expressed as D minor to F# (see Graph 3-3c). In

¹⁴⁶Again many of the "middle" notes are mostly dominant pedals: Eb (mm.256-59, V/Ab) - Ab (mm.279-84, V/Db) - Db (mm.285-304, key of Db which can be interpreted on the large-scale as V/F#) - C# (mm.351-78, V/F#).

Graph 3-3c the pitches are normalized so that Eb2, F#2 and D3 represent the pitches in the key areas staff. Measures 1-39 are in D minor, with a D Phrygian "coloration" in mm.24-27, and move to alternating open fifth "chords" on F# and Eb in mm.40-47 (see Figure 3-18 and Graph 3-3c). The Theater Manager's first words which are said in mm.29-39 in D minor, express that the opera's aim is to reform the audience's way of life (see Graph 3-3c). He then continues in mm.40-47, his first move away from D minor through F# to Eb chords, and states that the subject matter is about family and children, a domestic subject (see Graph 3-3c and Figure 3-18). A strong move back to D minor takes place at the end of Prologue, at (17), where the Theater Manager's final words urge the audience once again to make babies (see Graph 3-3c). I/i begins in F# as Thérèse decides that she is a feminist and that she will no longer recognize the authority of men or maintain the role as wife and baby producer (see Graph 3-3c and Figure 2-1a). Overall, F as D minor can be understood as the key of the opera that expresses the "conventional" way of life while the move to F# raises issues about nonconventionality and feminism, and how it affects issues related to family and children.

(4) Key relationships of entire opera. Ultimately, the opera is framed by three statements of the primary key F at the beginning, middle and end of the opera: Prologue, I/viii and II/viii, respectively (see Graph 3-4).¹⁴⁷ In Graph 3-4 the pitches are normalized so that Eb2, F#2, G2, C3 and C#3 represent the pitches in the key areas staff. F and D

¹⁴⁷F is expressed as D minor in the Prologue.

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are the only keys indicated by half notes because of the stronger weight that they possess. The text summary of all three scenes are closely related. In the Prologue the Theater Manager urges the audience to make babies; in I/viii the newspaper vendor, the people of Zanzibar, the gendarme and the husband reassure the public that they need not weep anymore and simply await the birth of babies born without the help of a wife; in II/viii Thérèse and her husband express their love for each other and urge the audience, along with the people of Zanzibar, the newspaper vendor and the gendarme, to make babies (see Graph 3-4). These keys are pillars that are embellished by main key areas and strong dominant harmonies in the other scenes of the opera which outline the notes from the Eb-F-F# conglomeration and the expanded Eb-G motive, expressed as Eb-G, G-Eb and Eb-C (see Graph 3-4). The succession of keys and harmonies proceeds as follows. D (Prologue) - F#-Eb (I/i) - Eb-F (i/ii) - Eb-V/C (I/iv) - C-G (I/v) - Eb-V/F (I/vii) - F (I/vii) - Eb-V/C (Entr'acte) - C (II/i) - F (II/ii) - V/F (II/iii) - F-Eb (II/iv) -

G-V/F# (II/v) - F# (II/vi) - G-Eb-V/F# (II/vii) -

F (II/viii) (see Graph 3-4).

CONCLUSION

This thesis illustrates some of the ways in which Poulenc achieves large-scale harmonic organization in *Les mamelles de Tirésias*. It highlights and examines a number of harmonic and motivic events and then relates them to the plot and text of I/i, I/ii and II/vii, and, when pertinent, to other scenes in the opera. This conclusion ties together the observations made in Chapters 1, 2 and 3, and makes some general remarks about Poulenc's harmonic language.

Few studies focus on isolated elements of Poulenc's musical idiom and attempt to link these elements to large-scale organization. Chapter 1 makes the following observations about Bobbitt's and Werner's dissertations. Bobbitt's work seems to disclose surface harmonic motion, but proves to be more useful once his analytical approach is expanded, whereas Werner provides more analytical tools and more accessible labeling schemes. Werner's method of examining Poulenc's works in terms of the 11 categories proves to say more about the organizational aspects of Poulenc's harmonic style and the underlying compositional structures. Although both authors supply descriptive information about the music, Werner relates these surface events to their role in structuring and organizing the passage or work under examination. Thus, a different analytical strategy is invoked in Chapters 2 and 3 of this thesis.

Chapter 2 examines key scenes in terms of plot development. The scenes are chosen because they are representative of the musical language employed throughout the opera and because they show how Poulenc achieves unity with large-scale key relationships revolving around the pitches belonging to the structural conglomeration

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involving F#, F and Eb; recurrent salient motives such as the Eb-G alternation, which is enlarged at times and expresses key relationships, the F-B motive and sliding fully diminished 7th chords; recurrent sequential patterns such as the one in I/ii, near (37), and II/vii, at (58), discussed in Chapter 2, and the ones that sequence the tritone root movements based on the F-B motive. Chapter 2 also shows how Poulenc uses certain compositional techniques that often obscure established or partly established key centers. These techniques include some of the unifying elements listed above: the F-B motive and its sequential presentations, the Eb-G alternation and sliding fully diminished 7th chords, and other techniques such as the absence of dominant harmonies and cadences, foreign harmonies introduced while the key center is being established, chromatic figures in the voice or accompaniment, sequences, sudden modulations via harmonic side-stepping and octatonic collections.

Chapter 3 extends Werner's and Bobbitt's approach to show how local events and large-scale harmonic motions are related to plot development. The local events consist of the high C, the Tristan chord, the masculine rhythmic motive and the sequential pattern in I/ii and II/vii; the large-scale harmonic motions include movements to and from the key regions of F and F#, using ascending and descending fifth motion and expansions of the Eb-F-F# conglomeration and the Eb-G motive. These local and large-scale events take on the role of leitmotives that underscore the drama - the loss and restoration of Thérèse's womanhood. The high C, the Tristan chord, the masculine rhythmic motive and the sequential pattern in I/ii and II/vii can be thought of as "traditional" leitmotives. The principal key areas and their relationships function as large-scale leitmotives that represent

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moves from femininity/conformity to masculinity/non-conformity (expressed in I/i and I/ii as the move from F# to F), and back to femininity/conformity in Thérèse (expressed in II/vii and II/viii as a move from F# back to F).

Admittedly, this study addresses only a handful of features in a portion of this vast and rich opera. Nevertheless, it demonstrates that the opera is unified at various levels. The opera's tight organization exhibits skillfull merging of dramatic events, the plot, with musical leitmotives. The issues raised in this thesis, such as the uses of certain compositional techniques, the ways in which the plot/text in general are musically represented and the ways in which gender characteristics in particular are musically represented, might be used for further investigation of other works by Poulenc to see if they are crafted in a similar manner.

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Harmonic Organization in Les mameiles de Tirésias by Francis Poulenc

Volume 2

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Faculty of Music McGill University Montreal, Quebec, Canada September 1995

^o Diane Kipling, 1995

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ABSTRACT

The opéra bouffe Les mamelles de Tirésias (1944) by Francis Poulenc (1899-1963) stands at the crossroad between the composer's formative and mature works. The opera exhibits a number of harmonic features characteristic of Poulenc's eclectic, idiosyncratic style. There are very few analytical investigations of Poulenc's œuvre and only a handful of works that deal even remotely with Les mamelles de Tirésias. This thesis attempts to redress the lack of attention given this work in particular and Poulenc's output in general.

The thesis consists of two volumes. Volume 1 contains the introduction, three chapters and the conclusion. Volume 2 contains musical examples, analytical graphs and reproductions of Act 1, Scenes 1 and 2, and Act 2, Scenes 7 and 8 from the piano-vocal score of *Les manelles de Tirésias*.

The first chapter of Volume 1 reviews two Ph.D. dissertations that examine Poulenc's harmonic language, Richard Bobbitt's *The Harmonic Idiom in the Works of* 'Les Six' (1963) and Warren Werner's *The Harmonic Style of Francis Poulenc* (1966), and summarizes the more recent analyses by Vivian Wood, Pamela Poulin and Keith Daniels. Figures (the musical examples) for Chapter 1 are given in Volume 2.

Chapter 2 of Volume 1 examines the large-scale harmonic organization in pivotal scenes that are representative of the musical language in the opera. It combines some tools and procedures employed by Werner with graphs that represent important harmonic, motivic and linear events in order to disclose the ways in which tonal areas and recurrent motives effect continuity and closure in the work. Figures (the musical examples) and Graphs (the analytical graphs) for Chapter 2 are given in Volume 2.

Chapter 3 of Volume 1 extends Werner's and Bobbitt's approach to show how local events and large-scale harmonic motions can be viewed as leitmotives that symbolize key events in the drama. Figures (the musical examples) and Graphs (the analytical graphs) for Chapter 3 are given in Volume 2.

The conclusion reviews the observations of the study and makes some general remarks about Poulenc's harmonic language.

RÉSUMÉ

L'opéra bouffe Les manelles de Tirésia: (1944) de Francis Poulenc (1899-1963) s'inscrit à la croisée de ses œuvres de jeunesse et de celles de maturité. Cet opéra met en relief des caractéristiques harmoniques propres à son style idiosyncratique et éclectique. L'œuvre de Poulenc n'a attiré que peu de recherches analytiques, dont seulement quelques unes traitent de Les mamelles de Tirésias. Ce mémoire tente de subvenir au manque d'attention attribué à cette composition en particulier et à l'œuvre de Poulenc en général.

Ce mémoire comprend deux volumes. Volume 1 contient l'introduction, trois chapitres et la conclusion. Volume 2 contient les exemples musicaux, les graphiques analytiques et les reproductions de l'Acte 1, Scènes 1 et 2, et de l'Acte 2, Scènes 7 et 8 de la partition pour piano et voix de *Les mamelles de Tirésias*.

Le premier chapitre du Volume 1 se penche sur les deux thèses de doctorat: *The Harmonic Idiom in the Works of 'Les Six'* de Richard Bobbitt (1963) et *The Harmonic Style of Francis Poulenc* de Warren Werner (1966), qui examinent le langage harmonique de Poulenc. Un résumé des études analytiques plus récentes de Vivian Wood, Pamela Poulin et Keith Daniels conclura ce chapitre. Volume 2 contient les *Figures* (les exemples musicaux) pour le premier chapitre.

Le deuxième chapitre du Volume 1 étudie l'organisation harmonique structurelle dans les scènes clés qui représentent le langage musical de l'opéra. Afin de démontrer comment les régions tonales et les motifs qui revient souvent effectuent la continuité et la clôture dans l'œuvre, l'approche adoptée combine un choix d'outils et de procédures employés par Werner, avec des graphiques illustrant les évènements harmoniques, motiviques et linéaires importants. Volume 2 contient les *Figures* (les exemples musicaux) et les *Graphs* (les graphiques analytiques) pour le deuxième chapitre.

Le troisième chapitre du Volume 1 élargit l'approche préconisée par Werner et Bobbitt afin de démontrer comment les évènements au niveau intermédiaire et les successions des régions tonales structurelles pourraient être interprétées comme leitmotifs qui symboliseraient les évènements clés du drame. Volume 2 contient les *Figures* (les exemples musicaux) et les *Graphs* (les graphiques analytiques) pour le troisième chapitre.

La conclusion propose un compte rendu des constations tirées du mémoire et offre des observations générales sur le langage harmonique de Poulenc.
FIGURES FOR CHAPTER 1

These are the figures (the musical examples) that are referred to in Chapter 1 of Volume 1. The figures are from the Ph.D. dissertations by Richard Bobbitt, *The Harmonic Idiom in the Works of 'Les Six'* (1963), and Warren Werner, *The Harmonic Style of Francis Poulenc* (1966), as indicated in the figure caption. Annotations have not been made to these figures.



Figure 1-1 Activation (Bobbitt)



Figure 1-2 Table I: Chords in thirds (Bobbitt)



Figure 1-3 Mixed-diatonic harmony (Bobbitt)



Figure 1-4 Uniform and generalized symmetry (Bobbitt)



Figure 1-5 Thematic material of mm. 17-40 (Bobbitt)



Figure 1-6 Thematic material used to establish an ostinato (Bobbitt)



Figure 1-7 Passage from the third movement of the Sonate pour piano et violoncelle (1948) with an accompanying condensed-harmonic sketch (Bobbitt)



Figure 1-8 Passage from the "Tenebrae factae sunt," from the choral work Quatre motets pour un temps de pénüence (1938-39) (Werner)

FIGURES FOR CHAPTER 2

These are the figures that are referred to in Chapter 2 of Volume 1. The figures (the musical examples) are excerpts from the piano-vocal score of *Les mamelles de Tirésias*. Measure numbers are added at the beginning of the staff at the top of each system. Annotations are given using larger fonts so as to distinguish them from the score.





Figure 2-1a Prologue and I/i: mm.213-20



F#: "V"

Figure 2-1b I/i: m.223



Figure 2-1c I/i: mm.229-35



Figure 2-1d I/i: mm.247-53









Figure 2-2b I/i: mm.244-47



Figure 2-3 I/i: mm.397-409



Figure 2-4a _1/i: mm.301-07



Figure 2-4b I/i: mm.415-22





A - va - cat. Si - tim-teur. Mi - ais - tre. Pre-si - deni de la cho - se pu: bil - que De pre-pre-si - de la cho - se pu: bil - que pre-si - de la cho - se pu: bil - que de la cho -

E¹ pedal _____ Figure 2-6a I/i: mm.253-56

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Figure 2-6b I/i: mm.278-85





Figure 2-6c I/i: mm.311-15







Figure 2-7b I/ii: mm.432-35



Figure 2-7c I/ii: mm.438-42



Figure 2-8a I/ii: mm.443-46



Figure 2-8b I/ii: mm.447-49







Figure 2-9 II/vii: mm.455-59



Figure 2-10 II/vii: mm.466-73



Figure 2-11 II/vii: mm.474-76







Figure 2-13 II/vii: mm.490-94



Figure 2-14 II/vii: mm.502-05



Figure 2-15 II/vii: mm.511-18



Figure 2-16 II/vii: mm.528-31



Figure 2-17 II/vi: mm.434-39





Figure 2-18a II/vii: mm.553-62



Figure 2-18b II/vii: mm.563-74



Figure 2-19 II/vii: mm.549-52

GRAPHS FOR CHAPTER 2

These are the graphs (the analytical graphs) that are referred to in Chapter 2 of Volume 1. The graphs are made by the author of this thesis. The top of each graph indicates the acts, scenes, sections and rehearsal numbers. The sections are divisions of the scenes defined in Chapter 2 of Volume 1.






Graph 2-1b 1/i: Secondary key areas of Ab and Eb







Graph 2-2c I/i and I/ii: Large-scale Eb-F-F# conglomeration



Graph 2-3a II/vii: Main and secondary key areas of Eb, G and F#



•





Graph 2-3c II/vii: Large-scale Eb-F-F# conglomeration

FIGURES FOR CHAPTER 3

These are the figures that are referred to in Chapter 3 of Volume 1. The figures (the musical examples) are excerpts from the piano-vocal score of *Les mamelles de Tirésias*. Measure numbers are added at the beginning of the staff at the top of each system. Annotations are given using larger fonts so as to distinguish them from the score.

Elle entr'ouve se blouse dont il en sort ses She partigliy opens her blouse from which her breasto 278 27 Th -tri-ne se dé-ta - che ba-sem's d's-ep-peer-leg. Ń. ab ah ah Ma poi ah ah ah ah An - 4) (þ. Ï 14 20.F 尾 $D \colon V^7$ 07

Figure 3-1a I/i: mm.278-80



Figure 3-1b I/i: mm.370-74



Figure 3-1c I/i: mm.414-19





Figure 3-2 I/ii: mm.454-58

I nerna tres hersell of her dispuise and appears in an elegant evening gown. Thérèse, se débarassant de ses poiles, apparaît dans une très élégante robe du soir. 553 Trea lent (69) 0 18 G. au comble de la joie Mon cherma-ti Oh, husbent deer. ne me reconnais-tu pas? 14 M. 🗄 The -: ſ 目 v⁹ F#:





Figure 3-4 I/i: mm.275-79







Figure 3-6 II/vii: mm.549-55





Figure 3-7 Prologue: mm.161-65



SCÈNE V. LES MÉMES, TIRÉSIAS, LE MARI, LE PEUPLE DE ZANZIBAR. Très «fashionable» dans un élégant veston, Thérèse-Tirésias, imberbe et resée de frais, sort de la maison en courant, suivie de son mari, habillé en femme et les mains ligottées. Thérèse gesticule tandis que le mari s'affale sur une chaise du café.



Very finitionable in an elegant smoking jacket, Theresa-Tiresias, beardiess and freshly shaven, leaves the house in a hurry, followed by her husband, dressed as a woman, with hands tied. Theresa signifies that the husband is to take a chair in the cafe.

Figure 3-8a I/iv and I/v: mm.550-52



Figure 3-8b I/v: mm.556-59



Figure 3-9 I/v: mm.672-73



Figure 3-10 II/iv: mm.357-64





Figure 3-11 II/v: mm.417-19



Figure 3-12a I/i: mm.244-45



Figure 3-12b 1/i: mm.271-72



Figure 3-12c 1/c mm.362-64



Figure 3-12d I/i: mm.369-72



Figure 3-13 I/vi: mm.791-96



Figure 3-14a II/v: mm.413-17



Figure 3-14b II/v: mm.432-33



Figure 3-15 II/vi: mm.446-47



Figure 3-16a I/i: mm.260-62



TC

Figure 3-16b I/i: mm.271-76

78.



Figure 3-16c I/i: mm.379-82





Figure 3-17a I/ii: mm.443-44



Figure 3-17b I/ii: mm.452-56



Figure 3-18 Prologue: mm.40-47

GRAPHS FOR CHAPTER 3

These are the graphs (the analytical graphs) that are referred to in Chapter 3 of Volume 1. The graphs are made by the author of this thesis. The top of each graph indicates the acts, scenes, sections and rehearsal numbers. The sections are divisions of the scenes defined in Chapter 2 of Volume 1.



Graph 3-1a Vi: Thérèse's high C and Tristan chord







Graph 3-1c II/vii: Thérèse's high C and Tristan chord



Graph 3-2a I/i: Movements to F#



Graph 3-2c I/i and I/ii: Large-scale Eb-F-F# conglomeration

Graphs for Chapter 3



Graph 3-2d II/vili: Novements to and from F#
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Section 1

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Section 3

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Graph 3-3c Prologue and I/i: Movements from F to F#





PIANO-VOCAL SCORE SCENES

These are the scenes from the piano-vocal score that are referred to in Chapters 2 and 3 of Volume 1.

> Act 1, Scene 1: Scene I/i Act 1, Scene 2: Scene I/ii Act 2, Scene 7: Scene II/vii Act 2, Scene 8: Scene II/viii

The following pages from the piano-vocal score of Les mamelles de Tirésias have been reproduced.

Scene I/i:	pp. 12-23
Scene I/ii:	рр. 24-26
Scene II/vii:	pp. 196-117
Scene II/viii:	pp. 117-139

Measures numbers are added to the beginning of the staff at the top of each system. Annotations have been added at the end of scene II/vii and throughout scene II/viii.

PREMIER ACTE

La grande place de Zanzibar le matin. The spuire of Zanzibar in the moving Le décor représente: côté cour au premier plan, un "café" à la terrasse duquel il y a un guéridon et The spuire of Zanzibar indit, in lie frietrand, scale, vinas versas subie subie subie subie de sevel The autoristic state indit, in lie frietrand, scale, vinas versas subie subie subie de subie. The backgound, an openieg on the barber. At the boiling laborg its popie, a Souther style bout with a first floor versas méridianal, auec, au premier flage, sine factire ouverte; au rez de chaussée un "Bar-Tabac". Chie i ardin: au premier plan, un éazar, au second; une échappée sur un jardin public avec un kios-Store pri: De the first floor, a bastar; at second; une échappée sur un jardin public avec un kios-Store pri: De the first floor, a bastar; at second; une échappée sur un jardin public avec un kios-Store pri: De the first floor, a bastar; at second; une échappée sur un jardin public avec un kios-gue de journaux.

SCÈNE I. THERESE

Excentrique, jeune et jolie. Thérèse, des que le rideau est levé, sort de l'immeuble, un

balai à la main. Eccentic, young and pretty, Therean, when the curtain rises, leaves the house, a broom in hand. THÉRÉSE





















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The husband VOIX du MARI





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Piano-Vocal Score Scene I/ii



Piano-Vocal Score Scene I/ii







ie M.















(desseus)















SCÈNE VIII. LES MEMES, LE PEUPLE DE ZANZIBAR, LA MARCHANDE DE JOURNAUX, DEUX SPECTATEURS. Dance lovingiy Ils densent amoureusement.





Piano-Vocal Score Scene II/viii



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dé-mas-ge

vous dé -man-ge

vous' dé - man-ge

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Neizey - Mai-Octobre 1946

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