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Abstract

French composer Ida Gotkovsky, Professor of Music Theory at the Paris Conservatory, studied composition with both Nadia Boulanger and Olivier Messiaen. Her Sonata for Solo Clarinet, commissioned by the International Clarinet Society, was completed in 1984 and premiered in 1986 at the society's international conference, yet there are no extant analyses of the piece. However, Gotkovsky's works for other instruments have been thoroughly examined by authors such as Carroll (1992), Heim (2011), and Surman (2010). I will provide an analysis of Gotkovsky's Sonata for Solo Clarinet, focusing on her use of modes of limited transposition to determine formal structure.

My analysis outlines how Gotkovsky hybridizes pitch language with historic forms in the Sonata for Solo Clarinet by using modes of limited transposition to create both large-scale and small-scale formal structure in her music. Although Gotkovsky studied composition with Messiaen, her use of modes of limited transposition to determine form is her own innovation. Messiaen did not care for historic forms such as sonata form in his music, preferring to write in mosaic form, and did not use modes of limited transposition to create historic forms in his own music. By highlighting the creation of formal structures through Gotkovsky's use of modes of limited transposition, my analysis demonstrates that her Sonata for Solo Clarinet is a valuable contribution to the repertoire that deserves to be known not only for its technical demands but also for its meticulously crafted musical materials.

Chapter One: Background of Ida Gotkovsky and the Sonata for Solo Clarinet

Ida Gotkovsky was born in 1933 in Calais, France to a musical family; her father was a professional violinist with the Loewenguth Quartet, her mother was an amateur violinist, her brother played the piano, and her sister played the violin.¹ Gotkovsky began composing at the age of eight.² During her formal training at the Conservatoire National Supérieur de Musique de Paris, she studied with noted pedagogues Tony Aubin, Nadia Boulanger, and Olivier Messiaen.³ Out of these three primary teachers, Messiaen had the greatest influence on Gotkovsky's development as a composer.⁴ While at the conservatory, she received all first prize awards in writing and music composition, confirming her high level of proficiency as a composer.⁵ After she completed her studies at the conservatory, Gotkovsky was the top prize winner in several competitions, including the Prix Blumenthal, the Prix Padeloup, the Prix de Composition International de Divonne les Bains, the Medaille de la Ville de Paris, and the Prix Lily Boulanger.⁶ She is currently Professor of Music Theory at the Paris Conservatory, the same institution she studied at during her youth. She has written for virtually all combinations of instrumental

¹ "Ida Gotkovsky," *Wikipedia*, last modified March 14, 2016, accessed April 23, 2016, https://en.wikipedia.org/wiki/Ida_Gotkovsky.

² *Ibid.*

³ Kenneth Don Carroll, "The Influence of Olivier Messiaen on 'Brilliance' and the 'Concerto pour Saxophone-alto et Orchestre' by Ida Gotkovsky: An Analytical Study" (DMA diss., University of Georgia, 1992), 10, accessed January 26, 2016, <http://search.proquest.com/docview/303964616?accountid=12964>.

⁴ Karin Pendle, *Women and Music: A History*, 2nd ed. (Bloomington, IN: Indiana University Press, 2001), 263.

⁵ Steven K. Hunter, "The Instrumental Music of Ida Gotkovsky: Finding Intertextual Meaning" (DMA diss., University of North Texas, 2010), 2, accessed January 26, 2016, <http://search.proquest.com/docview/860121893?accountid=12964>.

⁶ Patricia Jovanna Sorman, "Ida Gotkovsky's Eolienne pour flute et harpe in Theory and Practice: A Critical Analysis" (DMA diss., University of North Texas, 2010), 21-22, accessed January 26, 2016, <http://search.proquest.com/docview/748807337?accountid=12964>.

and vocal forces; her output includes pieces for orchestra, wind ensemble, concerti, a wide variety of chamber music, piano music, solo voice, and chorus in addition to her operas and ballets.⁷ She has garnered an international reputation as a composer and juror of competitions; in addition, her music has been performed throughout Europe, the United States, Japan, and Russia.⁸

Within her considerable and varied compositional output, Gotkovsky demonstrates a particular affinity for the clarinet in her writing. Her original works featuring the clarinet in a prominent role include the *Trio d'anches* for Oboe, Clarinet, and Bassoon (1954); the Concerto for Clarinet and Orchestra (1968, version for wind ensemble 1997); *Chanson* for Clarinet and Piano (1970-1985); *Images de Norvège* for Clarinet and Piano (1977); *Concerto lyrique* for Clarinet and Orchestra (1982, version for wind ensemble 1994) the Sonata for Solo Clarinet (1984); the Trio for Violin, Clarinet, and Piano (1984); and the Quartet for Four Clarinets (1998). While teaching at the Paris Conservatory, she made a specific point to attend the studio classes of all instruments to become more familiar with the strengths and capabilities of each instrument.⁹ The strong tradition of clarinet performance at the Paris Conservatory may have played a role in the creation of many of these pieces featuring the instrument.

The Sonata for Solo Clarinet was composed in 1984 during what has been referred to as her “American Period.” At this point, Gotkovsky was living in the United States, teaching master classes in the states of Michigan and Texas.¹⁰ This piece was

⁷ “Ida Gotkovsky,” *Wikipedia*.

⁸ “Ida Gotkovsky – Biography,” Ida Gotkovsky, accessed April 23, 2016, http://www.gotkovsky.com/textes_versionFR/txt_biographie-Ida_Gotkovsky.html.

⁹ Caroline Hartig, *Chalumeau*. Recorded 2008. Centaur Records CEN 2965. CD.

¹⁰ *Ibid*.

commissioned by what is now known as the International Clarinet Association and received its premiere performance at the 1986 ClarinetFest in Seattle, Washington by American clarinetist Elsa Ludewig-Verdehr, now a University Distinguished Professor of Clarinet at Michigan State University.¹¹ Despite this piece's premiere performance at an international conference by one of the most respected pedagogues of the instrument, it has not found a secure place in the canonic repertoire. There are only two extant commercial recordings of the piece, both of which are tied to the premiere performer. Caroline Hartig, the first clarinetist to record this piece, is a former colleague of Ludewig-Verdehr's from Hartig's time on faculty at Michigan State University.¹² Amanda McCandless, the second to record the piece, completed her Master of Music and Doctor of Musical Arts degrees with Ludewig-Verdehr.¹³ Similarly, there is a substantial lack of scholarship about Gotkovsky's music for clarinet to the point of being virtually nonexistent. Gotkovsky's works for other instruments have been thoroughly examined by authors such as Carroll (1992), Heim (2011), and Surman (2010), all using various analytical techniques. Behm (1992) is the only author to have written about her clarinet music at all; his doctoral dissertation only mentions the piece in passing as one of many to feature extended techniques.¹⁴

The Sonata for Solo Clarinet consists of four movements, all of which are atonal in nature and lack a conventional time signature or bar lines. Gotkovsky provides slow

¹¹ Ibid.

¹² Ibid.

¹³ Amanda McCandless, *Unaccompanied Clarinet Works by Women Composers*. Recorded 2012. Mark Records 9773-MCD. CD.

¹⁴ Gary Wilson Behm, "A Comprehensive Performance Project in Clarinet Literature with an Essay on the Use of Extended, or New, Technique in Selected Unaccompanied Clarinet Solos Published from 1960 through 1987" (DMA diss., The University of Southern Mississippi, 1992),

tempos for the first and third movements (titled “Lyrique” and “Dolcissimo,” respectively), while the second and fourth movements (“Scherzo capriccioso” and “Final”) are much faster. This slow-fast-slow-fast structure alludes to the Baroque *sonata da chiesa*. Performance of the piece in its entirety generally takes around 17 minutes. This makes the Sonata for Solo Clarinet one of the longest pieces in the repertoire for solo clarinet, which may contribute to its relative lack of popularity in performance and scholarship.

Although the Sonata for Solo Clarinet was written during Gotkovsky’s “American Period”, her harmonic language bears a strong resemblance to that of her teacher Olivier Messiaen. My analysis outlines how Gotkovsky hybridizes pitch language with historic forms in the Sonata for Solo Clarinet by using modes of limited transposition to create both large-scale and small-scale formal structure in her music. In addition, I demonstrate how Gotkovsky uses elements of voice leading, registral shift, and rhythmic development to further demarcate formal divisions within a movement. Although Gotkovsky studied composition with Messiaen, her use of modes of limited transposition to determine form is her own innovation. Messiaen did not care for historic forms such as sonata form in his music, preferring to write in mosaic form, and did not use modes of limited transposition to create historic forms in his own music. Just as composers working in a tonal language use differing tonal centers to distinguish different formal sections, Gotkovsky utilizes certain modes exclusively for specific thematic ideas within a movement. Her systematic use of modes of limited transposition creates larger sections that allude to large formal structures such as ternary and sonata forms. By highlighting Gotkovsky’s creation of historic forms through modes of limited transposition in which she moves away from

Messiaen's mosaic approach to composition toward more traditional morphologies such as ternary and sonata forms, my analysis demonstrates that her Sonata for Solo Clarinet is a valuable contribution to the repertoire that deserves to be known not only for its technical demands but also for its meticulously crafted musical materials.

Chapter Two: Movement One, “Lyrique”

The first movement of the Sonata for Solo Clarinet, titled “Lyrique,” is organized in a ternary structure (ABA-Coda). Gotkovsky uses subsets of the modes of limited transposition in much of the melodic writing, electing to only use certain modes in specific sections of the ternary structure.

Figure 2.1 Summary of Modes of Limited Transposition

Mode 1 (whole-tone): 2 transpositions
M2 M2 M2 M2 M2 M2

Mode 2 (octatonic): 3 transpositions
M2 m2 M2 m2 M2 m2 M2 m2

Mode 3: 4 transpositions
M2 m2 m2 M2 m2 m2 M2 m2 m2

Mode 4: 6 transpositions
m2 m2 m3 m2 m2 m2 m3 m2

Mode 5: 6 transpositions
m2 M3 m2 m2 M3 m2

Mode 6: 6 transpositions
M2 M2 m2 m2 M2 M2 m2 m2

Mode 7: 6 transpositions
m2 m2 m2 M2 m2 m2 m2 m2 M2 m2

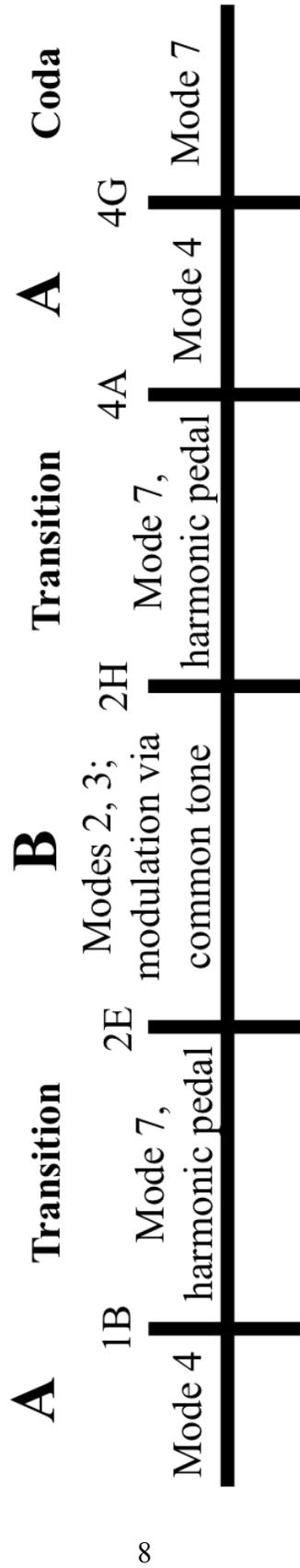
Messiaen cataloged these seven modes in *La technique de mon langage musical* (hereafter referred to as *The Technique of My Musical Language*), explaining their construction and providing examples of his usage of each mode in his compositional output. Messiaen intended *The Technique of My Musical Language* as a tool in analyzing and understanding his music, not as a pedagogical guide to composition. However, with the high number of students that Messiaen taught, it is only natural that some of his students would gravitate toward some of his techniques and incorporate select techniques into their own compositions. In Gotkovsky’s case, she uses the modes of limited

transposition as a means to demarcating formal structure, assigning specific modes to specific sections of each movement.

Gotkovsky primarily uses the fourth mode in the A sections of the movement, which is also characterized by high levels of rhythmic activity. While Gotkovsky provides a tempo of quarter note equals 46 beats per minute, the abundance of 32nd and 64th notes creates a great deal of rhythmic activity in the A sections. In contrast to her use of the fourth mode in the A sections, she heavily features the second and third modes featured in the more relaxed B section, marked “Lent” and “misterioso”. Gotkovsky uses the seventh mode as transitional material between the large sections, as well as in the movement’s coda. Messiaen rarely utilized the seventh mode in his own music, largely because the seventh mode is a superset of the second and fourth modes; this emphasis on the seventh mode is just one instance where Gotkovsky differs from her teacher.¹⁵ Gotkovsky crafts a strict ternary form while using the modes of limited transposition to demarcate these sections.

¹⁵ Gareth Healey, *Messiaen’s Musical Techniques: The Composer’s View and Beyond* (Burlington, VA: Ashgate Publishing Company, 2013), 173.

Figure 2.2 Movement One “Lyrique”, Ternary Form



ornithological fascination into her own music while fusing the elements of birdsong with modes of limited transposition.

At system 1B, Gotkovsky presents another leaping gesture that contains a subset of 7^5 , marking the transition away from the fourth mode and toward the B section of the movement. The seventh mode appears very infrequently in Messiaen's music as compared to the some of the other modes of limited transposition. Gotkovsky assigns more importance to the seventh mode than Messiaen was prone to in his music. In this case, she uses the seventh mode to facilitate a transition away from the opening material of the piece toward new modes of limited transposition. Gotkovsky soon modulates from 7^5 to 7^2 and culminates on C7, the highest note in the clarinet's range.

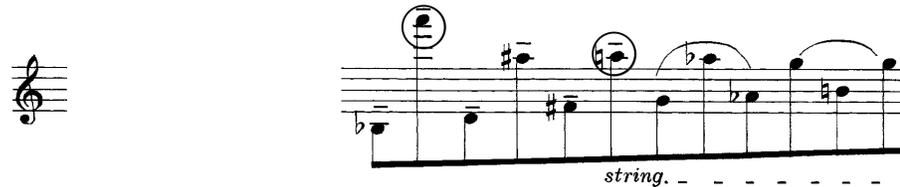
Figure 2.4 "Lyrique", systems 1B-1D; Modulation from 7^5 to 7^2

The image displays three systems of musical notation for the piece "Lyrique".
 System 1B (top): A single melodic line in treble clef. It begins with a decuplet (10) of notes. A dynamic marking *sf* is present. A bracket labeled 7^5 spans the final notes of the decuplet and the following notes.
 System 1C (middle): Continues the melodic line. It features a modulation to mode 7^2 , indicated by a bracket labeled 7^2 . The tempo marking *allarg.* is present. There are triplet markings (3) under several notes. The dynamic marking *con brio* appears at the end of the system.
 System 1D (bottom): Shows a continuation of the melodic line with dynamic markings *v* and *v* under the notes.

The next passage contains frequent large leaps, creating a sense of implied polyphony. The two lines of this compound melody combine to form a subset of 3^1 , except that Gotkovsky includes the written pitch A (A5 and A6), which falls outside of 3^1 . Similarly,

Messiaen would sometimes add extra notes to his own harmonic materials for purposes of color or imitation of birdsong.²⁰ This pitch reappears in system 1F, where it once again is not a part of the modal subset in place.

Figure 2.5 “Lyrique”, system 1D; Added Pitches in 3¹



Both of these instances show Gotkovsky using pitches outside the given mode for purposes of variety and color. A rapid flurry of pitches comprising a subset of 3⁴ follows the 3¹ polyphonic implication. Indicated by Gotkovsky to be performed *rapido*, this quick succession of pitches on a monophonic instrument gives the impression of a harmonic pedal, creating a blur of pitch classes that sound in such close proximity they can be imagined as sounding simultaneously. In this case, the harmonic pedal is used as a transition between the second and fourth modes. This technique more fully exploited in the fourth movement of the Sonata for Solo Clarinet.

Figure 2.6 “Lyrique”, system 1E; Harmonic Pedal of 3⁴



The quick succession of pitches in the 3⁴ subset leads to a new falling and returning gesture built out of a subset of 4⁶. However, the 4⁶ gesture also marks the return of the written A5 as a pitch outside of the mode utilized at the moment. This falling and returning gesture is repeated and developed in two more statements, with pitches being

²⁰ Ibid., 29.

added and subtracted, techniques utilized further by Gotkovsky in the second and fourth movements of this piece.

Following an intense crescendo of melodic and rhythmic content based on largely chromatic motion, Gotkovsky invokes a specific three-pitch set in system 2C, the [014] trichord. The [014] motive is transposed at various pitch levels as to imply a descent through a subset of 1^1 (also commonly known as the whole-tone scale, in this case WT_0). While this instance of compound melody outlines part of the whole-tone scale, the [014] trichord is sounded at so many different pitch levels as to obscure any modal implications. The outline of 1^1 gives way to free use of the [014] trichord along the descent to written E3, the lowest pitch available on the clarinet.

Figure 2.7 “Lyrique”, systems 2C-2E; [014] Outline of 1^1 Followed by Free Use of [014] Trichord

The image displays a musical score for the piece "Lyrique" by Igor Stravinsky, specifically systems 2C through 2E. The score is written for a clarinet in E-flat major. It features a treble clef and a key signature of one flat. The music is characterized by a dense, chromatic texture. A vertical line is drawn through the score to separate the initial section from the subsequent section. Above the main staff, there is a diagram labeled "1¹ outline" showing a sequence of notes with circles around them, and the instruction "brillant rapido" below it. Below the main staff, there is a section labeled "Free use of [014] trichord" with the instruction "long." and "ff" (fortissimo) below it. The main staff itself contains a complex melodic line with many accidentals and a "rapido" marking.

From the outset of the movement, Gotkovsky has established clear formal divisions by using modes of limited transposition in specific areas. The fourth mode features prominently in the A section, while Gotkovsky uses the seventh mode and instances of harmonic pedal to facilitate the transition to the B section of the movement.

B Section

The B section of the movement, marked *Lento*, uses distinctly different modal material from the A section, namely the second and third modes. The B section begins in system 2E and is characterized by largely predictable ascents and descents when compared to the highly disjunct motion of the movement's beginning. Each gesture arrives at a point of stasis on a sustained pitch after the gesture descends. Gotkovsky uses the sustained pitch as a common tone to modulate to another mode in rapid succession. Here we can see shades of Messiaen's style in Gotkovsky's writing, as Messiaen also frequently modulated between different modes, as in *Visions de l'Amen*.²¹ However, Messiaen did not use single pitches as common tones between different modes as Gotkovsky does in figure 2.7. In this passage, Gotkovsky again features modal subsets as opposed to full statements of modes. This gesture begins as a subset of 2² before moving to 3¹, back to 2² before arriving on a fermata after a use of 4⁶. After the fermata on E3, a new phrase begins with 3¹, followed by 2³, 2², and a long extension based on 2³ leading into an *allegretto* section. The B section contrasts from the A section not only in tempo and register, but also in harmonic material.

²¹ Messiaen, 65-66.

Figure 2.8 “Lyrique”, systems 2E-2H; Modulation Via Common Tone

At the subsequent *a Tempo* in system 2H, Gotkovsky begins to transition back to the A section. In this passage centered on the note D6, she relies on largely chromatic motion to build intensity before a new *Lent* section that she also bases on chromaticism. This *Lent* in 3A leads into a new section of harmonic pedal similar to the 4⁶ pedal occurring earlier in the movement. Although this pedal does not fall into a mode of limited transposition, the rapid succession of pitches serves as a monophonic implication of harmonic pedal. In this particular implied pedal, Gotkovsky uses the chromatic pitches found between D[#]4 and B^b4 (eight pitches in all). Her use of the eight-pitch chromatic set

bears some resemblance to Messiaen's preferred use of the chord of total chromaticism, in which an eight-note chord is followed by the remaining four pitches of the aggregate.²²

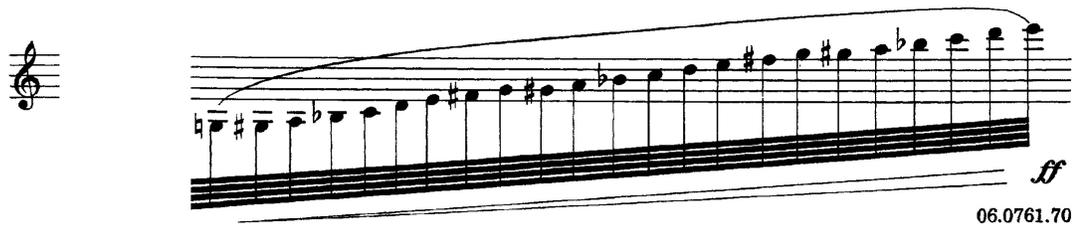
Figure 2.9 "Lyrique", systems 3C-3F; Harmonic Pedal of Eight-Note Cluster



The harmonic pedal leads to statements of 3^4 and 2^2 interspersed with chromatic flourishes beginning in system 3F. Gotkovsky timbrally varies these statements of 3^4 and 2^2 from the previous statements by instructing the performer to flutter-tongue while playing those modal subsets, further developing her statement of the modes used in the beginning of the movement. This leads to an ascending statement of a 7^2 subset that gives way to a fully chromatic ascent to B6, near the top of the clarinet's generally accepted range.

²² Healey, 93.

Figure 2.10 “Lyrique”, system 3H; 7² Transition to Reprise of A Section

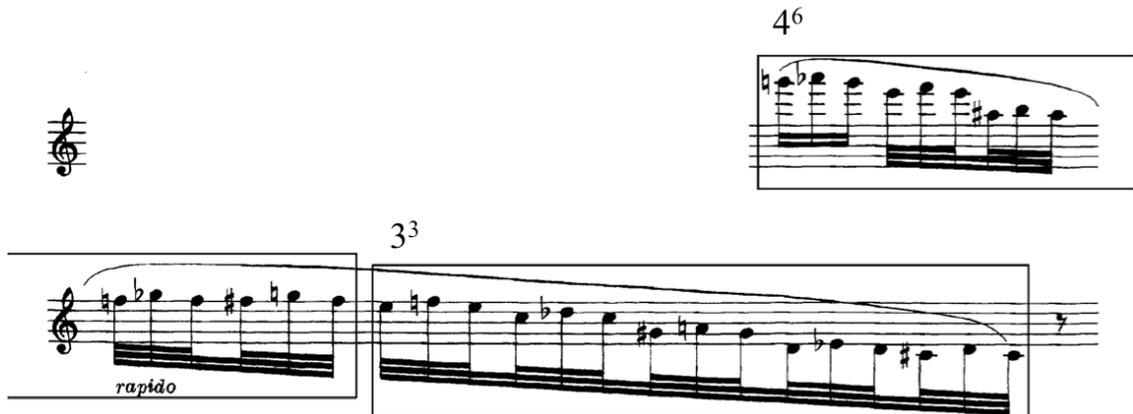


Just as harmonic pedal and the seventh mode were used as transitional material to lead into the middle of the movement, they also function as a return to the melodic material that opened the movement.

A Section (Reprise)

The A section returns in system 4A, marked by the indication *Tempo primo*. The reprise of the opening material occurs at the same pitch levels as in the beginning of the movement (4⁴, 2¹, and 7⁶). However, instead of continuing with the incorporation of the third mode as in the first transition, Gotkovsky then transposes the initial gesture up a whole step (4⁶) followed by another whole step (4²). She continues to explore the fourth mode through an ascending flourish in 4³ before writing a rapid descending passage highlighted by upper-neighbor tones. The principal pitches in this descent (excluding the neighbor tones) outline a subset of 4⁶ before modulating to 3³.

Figure 2.11 “Lyrique”, systems 4E-4F; 4⁶, 3³ with Neighbor Tone Embellishment



The final *Lent* at system 4G functions as a coda to the movement and contains a slowly ascending subset of 7⁶. Whereas Gotkovsky previously assigned transitional function to the seventh mode within the movement (moving between the A and B sections), she now uses the seventh mode to conclude the movement. However, this 7⁶ subset, with its open-ended nature due to the sustained timbral trill fading into *pianissississimo*, might be heard as a transition to the second movement, rather than a definitive ending.

Figure 2.12 “Lyrique”, system 4G; 7⁶ with Terminative and Transitional Functions



In the first movement, Gotkovsky characterizes the A sections of her ternary form by louder dynamic markings and predominance of the fourth mode of limited transposition. The B section is distinguished by Gotkovsky’s use of common tones to modulate between the second and third modes. Furthermore, Gotkovsky uses harmonic pedals and the seventh mode of limited transposition to separate the individual sections of the movement, as well incorporating the seventh mode into the coda. By assigning formal

function to different modes of limited transposition, Gotkovsky creates distinct, contrasting sections of ternary form that are distinct from one another not just by theme, but by harmonic material.

Chapter Three: Movement Two, “Scherzo capricioso”

The second movement, labeled “Scherzo capricioso,” features the use of different modes of limited transposition and free chromaticism to convey the idea of sonata form in an atonal context as shown in figure 3.1. In this movement, Gotkovsky approaches sonata form from eighteenth- and nineteenth-century perspectives simultaneously. Eighteenth-century theorists viewed the sonata form as a binary structure determined by contrasting harmonic areas, while nineteenth-century theorists felt sonata form was a three-part form resulting from thematic contrast and repetition.²³ Gotkovsky presents three themes in the exposition, subjects each theme to rotation in the development, and returns them to their initial states in the recapitulation. Following the recapitulation, Gotkovsky includes an extensive coda in which she further rotates each theme. The first theme (A), the most frequently appearing of the three, implies 7/16 meter (3+2+2) and is constructed largely of leaping intervals. The second theme (B) suggests two melodic lines happening simultaneously, one based on modal subsets and the other based on chromatic neighbor tones. The third theme (C) is a rapid cascade of pitches, initially only ascending but later completing the descent, subjected to insistent repetition.

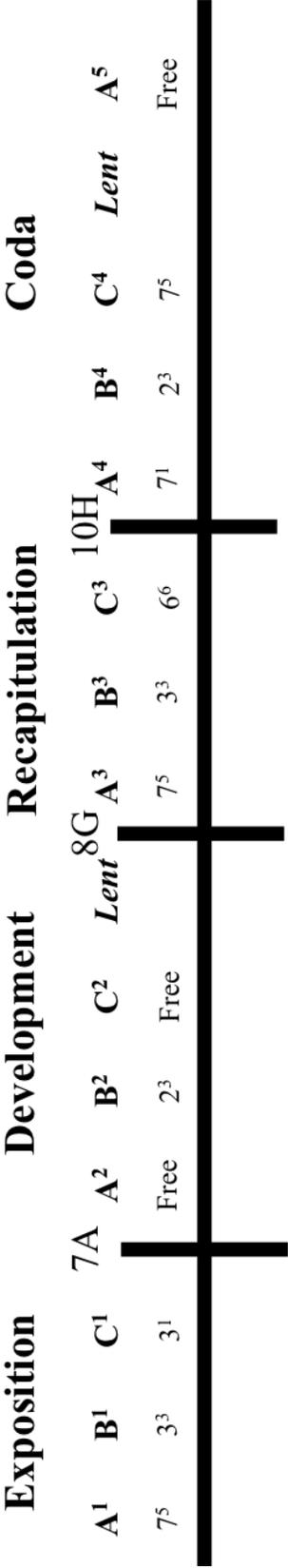
Thematic contrast between the exposition, development, and recapitulation shows Gotkovsky’s tripartite conception of sonata form in the second movement. In the development, she inverts the contour and register of each theme’s expository rotation before returning them to their original parameters in the recapitulation. However, Gotkovsky also embraces the binary perspective of sonata form in her use of modes of limited transposition as harmonic generators of form. Each theme in the exposition is

²³ Joseph N. Straus, *Remaking the Past: Musical Modernism and the Influence of the Tonal Tradition* (Cambridge, MA: Harvard University Press, 1990), 96-97.

based on a specific mode: the seventh mode for A¹ and the third mode for B¹ and C¹. However, the harmonic material is then altered in the development (free chromaticism for A² and C², second mode for B²) before returning largely to the same modes for the recapitulation (seventh mode for A³, third mode for B³, but sixth mode for C³). In the twentieth century, composers writing sonata forms from the nineteenth-century, theme-driven perspective often fell into a trap of writing “uninteresting” sonatas.²⁴ However, Gotkovsky avoids this by linking themes to specific modes of limited transposition in the exposition and then altering the modal content in the development before returning to the initial modal content in the recapitulation.

²⁴ Ibid., 97.

Figure 3.1 Movement Two “Scherzo capriccioso”, Sonata Form



Exposition

The exposition of this movement begins at system 5A with A¹, the first of the three themes, in which Gotkovsky presents a subset of 7⁵. Like in the first movement, Gotkovsky utilizes a mode rarely utilized by Messiaen, but she assigns even greater importance to the seventh mode by using it in primary themes as opposite to transitional material, as was the case in the first movement. The 7/16 theme is developed by motivic reduction, a technique commonly used by Messiaen. In development by motivic reduction, a key theme or motive is gradually reduced via deletion of certain rhythmic elements, such as in the first movement of Beethoven's Symphony No. 5 in C minor, op. 67.²⁵ In the development of the first movement of Beethoven's Symphony No. 5, a seven-measure melodic figure beginning at m. 179 is reduced to three measures at m. 195, two measures at m. 198, and eventually only a single measure at m. 210. The gradual process of reduction is evident despite the changes in pitch level throughout this passage.

Figure 3.2 Beethoven, Symphony no. 5 in C minor, op. 67, i; Development by Motivic Reduction

The figure displays four musical staves illustrating the process of motivic reduction. The first staff, labeled 'Violin 1 (Violin 2 8vb)', shows a seven-measure melodic figure starting at measure 179. The notes are G4, A4, B4, C5, B4, A4, and G4, with a dynamic marking of *ff*. The second staff, labeled 'Flute 1,2', shows the same seven-measure figure starting at measure 195, also with a dynamic marking of *ff*. The third staff, labeled 'Violin 1,2', shows the figure reduced to two measures starting at measure 198, with notes G4 and A4. The fourth staff, labeled 'Violin 1', shows the figure reduced to a single measure at measure 210, with note G4 and a dynamic marking of *dimin.*

²⁵ Healey, 171.

Gotkovsky utilizes a similar technique in the first theme of the movement (along with octave displacement in some cases) to create variety and expand the first theme.

Figure 3.3 “Scherzo capricioso”; Development by Motivic Reduction

System 5A: original motive



System 5B: motivic reduction and octave displacement



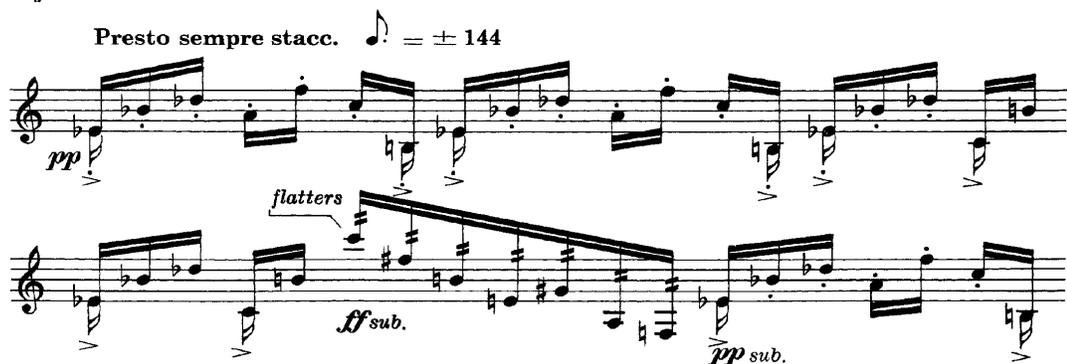
System 5E: motivic reduction



The subito *fortissimo* interjection, marked to be performed with flutter-tonguing, modulates to 7^4 before quickly returning to 7^5 . This interjection reappears in the second theme and the subsequent rotations, making it another recurring thread in the movement.

Figure 3.4 “Scherzo capricioso”, systems 5A-5B; A¹ Exposition with 7^5 and Flutter-Tonguing Interjection

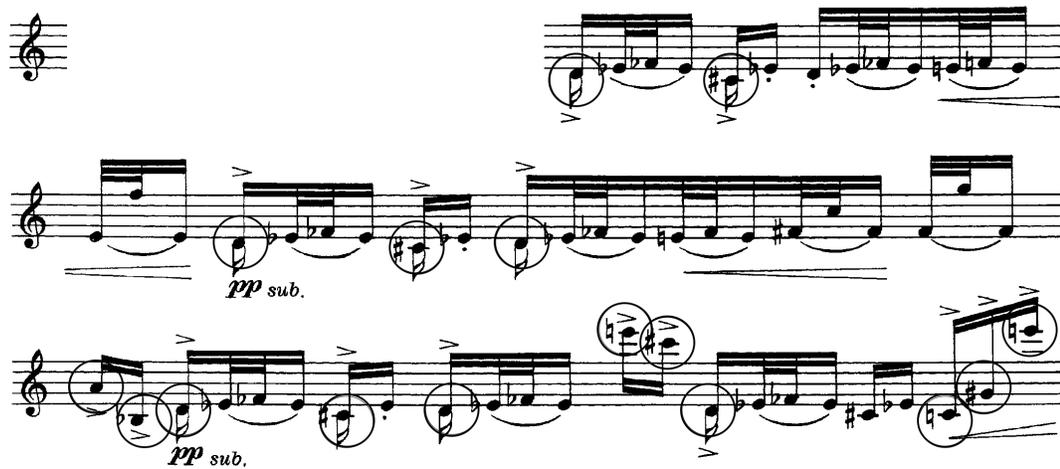
Presto sempre stacc. ♩ = ± 144



B¹ makes a brief appearance in systems 5D-5E in which the lower line of implied polyphony presents a subset of 4^5 but quickly gives way to the first theme. In system 5F, the first substantial appearance of B¹, Gotkovsky’s compound line presents a subset of 3^3

with the subset itself isolated from the rest of the monophonic line due to Gotkovsky's inclusion of accents.

Figure 3.5 "Scherzo capricioso", systems 5F-5H; B¹ Exposition with 3³



The next statement of this theme returns to the 4⁵ subset, but this time with another flutter-tonguing interjection. However, the pitch content of this interjection does not match any mode of limited transposition, foreshadowing Gotkovsky's use of free chromaticism in the developmental rotations A² and C².

C¹ consists of a 3¹ subset, initially only ascending but eventually ascending and descending to span nearly three octaves. The initial presentation in system 6C reaches D5, while subsequent statements span up to B5, D6, and G6, ascending further in the clarinet's range each time.

Figure 3.6 “Scherzo capricioso”, systems 6C-6F; C¹ Exposition with 3¹ and Increasing Ascent

Within the exposition, the three themes feature a general reliance on the seventh, fourth, and third modes, respectively. However, the themes are also unique enough in their contours, registers, and rhythms to maintain their individual identities. In the ensuing development, Gotkovsky abandons her established correlation between theme and mode while maintaining enough of each theme’s defining characteristics for them to remain identifiable.

Development

Gotkovsky begins the development in system 7A, presenting the three themes in the same order they appeared in the exposition. In A², she alters the contour, register, and dynamic from the initial presentation; however, the overall rhythmic impulse and

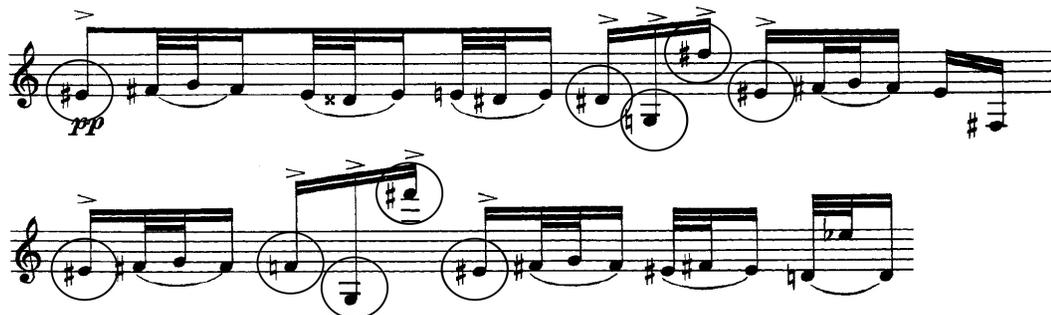
prevalence of leaps remains enough to connect the expository A^1 to the subsequent developmental rotation A^2 . Interestingly, the pitch content of A^2 does not fall into a mode of limited transposition, while the rhythmic content is altered to imply 8/16, not 7/16 as in A^1 . Gotkovsky's use of free chromaticism in A^2 was foreshadowed in B^1 , which featured freely chromatic interjections amongst a 4^5 subset. The previously used techniques of motivic development by addition and reduction are also present.

Figure 3.7 "Scherzo capricioso," system 7A; A^2 Development Altered to Free Chromaticism



Gotkovsky develops the second theme beginning in system 7G. B^2 is condensed as compared to B^1 , but the more interesting element is that the lower voice of the implied polyphony now implies the second mode, specifically 2^3 , rather than the third mode that was used in B^1 . This is analogous to the tradition of presenting the primary and secondary themes of a sonata movement in a new key in the development. Gotkovsky again includes accent markings to separate the modal subset from the neighbor-tone gesture that generates most of the rhythmic activity in this thematic area.

Figure 3.8 "Scherzo capricioso", systems 7G-7H; B^2 Development with 2^3



Following another flutter-tonguing interjection that does not suggest any mode of transposition, Gotkovsky presents a developmental rotation of the third theme (C^3). Similar to A^2 , the contour of C^2 is inverted as compared to the initial presentation and the register of the clarinet is substantially different, in part to facilitate the change of melodic contour. Another similarity between C^2 and A^2 as they relate to their initial presentations is that the developmental rotations move to freely chromatic music as opposed to Gotkovsky's earlier use of modes of limited transposition in the exposition. Whereas C^1 presented a subset of 3^1 , the pitch content of C^2 does not fall into a mode of limited transposition.

After the conclusion of C^2 , Gotkovsky includes an interlude in system 8E, marked *Lent*. This interlude is not particularly thematic in nature and largely facilitates the return to the first theme. Gotkovsky begins with a subset of 7^3 , perhaps to facilitate the return to the seventh mode as used in A^3 , but later dissolves into freely chromatic material before arriving at the recapitulation in system 8G.

Figure 3.9 “Scherzo capricoso”, systems 8A-8E; C² Development Altered to Free Chromaticism

The musical score for systems 8A-8E of "Scherzo capricoso" is presented in four systems. The first system, marked *rapido*, features a piano (*pp sub.*) with a dynamic of *sf*. The second system contains three measures, each marked *sf*, followed by a measure marked *ff string. cresc.*. The third system is a long melodic line marked *f*. The fourth system is marked *ff* and includes the instruction *repetere piu volte ad lib.* with a wavy line indicating a trill or tremolo.

In the development, Gotkovsky presents each theme in the same order as in the recapitulation, but changes the harmonic material while retaining the identifiable characteristics of each theme. She abandons modes of limited transposition for free chromaticism in A² and C² while presenting B² in 2³ (in opposition of the 3³ subset used in B¹) while also inverting several register, contour, and dynamic of the exposition. The interlude beginning in system 8E is analogous to a retransition in a tonal sonata form, facilitating the return to the harmonic materials from the exposition (in this case, the seventh mode) while also being largely non-thematic in nature.

Recapitulation

Gotkovsky begins the movement's recapitulation in system 8G (after the interlude) with A^3 , complete with the brief interjection of the second theme from the exposition that implies a subset of 4^5 . Gotkovsky includes new transitional material at system 9E, a flutter-tonguing passage moving from A^3 to the B^3 . This passage presents a subset of 3^3 and has no analogous passage in the movement's exposition. Gotkovsky first uses the flutter-tonguing passage as a transition in the developmental rotation of materials; similar passages facilitate the move from A^2 to B^2 and again from B^2 to C^2 . The flutter-tonguing interruption is curiously missing in A^3 , perhaps because Gotkovsky used this gesture so frequently in both the exposition and the development.

After B^3 , Gotkovsky moves directly into C^3 in system 10B. As opposed to the use of 3^1 in C^1 , the pitch content of C^3 is a subset of 6^6 while still returning to the ascending contour of C^1 , as opposed to the descent found in C^2 . C^3 , much like C^1 , relies greatly on additive processes, beginning with an ascent to $D^{\#5}$ but eventually reaching all the way up to $G^{\#6}$. Gotkovsky's decision to alter C^3 in the recapitulation may be influenced in part by Messiaen's feelings about sonata form, specifically that the recapitulation in strict sonata form is unnecessary.²⁶ However, this might also be considered analogous to the appearance of the secondary zone in the primary key within a tonal recapitulation. The conclusion of C^3 marks the end of the recapitulation.

²⁶ Messiaen, 40.

Figure 3.10 “Scherzo capricioso”, systems 10B-10F; C³ Recapitulation Altered to 6⁶

Coda

Following a rapidly ascending passage based largely on D-flat major and chromatic motion, Gotkovsky begins the movement’s coda in system 10H. She includes all three themes, as well as a passage that looks back to the *Lento* that moved from the development into the reprise of thematic material. This coda, with its expansive and complex recollection of all three themes from the movement, refers to the tradition of discursive codas.²⁷ A coda is not characterized as discursive just by its duration, but also by its elaborate presentation of thematic materials from the body of the movement, such

²⁷ James Hepokoski and Warren Darcy, *Elements of Sonata Theory: Norms, Types, and Deformations in the Late-Eighteenth-Century Sonata* (New York: Oxford University Press, 2006), 284.

as in the first movement of Beethoven's Piano Sonata No. 23 in F minor, op. 57 "Appassionata". In the coda of this movement, Gotkovsky presents the three thematic areas using different pitch content than has used previously in the movement, adding an element of development to this coda similar to the sense of development in the coda of the first movement from Beethoven's Symphony No. 3 in E-flat major, op. 55 "Eroica".²⁸

While each of the three themes are presented in the same order as in exposition, the overall duration of each theme is much shorter than previous rotations and some bear only a passing resemblance to the presentation. A^4 is based largely on 7^1 and no longer includes a flutter-tonguing interruption. A^4 is now interspersed with B^4 , which now presents a subset of 2^3 in the lower line of the implied polyphony. Although B^2 also utilized a subset of 2^3 , the use of different starting pitches between B^2 and B^4 ($E^{\#4}$ and A^4 , respectively) warrants a new rotation of the second theme. A freely chromatic flutter-tonguing passage leads to another rotation of the third theme, now labeled as C^4 . Gotkovsky uses a subset of 7^5 in C^4 , but the main motive is developed by reduction instead of additive processes, dissolving into a simple three-pitch motive.

²⁸ Ibid., 285.

Figure 3.11 “Scherzo capricioso”, systems 11E-11H; C⁴ Coda Altered to 7⁵

The incorporation of the seventh mode (the mode that begins the movement) in a theme that previously did not incorporate the seventh mode suggests a stable arrival in the home tonality, akin to a piece of tonal music ending in the home key in which it began. Gotkovsky assigns the coda a terminative function (as one would typically expect of a coda) in addition to the strongly established developmental function alluded to previously.

The following *Lento* in system 12A refers back to the similarly marked passage in system 8E within the development. In this ascending passage, Gotkovsky uses quicker rhythmic values to mark the end of one mode and the beginning of another. Beginning on F3, Gotkovsky presents a subset of 4⁴ before moving to 6⁶ and finally 3⁴. The subset of 3⁴ arrives on the pitch B^b6, near the upper limit of the clarinet’s practical range, and marked *pianississimo*. This *Lento* ascends from near the bottom of the instrument’s range to the extreme altissimo register, the opposite of the first *Lento* that began in the extreme

altissimo and descended to the chalumeau register. The second *Lent* passage then acquires developmental qualities as a rotation of the first. The harmonic material is also substantially different, as the first *Lent* relied on the seventh mode and free chromaticism as a transition into the reprise of themes, while the second uses the third and sixth modes.

Figure 3.12 “Scherzo capricioso”, systems 12A-12B; *Lent* Section in Coda, Altered to 3⁴ and 6⁵

The image shows two systems of musical notation. System 12A (top) consists of a treble clef staff with a melodic line and a bass clef staff with accompaniment. The tempo is marked 'Lent'. Dynamics include 'f' (forte), 'ad lib.' (ad libitum), and 'souple' (softly). System 12B (bottom) continues the melodic line and includes a section marked '3⁴' with 'rit. molto' (ritardando molto) and 'ppp' (pianississimo) dynamics.

After the conclusion of the *Lent* section, Gotkovsky includes yet another rotation of the A material. The pitch content of A⁵ is similar to A² in that no modal subset is present as shown in figure 3.12; this rotation of the first theme is also freely chromatic. This passage concludes with repetitions of the first theme fading to *pianissississimo* before a sudden *forte* dynamic and rapid *glissando* ascent from E3 to F6. This additional rotation of the first theme to conclude the coda, following a previous full rotation of the same theme within the coda, draws comparison with coda from the first movement of Beethoven’s Piano Sonata No. 21 in C major, op. 53 “Waldstein”.²⁹ The coda begins with the primary theme in D-flat major, followed by the secondary theme in C major (the home key). After the secondary theme in C major, Beethoven again inserts the primary theme, now in the home key, marking the fifth appearance of said theme.

²⁹ Hepokoski and Darcy, 285.

Figure 3.13 “Scherzo capricioso”, systems 12C-12E; A⁵ Coda Altered to Free Chromaticism

The image displays three systems of musical notation for the piece "Scherzo capricioso". The first system is marked "Tempo primo" and "ppp". The notation consists of three staves, each with a treble clef. The music is written in a single melodic line across the staves, with various rhythmic values and accidentals. The notation is dense and features a chromatic progression, particularly in the lower register. The first system ends with a double bar line and repeat dots. The second and third systems continue the melodic line, with the third system ending with a final cadence.

Similar to Beethoven’s coda from the first movement of the “Waldstein” sonata, Gotkovsky’s fifth rotation of the first theme, shown in figure 3.13, concludes not only the coda but the movement as a whole.

In the movement’s exposition, Gotkovsky utilizes specific modes of limited transposition to accentuate the three distinct themes in sonata form, akin to the distinct tonal centers in a three-key exposition. Those specific modes are then altered in the development, be it to a different mode or to freely chromatic pitch selection. This shift in harmonic material underscores the developmental changes in contour, register, and dynamic that Gotkovsky already includes in her rotation of the three themes. The recapitulation returns the three themes to their original presentations, aside from the third theme, which Gotkovsky places in a different transposition level than in the exposition, referring to the established tradition of the secondary theme returning in the primary key. Gotkovsky further develops each theme in a lengthy and extensive coda by presenting the themes at different transposition levels, further strengthening the connection to sonata form. Her use of modes of limited transposition throughout the movement strongly

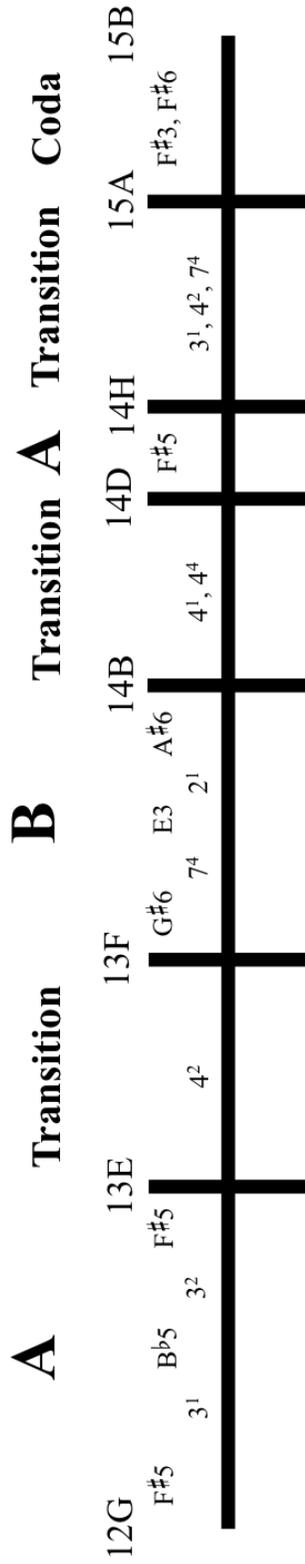
parallels the traditions of tonality in sonata form, creating a hybrid of tonal and post-tonal traditions that embraces the sonata as both a bipartite and tripartite form.

Chapter Four: Movement Three, “Dolcissimo”

The third movement of the Sonata for Solo Clarinet, marked “Dolcissimo,” stands apart from the other three movements as the one using free chromaticism with the greatest frequency and the fewest implications of modes of limited transposition. In this movement, modes of limited transposition are used in passages that move away from F-sharp as points of stasis and emphasis. Gotkovsky features F-sharp as a point of repose in the outer sections of the movement, with various modal gestures creating tension as they motion away from F-sharp in the internal section, creating a ternary structure. Interestingly, F-sharp is the same pitch Messiaen uses to begin and end “Abîme des oiseaux,” his movement for solo clarinet from *Quatour pour la Fin du Temps*.³⁰ Although Gotkovsky uses a general ternary design as shown in figure 4.1, this movement is very free in its melodic and rhythmic construction.

³⁰ Olivier Messiaen, *Quatour pour la Fin du Temps* (Paris: Edition Durand & Company, 1957), 15-16.

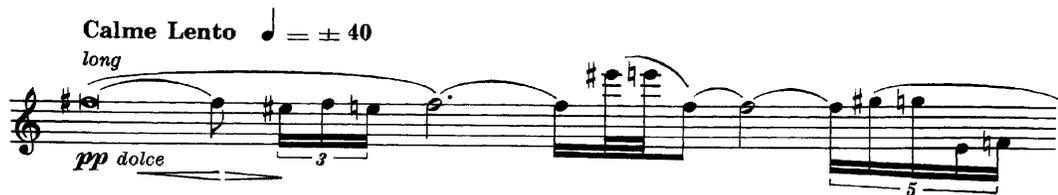
Figure 4.1 Movement Three “Dolcissimo”, Ternary Form



A Section

Figure 4.2 shows that the movement begins on a sustained F[#]5 held for eight counts; at the marked tempo of quarter note equals 40 beats per minute, there is very little perceived sense of rhythm or tempo. This sustained F-sharp is established as the central pitch of this section through its duration and repetition. The melodic motion at the beginning of the movement is largely chromatic in nature and neighbors the F-sharp that begins the movement, accounting for some octave displacement.

Figure 4.2 “Dolcissimo”, system 12G; Melodic Neighboring of F[#]5



The first melodic motion that does not immediately return to F[#]5 (aside from a chromatic descent to C5 that returns chromatically to F[#]5) presents a subset of 3¹ that leads to a sustained B^b5. This sustained B^b5 is the longest duration of a sustained pitch that is not the opening F[#]5 and functions as a common tone to transition to another modal subset, this time taken from 3². This statement of 3² eventually returns to F[#]5, where the neighboring melodic motion around F-sharp begins again. The modal subsets are used to facilitate motion away from F-sharp and toward new pitches of emphasis established through temporal duration.

Figure 4.3 “Dolcissimo”, systems 13A-13B; 3^1 Leading to B^b5 , 3^2 Returning to $F\#5$

In the next section of F-sharp prolongation beginning in system 13B, Gotkovsky incorporates a truncated subset of 3^1 as compared with that of figure 4.3, as well as a brief subset of 4^2 . The small, four-pitch subset of 4^2 quickly returns to F-sharp prolongation, but foreshadows the return of the 4^2 subset later in the movement. Shortly thereafter, Gotkovsky ascends from $D\#4$ to $G\#6$ via a much larger and more rhythmically active 4^2 subset.

Figure 4.4 “Dolcissimo”, system 13D; Truncated Statements of 3^1 and 4^2

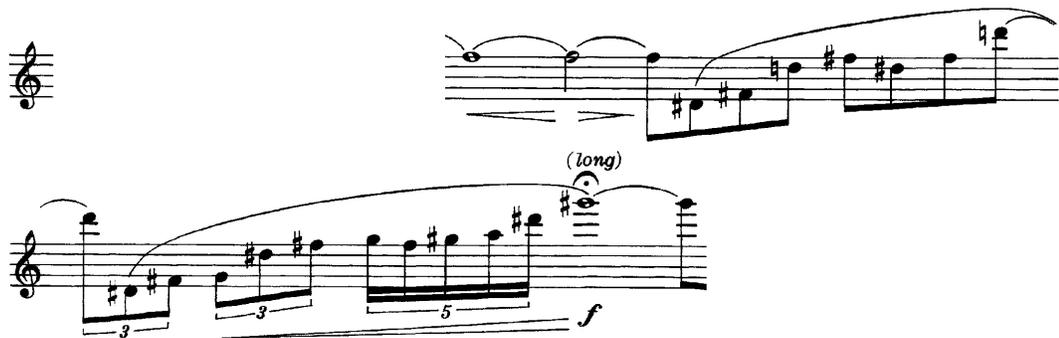
The arrival on $G\#6$ via the fourth mode of limited transposition marks the end of the A section. The fourth mode is used as a means of modulating between different pitches of emphasis, a technique also used to return to the A section later in the movement.

B Section

The substantial arrival on $G\#6$ marks the B section of the ternary form. Due to its register and temporal duration, $G\#6$ is the first point of emphasis away from $F\#5$ within

the movement. At the apex of this ascent (shown in figure 4.5), G#6 is to be played at a *forte* dynamic and sustained for at least four counts, indicated by the fermata over the whole note with the instruction “long.” The subset of 4² marks the transition away from the F#5 that initiated the third movement.

Figure 4.5 “Dolcissimo”, systems 13E-13F; Transition via 4² to Arrival on G#6



After the arrival on G#6, Gotkovsky gradually descends using a subset of 7⁴ to eventually arrive on E3 at a *pianissimo* dynamic, shown in figure 4.6, as opposed to returning to F-sharp as a point of stasis. This subset of 7⁴ incorporates a great deal of rhythmic variety, helping the sustained E3 to feel even more static and important due to its duration, similar to the 4² subset ascent to G#6.

Figure 4.6 “Dolcissimo”, systems 13F-13H; Transition via 7^4 to Arrival on E3

The musical score for Figure 4.6 is presented in three systems. The first system (top) shows a treble clef with a melodic line that includes a trill-like figure and a triplet. The second system (middle) shows a more complex melodic line with various dynamics and articulations, including *rit. espress.*, *espress.*, and *rit.*. The third system (bottom) shows a sustained pitch with a natural overtone and a dynamic marking of *pp*.

Figure 4.7 shows rhythmic acceleration based primarily on a subset of 2^1 , a mode not yet utilized in this movement, leads to an arrival on $A\#6$, the highest pitch in the movement. Gotkovsky’s use of one mode for such a comparatively long duration as opposed to the previous use of 3^1 , 4^2 , and 7^4 , intensifies the harmonic motion toward the registral apex of this movement. Gotkovsky follows this apex with a descending passage that incorporates subsets of both 4^1 and 4^4 but eventually returns to free chromaticism and the sustained pitch $F\#5$ from the beginning of the movement. The return of $F\#5$ marks the conclusion of the B section and the reprise of the A section.

Figure 4.7 “Dolcissimo”, systems 13H-14B; Transition via 2¹ to Arrival on A#6



Just as how Gotkovsky moves to G#6 via 4², to E3 via 7⁴, and to A#6 via 2¹, she returns to F#5 via 4¹ and 4⁴. While the pitches of emphasis are established via duration and dynamic, the motion between these pitches is facilitated by modes of limited transposition. While the modes occupy a place of harmonic stability in the other movements in the Sonata for Solo Clarinet, Gotkovsky makes them harmonically unstable in this movement by assigning them exclusively transitional function within what is otherwise a highly chromatic movement.

A Section (Reprise)

The descent from A#6 incorporates subsets of both 4¹ and 4⁴ but eventually returns to free chromaticism and the sustained pitch F#5 from the beginning of the movement. This marks the reprise of the A section, centered around the pitch F#5. While not a literal repeat of the movement's beginning, many of the same ideas are present, including chromatic neighboring of F#5 and eventual returns to the same pitch.

Figure 4.8 shows the reappearance of brief references to 3^1 and 4^2 from earlier in the movement, along with a new small subset of 7^4 , the mode that led to the arrival on E in system 13H. However, this time these modal subsets lead to E \sharp 4 and a section marked *Lent*. This section functions as a coda to the movement and is almost entirely based on chromatic motion. At this point, the pitch content descends from E \sharp 4 down to F \sharp 3, returns to F4 (enharmonic to E \sharp 4), and settles on G5 and F5 before beginning another chromatic ascent to F \sharp 6, where the movement ends. The aggregate statement of the chromatic scale helps to erase any harmonic memory of the modes of limited transposition used as transitional materials and reestablishes the central pitch of F-sharp.

Figure 4.8 “Dolcissimo”, systems 14H-15B; Reprise of 3^1 , 4^2 , and 7^4 Truncated Statements Leading into *Lent*

The musical score consists of three systems. The first system shows three boxed phrases: the first is labeled 3^1 , the second 4^2 , and the third 7^4 . The second system is marked *Lent* and *ppp à la limite du souffle*, with a *rit.* marking. The third system is marked *Très Lent* and *ppp*, with a *long* marking over the final notes.

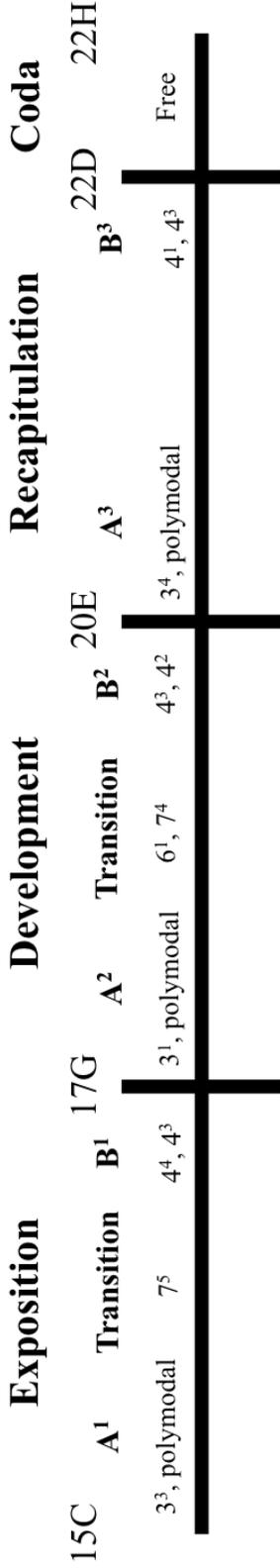
This movement is unique in that Gotkovsky does not generate pitch content primarily by modes of limited transposition, nor does she assign them the most emphasis in the movement. She favors chromatic motion in the third movement, with F-sharp acting as a central pitch due to its temporal duration and frequent melodic returns to F-sharp. However, she uses modes of limited transposition in passages moving to sustained

pitches other than F-sharp, creating a loose ternary structure and giving the modes of limited transposition a strong transitional function. This differs substantially from the other movements, in which her harmonic material is frequently generated by modes of limited transposition and free chromaticism is used for transitional or rotational/developmental purposes.

Chapter Five: Movement Four, “Final”

In the fourth movement, marked “Final”, Gotkovsky returns to the sonata form previously utilized in the second movement. After the initial presentation of themes, Gotkovsky develops the themes via changes in register, contour, and dynamic. Within this development, close analysis reveals Gotkovsky’s conscious selection of melodic material rather than a simple repackaging of the expository materials. Following a recapitulation in which both themes are presented in similar manners to the exposition, she concludes the movement with an elaborate coda. Similar to her approach in the second movement, Gotkovsky she embraces the bipartite, harmony-based approach and the tripartite, thematic-based approach toward sonata form in the second movement. She presents distinct harmonic materials via modes of limited transposition in the exposition before leaving them in the development and returning to them in the recapitulation, while still developing the themes via register, contour, and dynamic. The fourth movement stands out as Gotkovsky’s strictest use of modes of limited transposition in the entire piece.

Figure 5.1 Movement Four “Final”, Sonata Form



Exposition

In the exposition, the primary theme (A¹) takes the form of a sort of *moto perpetuo*. Gotkovsky utilizes Messiaen's technique of rhythmic pedal along with his tendency to insert conflicting rhythmic patterns to create brief moments of relief from the prevailing ostinato.³¹ This can be seen from the outset of the movement, shown in figure 5.2. Gotkovsky establishes a reoccurring rhythmic motive of six thirty-second notes through pitch and accent. However, after she establishes this ostinato, Gotkovsky interpolates different rhythmic groupings that disrupt the previously established rhythmic consistency. The first of these insertions, a group of only three thirty-second notes, is another instance of Gotkovsky using the technique of development by motivic reduction. Gotkovsky removes the last three thirty-second notes from the original motive, sounding only the first three rhythmic values before restarting the rhythmic motive. This process of motivic reduction grows more complicated as time progresses, with groupings of 3+5/32, 9/32, and 2/32 appearing within only three systems, creating rhythmic variety and often a feeling of acceleration or compression. Gotkovsky utilizes this type of insertion in both thematic areas.

³¹ Healey, 68.

Figure 5.2 “Final”, systems: 15C-15E; A¹ Ostinato, Development by Motivic Reduction

This combination of rhythmic and harmonic pedals may allude to Messiaen, who stated a harmonic pedal “could not function satisfactorily in technical isolation.”³² In figure 5.2, the harmonic pedal presented in the first group of thirty-second notes is the hexachord [012456], labeled by Allen Forte as 6-Z4.³³ This hexachord is also a subset of 3³.

The modes of limited transposition also impact the pitch content of this movement in several other ways. After the ostinato is established, Gotkovsky extracts a smaller subset from the 6-Z4 hexachord beginning in system 15G; this chromatic trichord [012] is then inserted into the previously established rhythmic and harmonic pedal at varying pitch levels. If the first pitch of each [012] insertion is isolated, the resulting pitches can be categorized as a subset of 3². Although both layers are in the same mode, this foreshadows the use of polymodalism in subsequent music, such as figure 5.3.

³² Ibid., 83.

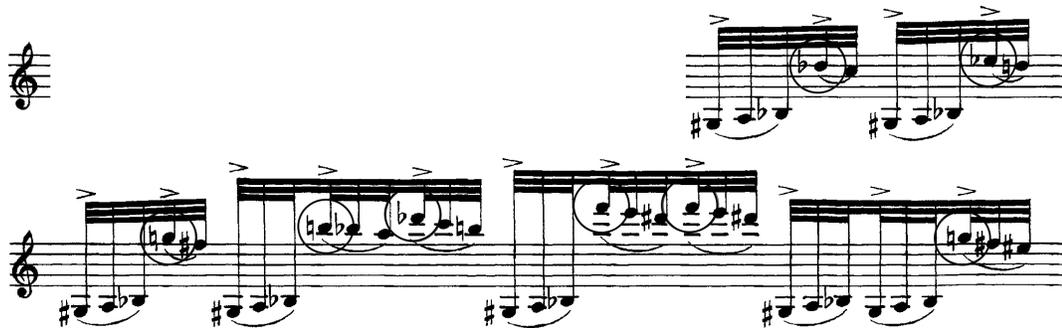
³³ Stefan Kostka, *Materials and Techniques of Twentieth-Century Music* (Upper Saddle River, NJ: Pearson Education, Inc., 2006), 322.

Figure 5.3 “Final”, systems 15G-16B; A¹ Exposition, Layering of Multiple Transpositions in 3³ Ostinato with 3² Overlay



Gotkovsky uses a similar technique in systems 16E-16F, but with different modal content. In this example, she further develops [012] trichord by elimination, creating a simple two-note chromatic descent. Using the same technique of isolating the pitches marked by articulatory and registral accent, she realizes a subset of 1² (the whole tone scale).

Figure 5.4 “Final”, systems 16E-16F; A¹ Exposition, Polymodalism in 3³ Ostinato with 1² Overlay



In both cases, Gotkovsky’s insertion of chromatic motives into the rhythmic and harmonic pedal creates a sense of compound melody. This helps to portray the polymodal illusion of a single melodic line based on the modes of limited transposition moving above a harmonic underpinning based on a different mode. Gotkovsky’s use of

compound melody characterizes the first theme of the movement; she utilizes this technique several times throughout A^1 and the subsequent rotations.

Following the polymodal section of 3^3 and 1^2 , Gotkovsky ascends stepwise at system 16G through a subset of 7^5 . Similar to the first movement, she uses the seventh mode as primarily transitional material in the fourth movement. This stepwise passage spanning three octaves contrasts strongly with the harmonic and rhythmic pedal of A^1 .

Figure 5.5 “Final”, systems 16G-16H; Transition Using 7^5



The shift of texture and mode in these two systems creates a clean demarcation between A^1 and the transition.

The presentation of B^1 is markedly different from A^1 ; the rhythmic and implied harmonic pedals are replaced by clear monophony and inconsistent rhythmic activity. B^1 utilizes a subset of 4^4 , creating a strong contrast in harmonic material between the first and second themes. This contrast between first and second themes is further demonstrated by the marked change of tempo and rhythmic pulse. In the few commercially available recordings of this piece, the metric modulation indicated in figure 5.6 is rendered incorrectly, resulting in a less stark rhythmic contrast between A^1 and B^1 .

Figure 5.6 “Final”, systems 17A-17C; B¹ Exposition

Tempo ♩ = ± 76 (♩ = ♩)

Following a brief melodic link in system 17C shown in figure 5.7, the melodic material is lowered by a half step, resulting in a shift to 4³. The melodic link between these two instances of the fourth mode is derived from 4⁶ and features a change in rhythm from the established sixteenth note pattern of the secondary zone.

Figure 5.7 “Final”, system 17C; B¹ Exposition, Melodic Link Using 4⁶

Other melodic links are also derived from transpositions of the fourth mode; subsequent triplet passages are both subsets of 4⁵, maintaining use of the fourth mode of limited transposition in the second theme. Gotkovsky uses this melodic link as the basis for the movement’s coda.

B¹ also features instances of development by elimination similar to what is found in A¹. The unaccented gesture at the end of the system 17A (see figure 5.6) reappears at the conclusion of system 17B but in a truncated form. The last four pitches are eliminated to create space for the transitional link derived from 4⁶ that leads into a repetition of the

melodic material as a 4^3 subset. Gotkovsky also uses an additive technique between these two systems. The first half of the system 17A is almost identical to that of the system 17B except for the addition of three B^b5 . This technique yields a similar effect to Messiaen's altering of rhythmic pedals in that both create a sense of variety within what can easily become repetitive.

Within the exposition, Gotkovsky bases the first theme largely on 3^1 with polymodal layering, while the second theme relies on both 4^1 and 4^4 . The seventh mode is used as transitional material between themes. However, the themes are also different in their level of rhythmic activity, perceived sense of polyphony or monophony, and general dynamic. While the modal content remains largely the same in the development, Gotkovsky alters these other parameters while leaving each theme identifiable from the other.

Development

The *Tempo primo* in system 17G marks the beginning of the development section. Just as in A^1 , Gotkovsky derives the harmonic pedal in A^2 from a subset of the third mode (in this case, 3^1). However, the contour of pitches in A^2 is inverted from A^1 . Where the implied harmonic pedal in A^1 has a contour of <012543>, the analogous part of A^2 exhibits a contour of <543012>.³⁴ A^2 is the only instance of contour inversion Gotkovsky uses throughout this movement. The beginning of A^2 is an exact inversion of the beginning of A^1 around an imaginary axis pitch of B^b4 (inversion operation $T_{10}I$),

³⁴ For another instance of the use of contour theory to explain inversion as a developmental process, see Ellie M. Hisama, "The Politics of Contour in Crawford's 'Chinaman, Laundryman,'" in *Gendering Musical Modernism: The Music of Ruth Crawford, Marion Bauer, and Miriam Gideon* (New York: Cambridge University Press, 2001), 82-85.

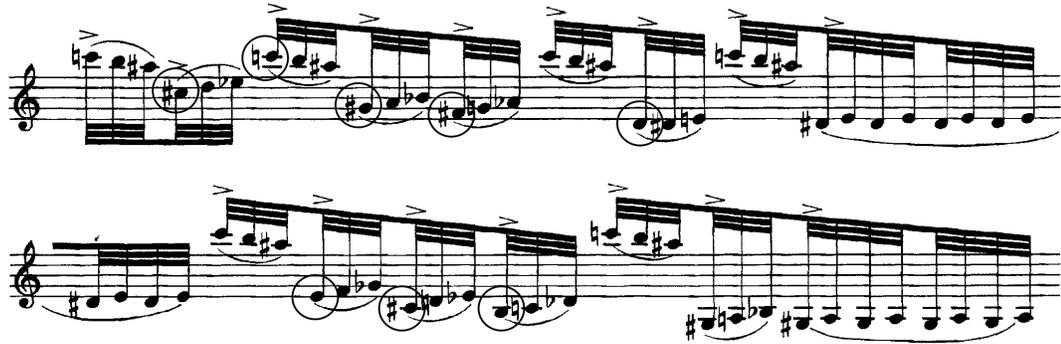
possibly referring back to the central pitch of B^b5 in B¹. Combined with the changes in register and timbre, the reverse contour of the harmonic pedal serves as a distinct developmental rotation of A¹. Gotkovsky also indicates a clear change in dynamic between A¹ and A² (*pianississimo* in the former, *fortissimo* in the latter), but this directive is not observed in commercially available recordings of the piece.

Figure 5.8 “Final”, systems 17G-18A; A² Development

However, not all of A² is strictly inverted from A¹ at T₁₀I. While figure 5.9 is analogous to figure 5.3 in A¹, the polymodal content is not identical. If inverting the first four circled pitches in Figure 5.2 (G₄, C^b₅, D^b₅, and E₅) around the axis of B^b₄ that results form T₁₀I, the analogous passage in figure 5.8 would exhibit a registral accent of the pitches C[#]₅, A₄, G₄, and E₄. However, upon further examination, the line created in this section of compound melody is actually comprised of C[#]₅, G[#]₄, F[#]₄, and D₄. This demonstrates Gotkovsky’s conscious selection of her melodic material rather than a simple inversion of A¹ and maintains her strict use of modes of limited transposition. In this case, the accented pitches comprise a subset of 7¹. Her use of the seventh mode, a

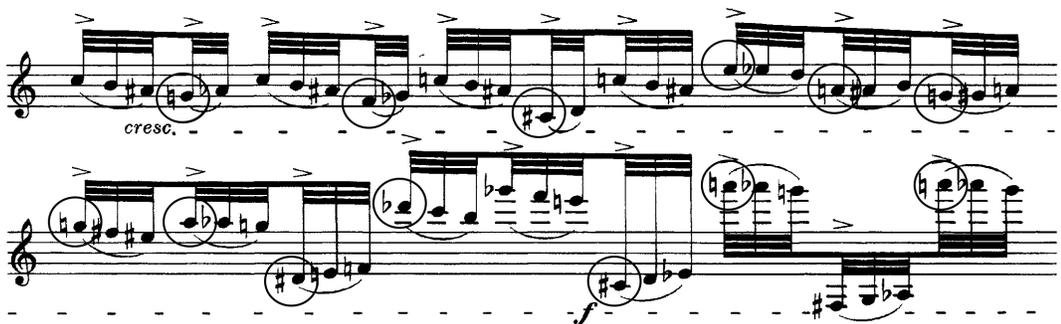
mode that was previously only assigned transitional function, increases the developmental aspects of this rotation.

Figure 5.9 “Final”, systems 18D-18E; 7¹ in A² Development, Demonstrating Lack of Strict Inversion at T₁₀I



After a return to the harmonic pedal in isolation, analogous to a similar passage in systems 16C-16E in the exposition, Gotkovsky again uses compound melody to present a subset of another mode, this time 3².

Figure 5.10 “Final”, systems 19A-19B; A² Development, Polymodalism in 3¹ Ostinato with 3² Overlay



In figure 5.10, F[#]3 and G^b6 are not included as part of the compound monophonic line because F[#] is part of the harmonic pedal established at the beginning of the development.

Considering that the analogous passage in the exposition included an overlay of 1², the use of 3² in A² further demonstrates intentionality on Gotkovsky’s part in this developmental rotation, not a simple inversion of the initial presentation.

Just as in the exposition, Gotkovsky uses a sweeping stepwise passage to move between A^2 and B^2 . In this case, the transition in systems 19C-19D begins with a complete statement of 6^1 , a rare occurrence of a complete presentation of a mode. The descending passage that follows reverts to a more typical use of a subset, in this case a subset of 7^4 .

Figure 5.11 “Final”, systems 19C-19D; Transition Using 6^1 and 7^4



Similar to the transition from the exposition in systems 16G-16H, Gotkovsky uses harmonic materials that Messiaen is not known for using widely: a complete statement of a mode (6^1) and the seventh mode. The arrival at *fortissimo* dynamic and the change in contour of the melodic line helps to demarcate the change in mode.

B^2 also appears in a different register and dynamic than B^1 , similar to the change in register and dynamic between A^1 and A^2 . B^2 is still derived from the fourth mode, this time in the form of 4^3 before shifting to 4^2 , similar to the shift from 4^4 to 4^3 in B^1 .

Figure 5.12 “Final”, systems 19E-19F; B² Development

The C5 in system 19E does not fit within 4³. While it may suggest the absence of conscious effort in pitch-class selection on Gotkovsky’s part, when considered with the previous A3 and G#4, C5 becomes part of the [014] trichord that Gotkovsky introduced in the first movement. This trichord is introduced in a more recognizable guise in the system 19F, where it is made distinct from the second theme via means of dynamic and registral accent. Gotkovsky enhances the anticipatory nature of the [014] trichord in the first system of figure 5.11 with the dynamic shift to *mezzo forte* and the crescendo that peaks on C5, a much higher pitch than the A3 central pitch; this foreshadows the strong dynamic and registral accent later. These [014] interpolations, not found in B¹, are a key feature within the development of the second theme.

Although Gotkovsky develops both themes by altering their register, contour, and dynamic, she assigns them to the same mode of limited transposition but at a different transpositional level than in the exposition. Gotkovsky uses 3³ for A¹, but 3¹ for A²; similarly, she uses 4³ and 4⁴ for B¹ but 4² and 4³ for B². The seventh mode, along with a complete statement of 6⁴, reappears as transitional material just as it did in the exposition.

Recapitulation

Through a prolonged chromatic descent initiated by the shift to 4², Gotkovsky leads out of the development and into the movement’s recapitulation in system 20E. A³

marks the return of the 6-Z4 harmonic field, but this time derived from 3^4 , not 3^3 as in the exposition. Although A^3 does not feature the same transposition of the third mode as A^1 , it is appropriate to consider the return to *Prestissimo* as the beginning of the recapitulation due to shared register, contour, and dynamic marking between A^3 and A^1 . As in the recapitulation of the second movement, there is a difference in pitch levels between the exposition and recapitulation.

Figure 5.13 “Final”, systems 20E-20H; A^3 Recapitulation

In A^3 , Gotkovsky again creates compound melody from insertions of the [012] trichord, outlining another subset of 4^3 . The fourth mode was used as part of polymodal harmony in A^1 , again suggesting a strong intentionality behind the pitch content of this movement. This foreshadows the recapitulation of the second theme (B^3), which is based heavily on the fourth mode, giving this section a transitional function within the rhetoric of the first

theme. The sweeping transitional gesture from the exposition does not appear in the recapitulation, possibly because it was featured in the developmental rotation.

Figure 5.14 “Final”, systems 21B-2121D; A³ Recapitulation, Polymodalism in 3³ Ostinato with 4³ Overlay



B³ reappears at the change of tempo in system 21E, still derived from the fourth mode, but this time the pitch content is a subset of 4¹. This is a result of Gotkovsky transposing the original pitch classes at T₇.

Figure 5.15 “Final”, systems 21E-21H; B³ Recapitulation

Tempo ♩ = 76 (♩ = 76)
f saccadé haletant
piu f

The subset of 4¹ eventually gives way to a subset of 4³, suggesting another rotation of the second theme that actually returns to the mode used in B¹.

In the recapitulation, Gotkovsky returns each theme to its original dynamic, register, and contour. The first and second themes still utilize the third and fourth modes, respectively, but are presented at different transpositional levels. This difference in transpositional levels may be attributed to Gotkovsky's desire for variety rather than strict repetition, but while still returning to the parameters of the exposition.

Coda

In the coda, Gotkovsky develops the triplet motive derived from the fourth mode that she first included in B¹ (shown in figure 5.7). However, in this rotation, only the rhythmic and articulatory elements are apparent. Here, Gotkovsky abandons her strict use of modes of limited transposition from the body of the movement in favor of free

chromaticism that seems to be more intent on demonstrating the performer's technical abilities, with each ascending gesture in figure 5.16 comprising an aggregate statement.

Figure 5.16 "Final", systems 22D-22G; Aggregate Statements in Coda

In these aggregate statements, Gotkovsky combines chromatic elements from previous movements with a thematic idea from the body of the fourth movement. This coda gradually ascends to the extreme altissimo of the clarinet's register, culminating on B^b6 in a possible reference to both the B-flat centrality of B¹ and the imaginary B-flat axis of inversion in A². The final quintuplet gesture concludes the emphasis on B-flat by beginning on B^b4 before plummeting to the lowest pitch of the instrument. Gotkovsky's use of free chromaticism marks the coda as a distinct and separate section from the recapitulation.

Despite the changes in contour, dynamic, and register in the development, the fourth movement contains Gotkovsky's strictest use of modes of limited transposition. Gotkovsky creates an atonal sonata form by using specific modes of limited transposition in place of specific tonal centers, similar to the second movement. However, she still develops themes by traditional means such as varying dynamic, register, and contour. Although the themes and specific harmonic changes differ substantially between the second and fourth movements, both show Gotkovsky's willingness to embrace both eighteenth-century and nineteenth-century perspectives in her twentieth-century reconstruction of sonata form.

Chapter Six: Conclusion

Throughout the Sonata for Solo Clarinet, Gotkovsky hybridizes pitch language with historic forms by using modes of limited transposition to create both large-scale and small-scale formal structure in her music. In the first movement, she creates a ternary structure by using the fourth mode in the outer sections of the movement, but only the second and third modes in the interior section. Gotkovsky limits the transitional material between these sections to the seventh mode and implied harmonic pedals in a monophonic setting. She creates a sonata form in the second movement by presenting three distinct themes in the exposition, developing them via inversion, changes dynamic, and changes in harmonic material (modes of limited transposition versus free chromaticism), and returning the three themes to their original guises in the recapitulation. Gotkovsky presents these themes again in the movement's coda, developing them further before the movement concludes.

In the third movement, Gotkovsky relegates the modes of limited transposition to a purely transitional role. This movement begins with F-sharp as a central pitch established by duration and repetition, but moves toward other pitches via passages based on modes of limited transposition. Similar modal passages facilitate a return to F-sharp as a central pitch, creating a loose ternary structure. In the fourth movement, Gotkovsky returns to a sonata form, this time with only two contrasting themes. She saves her strictest adherence to modes of limited transposition in this movement, often altering pitch content in the development to present rows that differ from analogous materials in the exposition and recapitulation. In the coda, Gotkovsky abandons modes of limited transposition entirely in favor of freely chromatic materials.

However, to claim that Gotkovsky merely borrows the modes of limited transposition from Messiaen's musical language would be both unfair and undeserved. Gotkovsky consistently uses modes in her formal construction throughout this piece, contrasting Messiaen's avoidance of historic forms. She makes use of the seventh mode quite frequently, both as transitional material (first movement) and primary thematic material (second movement). In comparison, Messiaen tended to avoid this mode in his own music and even ignored its existence in his later theoretical writings. However, Gotkovsky did not strictly adhere to the modes of limited transposition the way Messiaen was prone to in his early career. She utilizes free chromaticism in both the development of the second movement and the coda of the fourth movement, the body of which features her strictest use of modes of limited transposition. However, the third movement is unique in that the main harmonic material is entirely chromatic, with modes of limited transposition relegated to a transitional role.

Gotkovsky uses modes of limited transposition to a different extent in each movement. In the first movement, she uses contrasting modes to create distinct sections of the ternary form, while in the third movement, she uses various modes to separate contrasting chromatic sections of music. Gotkovsky's greatest incorporation of modes of limited transposition takes place in the second and fourth movements, where different modes of limited transposition take the place of different tonal centers in full sonata structures. Keeping with the established tradition of sonata form, she utilizes different modes or abandons them in the development sections of these movements before returning to their initial stages in the recapitulation and concludes the movements with elaborate and developmental codas, incorporating both harmonic contrast and thematic

contrast in her sonata movements. Gotkovsky clearly defines her formal parameters in the Sonata for Solo Clarinet by using modes of limited transposition in the same way her predecessors used contrasting tonal centers in historic forms.

This analysis has multiple implications for future research and creative activity. First, I hope that this analysis will encourage other musicians, particularly clarinetists, to explore not only the Sonata for Solo Clarinet, but also any of the pieces Gotkovsky has composed during her career. Although she has written for the clarinet in various settings, Gotkovsky's music is underrepresented in clarinet performances. I suspect this is due to a combination of multiple factors: the virtuosic technical and musical demands her writing places on the performer, the deep and rich traditions of the clarinet repertoire, and the androcentric tendencies to study and perform music by male composers at the exclusion of female composers. I believe the Sonata for Solo Clarinet is of substantial musical and compositional merit to be included in performance along with the rest of the established clarinet repertoire. Second, this analysis reveals various pedagogical potentials for the Sonata for Solo Clarinet. In applied clarinet studies, this analysis presents one way to approach and prepare a lengthy and technically demanding piece for the instrument: formal construction as a means of illustrating how different sections of a piece related to one another and how the formal construction impacts performance decisions. In a music theory classroom, this piece can be used as an example of modes of limited transposition outside of Messiaen's compositional output as well as an example of historic forms using an atonal harmonic language. These are just some implications of this analysis and I hope this analysis will serve as the impetus for many areas of research in the future.

Bibliography

Musical Scores

- Beethoven, Ludwig van. *Five Great Piano Sonatas*. Mineola, NY: Dover Publications, 1999.
- . *Symphonies Nos. 1, 2, 3, and 4 in Full Score*. Mineola, NY: Dover Publications, 1989.
- . *Symphonies Nos. 5, 6, and 7 in Full Score*. Mineola, NY: Dover Publications, 1989.
- Gotkovsky, Ida. *Sonata pour Clarinette Solo*. Wormerveer, Netherlands: Molenaar Edition BV, 1986.
- Messiaen, Olivier. *Quatour pour la Fin du Temps*. Paris: Editions Durand & Company, 1957.

Scholarly Works

- Behm, Gary Wilson. "A Comprehensive Performance Project in Clarinet Literature with an Essay on the Use of Extended, or New, Technique in Selected Unaccompanied Clarinet Solos Published from 1960 through 1987." DMA diss., The University of Southern Mississippi, 1992. Accessed January 26, 2016. <http://search.proquest.com/docview/304024106?accountid=12964>.
- Carroll, Kenneth Don. "The Influence of Olivier Messiaen on 'Brilliance' and the 'Concerto pour Saxophone-alto et Orchestre' by Ida Gotkovsky: An Analytical Study." DMA diss., University of Georgia, 1992. Accessed January 26, 2016. <http://search.proquest.com/docview/303964616?accountid=12964>.
- Gotkovsky, Ida. "Ida Gotkovsky – Biography," Ida Gotkovsky. Accessed April 23, 2016. http://www.gotkovsky.com/textes_versionFR/txt_biographie-Ida_Gotkovsky.html.
- Hartig, Caroline. *Chalumeau*. Recorded 2008. Centaur Records CEN 2965. CD.
- Healey, Gareth. *Messiaen's Musical Techniques: The Composer's View and Beyond*. Burlington, VA: Ashgate Publishing Company, 2013.
- Heim, Amanda Marie. "Using Post-Tonal Analytical Techniques for a Better Performance of Ida Gotkovsky's Quatour de Saxophones." DMA diss., The University of North Carolina at Greensboro, 2011. Accessed January 26, 2016. <http://search.proquest.com/docview/895068939?accountid=12964>.

- Hepokoski, James, and Warren Darcy. *Elements of Sonata Theory: Norms, Types, and Deformations in the Late-Eighteenth-Century Sonata*. New York: Oxford University Press, 2006.
- Hisama, Ellie M. "The Politics of Contour in Crawford's 'Chinaman, Laundryman'." In *Gendering Musical Modernism: The Music of Ruth Crawford, Marion Bauer, and Miriam Gideon*, 60-98. New York: Cambridge University Press, 2001.
- Hunter, Steven K. "The Instrumental Music of Ida Gotkovsky: Finding Intertextual Meaning." DMA diss., University of North Texas, 2010. Accessed January 26, 2016. <http://search.proquest.com/docview/860121893?accountid=12964>.
- Kostka, Stefan. *Materials and Techniques of Twentieth-Century Music*. 3rd ed. Upper Saddle River, NJ: Pearson Education, Inc., 2006.
- McCandless, Amanda. *Unaccompanied Clarinet Works by Women Composers*. Recorded 2012. Mark Records 9773-MCD. CD.
- Messiaen, Olivier. *The Technique of My Musical Language*. Translated by John Satterfield. Paris: Alphonse-Leduc, 1956.
- Pendle, Karin. *Women and Music: A History*. 2nd ed. Bloomington, IN: Indiana University Press, 2001.
- Straus, Joseph N. *Remaking the Past: Musical Modernism and the Influence of the Tonal Tradition*. Cambridge, MA: Harvard University Press, 1990.
- Surman, Patricia Jovanna. "Ida Gotkovsky's Eolienne pour flute et harpe in Theory and Practice: A Critical Analysis." DMA diss., University of North Texas, 2010. Accessed January 26, 2016. <http://search.proquest.com/docview/748807337?accountid=12964>.
- Wikipedia. "Ida Gotkovsky." Last modified March 14, 2016. Accessed April 23, 2016. https://en.wikipedia.org/wiki/Ida_Gotkovsky.

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