SYMMETRY AND PHRASE DEFINITION: GINASTERA'S FIRST PIANO SONATA, OP. 22, II MOV.

Erick Carballo
Indiana University at Bloomington
carballo@iu.edu

Abstract: The article evaluates the usefulness of the twelve-tone analytical approach when applied to the second movement of Alberto Ginastera's first Piano Sonata, Op. 22 (1952). Based on the results from this evaluation, it postulates a new analytical approach grounded on two main principles. The first principle is the recognition of symmetrical pitch-class sets and their rapport with the establishment of phrase structures. The second principle deals with the combination of tonal and atonal gestures and their interaction with higher levels of tonal organization—levels that, as the analysis shows, are predominantly diatonic.

Keywords: Ginastera; piano sonata; symmetry; phrase definition; dodecaphonism; ordered and unordered interval-class successions; progressional analysis; kinetic, terminal and prolongational progressions; structural analysis; malambo.

Resumo: O artigo avalia as vantagens e a utilidade de um enfoque dodecafônico aplicado ao segundo movimento da primeira "Sonata para piano Op. 22 (1952)" de Alberto Ginastera. Baseado nos resultados da dita avaliação, postula um novo enfoque analítico baseado em dois princípios fundamentais. O primeiro é o reconhecimento de grupos simétricos de alturas e a estreita relação desses grupos com o estabelecimento de frases musicais. O segundo princípio se relaciona com a combinação de elementos musicais tonais e atonais e a interação desses elementos com níveis estruturais de organização tonal – níveis que, tal e como o demonstra a análise, são predominantemente diatônicos.

Palavras-chave: Ginastera; sonata para piano; simetria; fraseado; dodecafonismo; sucessão de alturas ordenadas e não ordenadas; análise progressional; progressões cinéticas, terminais e prolongacionais; análise estrutural; malambo.

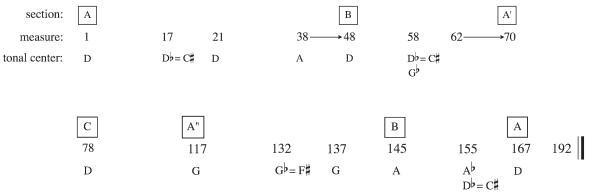
Symmetry is a compositional tool that composers have used to advantage for centuries: to lay out relationships among formal sections (five- or seven-part rondos); to create pitch palindromes (Machaut's *Ma fin est mon commencement*); and to construct and manipulate tone rows (pervasive in Webern's compositions), to name just a few ways the device has been employed. Argentinean composer Alberto Ginastera had an affinity for symmetry, and it is ubiquitous in his compositions: in rondos ("Variazione finale in modo di rondo per orchestra" from *Variaciones concertantes*, op. 23, and the *Rondó sobre temas infantiles argentinos*, op. 19); in palindromes (Sonata for Cello and Piano, op. 49, III mov. Presto mormoroso, and the "Interludio fantástico" from *Cantata para América mágica*, op. 27); in twelve-tone rows (*Panambí*, op. 1; *Quintetto*, op. 29; and *Don Rodrigo*, op. 31); and around an axis ("Cadenza I per viola e violoncello" from *Quintetto*, op. 29). Beyond these standard techniques, Ginastera uses an innovative form of symmetry, described in the ensuing discussion, to drive the tension and release that shape atonal musical phrases, much in the same way that dissonance and consonance drive tension and release in common-practice musical phrases.

The present article evaluates the usefulness of the twelve-tone analytical approach when applied to the second movement of Ginastera's first piano sonata. Based on the results from this evaluation, it postulates a new analytical approach grounded on two main principles. The first principle is the recognition of symmetrical pitch-class sets and their rapport with the establishment of phrase structures. The second principle deals with the combination of tonal and atonal gestures and their interaction with higher levels of tonal organization—levels that, as the analysis will show, are predominantly diatonic.

In 1952, the Carnegie Institute and the Pennsylvania College

for Women commissioned a piece from Ginastera for the Pittsburgh International Contemporary Music Festival. The result of this commission was the first of three piano sonatas that he was to write over a span of thirty years.[1] Shortly after its premiere, Ginastera's first piano sonata was incorporated into the standard piano repertory, becoming one of his most widely performed works. With respect to the musical language used in this sonata, Ginastera asserts rather abstractly: "the composer does not employ any folkloric material, but instead introduces in the thematic texture rhythmic and melodic motives whose expressive tension has a pronounced Argentine accent."[2]

The sonata's second movement, the main focus of the present article, is particularly intriguing because the composer mixes these "Argentine accents," which are extremely tonal in nature, with atonal and dodecaphonic gestures.



Example 1. Piano Sonata Nº. 1, op. 22, II mov.: Form diagram

Example 1 presents a simple form diagram of the entire second movement, delineating its main sections, measure numbers, and tonal centers of the most important events within those sections.

The movement is divided into seven sections that fall into three categories:

Type (A): includes those sections featuring atonal and—more

1 Piano Sonata Nº. 1, op. 22 (1952): 1. Allegro marcato, 2. Presto misterioso, 3. Adagio molto appasionato, 4. Ruvido ed ostinato; first performance 29 November 1952, Pittsburgh, PA. The other two piano sonatas were written in the last two years of his life. The second sonata, op. 53, in 1981; the third, op. 55 (rectified posthumously to op. 54), in 1982.

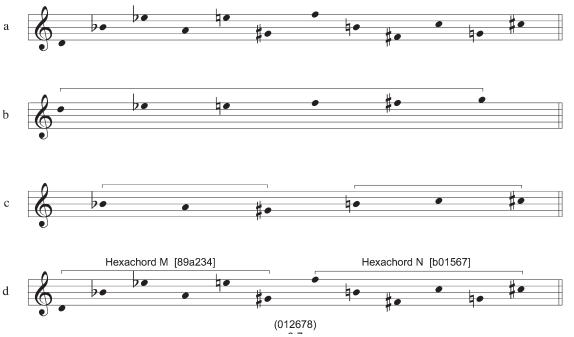
2 Alberto Ginastera, quoted in Gerard Béhague, *Music in Latin America*, 218.

specifically—dodecaphonic gestures with both hands, mostly doubling in octaves.

Type (B): includes the diatonic sections featuring triadic and quartal harmonies and constant interchange between triple and duple meters.

Type (C): combines elements found in sections A and B, described in fuller detail below.

Type A and type B sections share an internal transitional gesture: a pedal point with alternation of dyads and a single pitch class in the upper register. This gesture is particularly resourceful because it functions sometimes as a bridge in a single section (e.g., mm. 17-20) and at other times as part of a lead-in to a new section (e.g., mm. 58-61).[3]



Example 2. Features of the opening row

The most striking feature of the beginning of the movement is its dodecaphonic opening. Early Ginastera scholars—and Ginastera himself—commented on the "dodecaphonic procedures" used in this piece.[4] As the following discussion explores, there certainly

3 Notice how the first appearance of the B section is located in m. 48, in spite of the fact that the change to tonal vocabulary takes place ten measures earlier. The rationale for this decision lies in the function of mm. 38-47: they act as a catalyzing harmonic force towards m. 48. This issue will be discussed and explained in detail later.

4 "The Sonata is written with polytonal and twelve-tone procedures." Alberto Ginastera, quoted in Gilbert Chase, *Argentine Composer*, 451. "El paso de Ginastera hacia el uso de procedimientos dodecafónicos, se realiza con suma naturalidad. En la *Sonata* ese procedimiento se alterna con el uso de un politonalismo de ninguna manera nuevo en su obra." ["Ginastera's movement toward the use of dodecaphonic procedures occurs completely naturally. In the [Piano] Sonata [op. 22], this

is dodecaphonic potential (a very interesting tone row in a clear, understandable initial presentation), but ultimately the row as a twelve-tone compositional device is left precisely at the level of potential and not fully exploited. Example 2.a shows the pitches found in mm. 1 and 2. To facilitate its reading, they are transposed down an octave, but the general contour has been preserved. One outstanding feature of the row is the chromatic hexachord that results when we consider every other note of the row starting on the first note (example 2.b). On the other hand, if we consider every other note from the second note of the row, two chromatic trichords result, one descending, the other ascending (example 2.c).

a	M = T3(N)	N = T3(M)
	M = T9(N)	N = T9(M)
	M = T3I(N)	N = T3I(M)
	M = T9I(N)	N = T9I(M)
b	M = T0(M)	N = T0(N)
	M = T6(M)	N = T6(N)
	M = T0I(M)	N = T0I(N)
	M = T6I(M)	N = T6I(N)

Example 3. Relationships between hexachords M and N

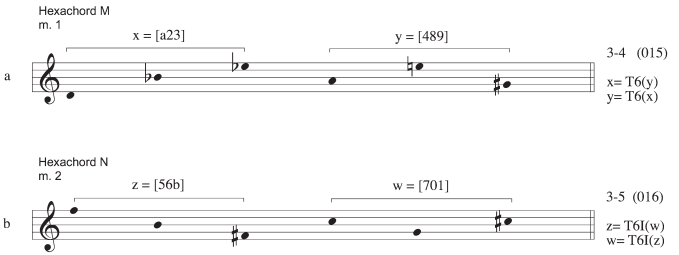
The row is divided into two hexachords, labeled M and N, to highlight some of the noteworthy characteristics of the row. As shown in example 2.d, both hexachords belong to the pc set 6-7,[5] a symmetric set, which makes the row hexachordally combinatorial at the following levels: T3, T9, T3I, and T9I (example 3.a). In addition, because of its symmetry, hexachord 6-7 maps onto itself not only at the obvious T0, but also under T6, T0I, and T6I (example 3.b).

Turning to the trichordal configuration of the hexachords, hexachord M is formed of two trichords, labeled x and y (example 4.a).

procedure alternates with the employment of polytonalism in a way very common to his works."] Pola Suárez-Urtubey, *Alberto Ginastera*, 16.

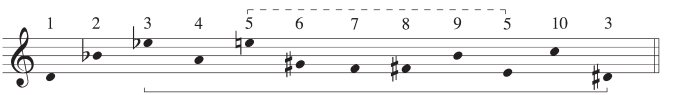
5 For the designation of pitch classes, a=10 and b=11.

Both of them belong to Allen Forte's set class[6] 3-4 and relate to each other by T6. Hexachord N, on the other hand, is made up of trichords labeled z and w, of set class 3-5, related to each other by T6I (example 4.b).



Example 4. Trichordal properties of hexachords M and N

All these properties—of the row, the hexachords, and the trichords—seem to imply fertile grounds for the development of serial twelve-tone operations, but even so, that is not the approach Ginastera takes. During the first section, there are no transformations of the original row; that is, it is repeatedly presented only in P0 form with no revelations of the inherent symmetries of the row (beyond those already mentioned in relation to example 2).[7] Furthermore, the flow of the row is interrupted with two repeated pitches in mm. 6-7. These repeated pitches are E and D$^{\cdot}$; since the left and right hands double each other, there is no other voice to go "hunting" for the missing pitches. Because the pitches needed to complete the row, C$^{\cdot}$ and G, are not present (example 5), the development of the twelve-tone row stalls—again.



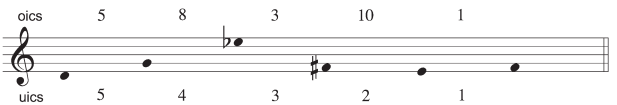
Example 5. Interruption of the row (m. 5-6)

6 Allen Forte, *Contemporary Tone-Structures*.

7 In mm. 117-44, there is a presentation of the row starting with pitch G. Although technically speaking this is a P5 form of the original row, it will be better to consider it as a *modulation* rather than a transposition. The reasons for doing so will be become apparent later.

Since the twelve-tone approach does not lend itself to illuminating analyses in this piece, we must consider other options. Other modes of analysis may illuminate the Sonata; for example, linear analysis is helpful at deeper levels for a tonal perspective, but it has difficulty portraying some integral elements at the foreground level. Analysis using subsets of the twelve-tone row would be useful for the analysis of the row itself but would probably do as little for the piece as a whole as did the twelve-tone analysis, inasmuch as the row appears only in its prime form, when present.

The rest of this article proposes a different analytical model, based on two elements that are essential to understanding this movement's pitch organization: intervallic succession and symmetry. In relation to the intervallic succession, there must be a distinction between ordered interval-class succession and unordered interval-class succession.[8] Ordered interval-class succession (oics) consists of the successive ordered pitch-class intervals of a given pitch-class set. On the other hand, unordered interval-class succession (uics) consists of unordered pitch-class intervals. These two concepts are illustrated in example 6.[9]



Example 6. Oics and uics

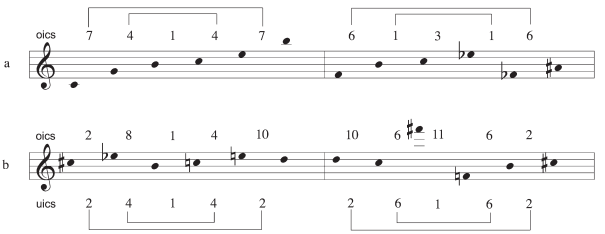
With the oics and uics concepts in mind, it is possible to speak

8 An ordered pitch interval is the distance between two pitches. An ordered pitch-interval succession is the successive ordered pitch intervals of a given pitch collection. The intervals are measured by the number of semitones. For more information on ordered and unordered pitch intervals—sometimes seen as directed and undirected pitch intervals—refer to Joseph Straus, *Post-Tonal Theory*, 6; John Rahn, *Basic Atonal Theory,* 20-22.

9 Previous authors have employed the concept of successive-interval arrays or interval-array to refer to the interval content of a given unordered collection of tones. The concepts of ordered and unordered pitch-interval succession are preferred because they discriminate between ordered and unordered pitch collections. For more information on successive-interval arrays, refer to Richard Chrisman, "Describing Structural Aspects of Pitch-Sets," 7-8.

of two different types of intervallic symmetry: depending on the type of correspondent pc intervals on each side of its center or axis, a pitch-class set may be oics-symmetric or uics-symmetric.

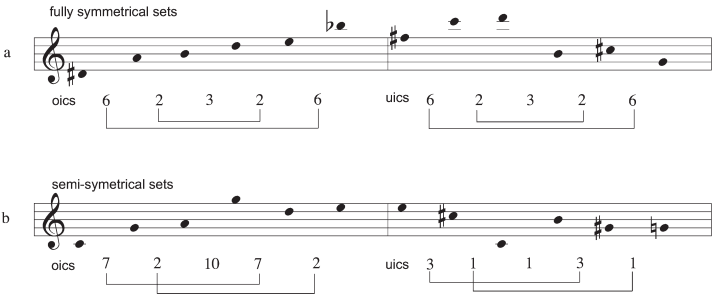
The definitions are quite intuitive. A pc set is oics-symmetric when its ordered interval-class succession is symmetrical (example 7.a). A pc set is uics-symmetric when its unordered interval-class succession is symmetrical (example 7.b). Since every pc set that is oics-symmetric is also uics-symmetric, there is no need for a "both" category. These concepts could be further refined and more categories added by including some other types of intervals such as ordered pitch intervals and unordered pitch intervals; nevertheless, for the present discussion, the terms oics and uics will suffice.



Example 7. Oics-symmetric and uics-symmetric

It is possible, however, to be more specific in discussing the concepts oics and uics by looking at their *quality* of symmetry. This brings up two subcategories for both oics and uics symmetry: fully symmetrical and semi-symmetrical.

Fully symmetrical sets are those with mirror images on both sides of the center/axis (example 8.a). In semi-symmetrical sets, for every interval on one side of the center/axis, there is a corresponding interval on the other side, although not in mirror fashion (example 8.b).



Example 8. Fully symmetrical and semi-symmetrical sets

The key to approaching the pitch organization of the Sonata's second movement lies in the equation of symmetrical pc sets with stability and asymmetrical ones with lack of stability.[10] Several theorists have approached the topic of symmetry from this functional point of view. In one useful (although unfortunately brief) article on symmetry in Webern's op. 5, no. 2, Bruce Archibald asserts: "Chords constructed symmetrically around a central pitch or interval are found occasionally in the early works of Anton Webern. It is generally felt that such formations represent stability, possibly even a substitute for a tonic or temporary tonic."[11] Subsequently, in relation to his own personal ear-training, Archibald adds: "Tuning the ear to recognize symmetry led me to expect near symmetries to become completed, and this in turn led to a remarkable sense of forward motion—expectation, fulfillment which then became new expectation, etc."[12] Archibald also makes reference to George Perle's statement in relation to a symmetric chord in Webern's op. 5, no. 1: "Because of its self-evident structure such a chord tends to have a somewhat stable character; which suggests its employment as point of origin or destination of a harmonic progression."[13] It is rather unfortunate that

10 Even though originally applied to tonal music, Steve Larson's concept of "contextual stability" certainly applies. Steve Larson, "Problem of Prolongation in Tonal Music."
11 Bruce Archibald, "Thoughts on Symmetry in Early Webern," 159.
12 Ibid.
13 George Perle, *Serial Composition and Atonality*, 26.

neither of these two authors further develop the subject or present specific examples about how this process works in the pieces they analyze, because it is, at first blush, counterintuitive: particularly in terms of traditional tonality, *non-symmetrical* sonorities (major or minor triads, major and minor scales) are much more likely to be "home" or sources of stability than *symmetrical* sonorities (fully diminished and augmented chords, octatonic and whole-tone scales).

Table 1 presents information pertaining to hexachords found in mm. 1-29 of the Sonata's second movement. In relation to the segmentation criteria, the hexachords are derived rather simply, as they align with the meter (one hexachord per measure) and are articulated by simple repetition. The seventh column of the table shows the degree of uics symmetry of the sets: fsy (fully symmetrical), msy (semi-symmetrical), or asy (asymmetrical). The three possible degrees of uics symmetry yield nine potential progressions: fsy-fsy, fsy-msy, fsy-asy, msy-fsy, msy-msy, msy-asy, asy-fsy, asy-msy, and asy-asy. Potential progressions (1) fsy-fsy, (5) msy-msy, and (9) asy-asy do not include repetitions of the same hexachord; rather, they imply change to a different hexachord of the same type. For example, a progression from a uics hexachord 54245 to another uics hexachord 54245 is not considered a fsy-fsy progression, but merely repetition. A uics hexachord 54245 followed by a uics hexachord 65256 is an fsy-fsy progression.

Table 1. Hexachords in mm.1-29

pc set	n. o.	set class	Forte label	oics	uics	uics symmetry	mm.
{2a3948}	[89a234]	(012678)	6-7	85674	45654	fsy	1, 3, 5, 8, 10, 12, 21, 23, 25
{5b6071}	[b01567]	(012678)	6-7	67676	65656	fsy	2, 4, 9, 11, 22, 24
{56b403}	[b03456]	(012367)	6-5	15583	15543	asy	6, 13. 26
{8293a4}	[89a234]	(012678)	6-7	67676	65656	fsy	7
{94a071}	[479a01]	(013469)	6-27	76276	56256	msy	14
{2834a5}	[23458a]	(012368)	6-Z41	67167	65165	msy	15
{607829}	[678902]	(012368)	6-Z41	67167	65165	msy	16
{689ab0}	[689ab0]	(012346)	6-2	21111	21111	asy	16
{294507}	[024579]	(024579)	6-32	77177	55155	fsy	27, 29
{234567}	[234567]	(012345)	6-1	11111	11111	fsy	27, 29
{83ab61}	[68ab13]	(024579)	6-32	77177	55155	fsy	28
{89ab01}	[89ab01]	(012345)	6-1	11111	11111	fsy	28

Following Archibald's and Perle's statements relating symmetry with stability, these progressions group into three categories according to their function: prolongational, kinetic, and terminal. Example 9 shows this categorization and the progressions that each type includes.

prolongational	**kinetic**	**terminal**
fsy-fsy	fsy-msy	msy-fsy
msy-msy	fsy-asy	asy-fsy
	msy-asy	asy-msy
	asy-asy	

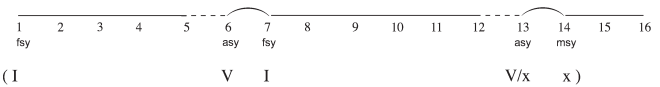
Example 9. Categorization of progressions

Since this mode of analysis concentrates on the progression of the sonorities, we will call it "progressional analysis." In this kind of analysis, prolongational progressions involve continuation of

function; to a certain extent, they borrow their meaning from the Schenkerian realm. Kinetic progressions, on the other hand, involve change of function, basically "going away from." Notice that asy-asy progressions are considered not prolongational but kinetic. As the analysis of Ginastera's movement will show, the succession of different asymmetrical hexachords does not bring a sense of continuation of function but rather an increasing sense of departure. Finally, terminal progressions bring closure. As would be expected, kinetic and terminal progressions are opposite to one another.

Example 10. Graphic representation of progressions

For graphic purposes, prolongational progressions will be represented by a single solid horizontal line, kinetic progressions by a dotted line, and terminal progressions by a curved line (example 10).



Example 11. Graphic representation of progressions

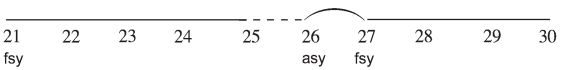
Example 11 presents a progressional analysis of the opening of the movement up to the first transitional section (mm. 1-16). The analysis brings to the surface the existence of two partitions, each one a succession of progressions: prolongational, kinetic, and terminal. This sequence of events mirrors the traditional procedure of establishing tonal stability, departing from it, and returning to it, which one finds in the phrase formation in the tonal realm. The first one ends in m. 7 with

the terminal progression back to a fsy hexachord. The second partition concludes in m. 16; nevertheless, its "cadence" takes place between mm. 13 and 14, with a terminal progression from an asy hexachord to a msy hexachord. The terminal progression in m. 7, as well as the one in the second partition, are not isolated pitch events; rather, both of them are enhanced by a change of register that returns to "normal" with the closure of the progression.

Since the asy-msy progression in mm. 13-14 is not as strong as the asy-fsy progression of mm. 6-7, one may easily relate the progressional pattern presented in the first sixteen measures with a short modulation to or tonicization of a secondary key. The Roman numerals in parentheses in example 11 suggest such a potential parallel model. As a result, there is some sense of return, although it is not as strong as if it had returned to a fsy hexachord (as in m. 7) .

Furthermore, it is far from coincidental that one of the two main features of the bridge section (mm. 17-20) is a pedal point on Db: a disguised C#, the leading tone of D. The initial row (mm. 1-2) starts on pc D and ends on C#, which helps explain why Ginastera does not transform the row; since it is always presented in P0 form, the C# will always "resolve" to the D of the next row. The "D-ness" of this passage—and of the rest of the movement, as the analysis shows—is therefore made quite apparent, in spite of the dodecaphonic row.

In addition, the bridge section features an fsy trichord: Db, Ab, Eb, a quintal chord with oics 7 7. Once again, Ginastera makes use of a symmetrical sonority to project a specific tonal function. In this particular case, given the weight of the Db pedal, he uses this trichord to prolong a dominant-like sonority that comes to a resolution in m. 21 with the return of the same fsy hexachord as in m. 1 (hexachord M).

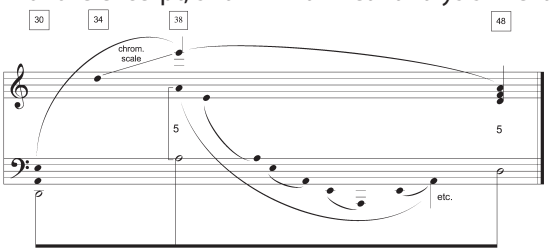


Example 12. Progressional analysis, mm. 21-30

The progressional analysis of the return is shown in example

12. The first six measures (mm. 21-26) are an exact reproduction of the first six measures of the movement. Measure 27 introduces the change from the movement's opening with the combination of a series of 6-32 hexachords in the right hand with an ascending chromatic scale in the left hand (which could also be interpreted as a series of 6-1 hexachords). Notice that both 6-32 and 6-1 hexachords are fsy. This progression concludes in m. 30 with the arrival of a fsy trichord resembling the one presented in mm. 17-20, although this time the sonority is based on pc D, which brings a sense of tonic arrival.

The fsy trichord (D2-A2-E3), which appears in mm. 30-34, articulates the transition towards the second section of the piece. Since sections A (chromatic) and B (diatonic) are so dissimilar,[14] Ginastera employs a link of considerable length to reconcile them. This connecting section is made up of two main elements. The first one is a chromatic ascending scale found in mm. 34-37. As a linking element, going from chromatic to diatonic, the chromatic scale is quite appropriate as the "common element," particularly since it is not rare to find this gesture in diatonic/tonal music as a way of "filling-in" intervals. The second connecting element is the descending-ascending diatonic pattern found in mm. 38-47 at the culmination of the chromatic ascending scale. As previously stated, m. 38 marks the beginning of the use of diatonic vocabulary at the local level; however, the arrival of section B takes place later, in m. 48. The rationale behind this is found in the tonal organization of the excerpt, shown in a linear analysis in example 13.



Example 13. Linear analysis, mm. 30-48

14 This characterization pertains to the pitch vocabulary used at local levels in each of these sections. Note that calling section A "chromatic" does not deny the tonal implications found at earlier organizational levels.

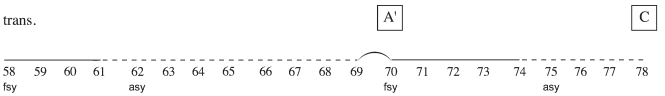
The predominance of pitch classes A and E in mm. 38-47 creates a dominant force that finds its resolution in the D minor chord of m. 48. This arrival is enhanced texturally (tripled pitch class D, the two lowest pitches of the chord) and dynamically (marked fortissimo). The significance of the tonal organization of the section does not lie in pinpointing beginnings or endings of either section but rather in highlighting the role that the tonal drive plays in the definition of form in this movement. Although mm. 38-47 lead to (and thus may be thought of as part of) section B, the section actually starts—thematically, harmonically, and formally—in m. 48. This may seem paradoxical at first, but the large-scale harmonic anacrusis was, after all, a common element in first movements of late eighteenth- and early nineteenth-century symphonies and solo instrument sonatas.

The second section, B, includes mm. 48-57 and emphasizes features of Ginastera's early compositions such as the use of folk-like melodies, energetic rhythmic drive, and the combination of duple and triple meter. The transition towards the next section, A', starts in m. 58 with the introduction of the fsy trichord (Gb, Db, Ab) similar (with the exception of the different transposition level) to the trichords found in mm. 17-20 and 30-34, as discussed above.

Table 2. Hexachords, mm. 62-77

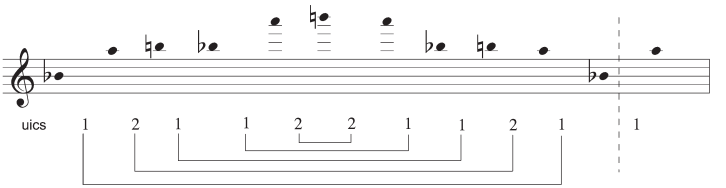
pc set	n. o.	set class	Forte label	oics	Uics	uics symmetry	mm.
{05a982}	[89a025]	(012469)	6-Z46	55bb6	55116	asy	62, 64
{6b4328}	[23468b]	(012469)	6-Z46	55bb6	55116	asy	63, 65
{0395ab}	[0ab035]	(012368)	6-Z41	36851	36451	asy	66
{06923b}	[69b023]	(013469)	6-27	63518	63514	asy	67
{456038}	[034568]	(023458)	6-Z39	11635	11635	asy	68
{95a4b0}	[9ab045]	(012378)	6-Z38	85671	45641	asy	69
{2a3948}	[89a234]	(012678)	6-7	85874	45654	fsy	70, 72, 74
{5b6071}	[b01567]	(012678)	6-7	67676	65656	fsy	71, 73
{56b403}	[b03456]	(012367)	6-5	15583	15543	asy	75
{297831}	[789123]	(012678)	6-7	85671	45651	asy	76, 77
{234567}	[234567]	(012345)	6-1	11111	11111	fsy	77
{89ab01}	[89ab01]	(012345)	6-1	11111	11111	fsy	

After the fsy trichord come four measures repeating an asy hexachord (mm. 62-65). In m. 66 the progression is reactivated with a series of different asy hexachords, creating a kinetic progression that resolves in m. 70 with the arrival of the fsy hexachord and the presentation of the movement's opening material. Table 2 presents a list and classification of the hexachords found in mm. 62-77, which comprise part of the transition as well as the ensuing brief A', the third section of the piece.



Example 14. Progressional analysis, mm. 58-78

Example 14 shows a progressional analysis of this same transition and section A'. Two elements to highlight in this example are the kinetic progression at the end of the A' section leading towards section C (mm. 74-77) and the ascending chromatic scale in the left hand (mm. 76-77). We could think that the hexachords presented in mm. 75-78 might create a progressional conflict, particularly in mm. 76-77 where the right hand features asy hexachords against the left hand's fsy hexachords. Nevertheless, given the transitional character that hexachord 6-1—the chromatic hexachord—has previously displayed, it seems reasonable to assert that this character takes precedence over the symmetrical properties when that particular hexachord is combined with asy hexachords in the right hand and enhanced dynamically with a *poco crescendo* marking.



Example 15. Right-hand patttern, section C

Section C, the fourth section (mm. 78-116), mixes elements from sections A and B. On the one hand, there is a continuous chromatic trichord (Bb A, B). This eighth-note pattern resembles the right-hand material found in section A. It also encompasses a pair of two measures, which repeats continuously. As example 15 shows, the pattern is almost uics symmetrical: it is, in fact, symmetrical if one considers the Bb as both the point of departure and as arrival.[15] The completion of the grouping with pitch class A slightly offsets the symmetry, making the complete two-measure pattern technically asymmetrical. On the other hand, section C features parallel sonorities in combination with hemiola figures that resemble those found in section B, although these are not exclusively diatonic.

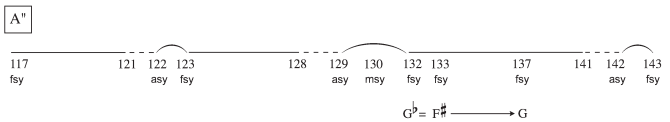
In mm. 109-10 and 113-14, Ginastera introduces the guitar chord. The guitar chord functions at varying hierarchical levels in Ginastera's music; here, mid-movement, it acts at the foreground level as a marker for the form, as it appears just as section C cedes to the return of section A" (m. 117).

Table 3. Pc sets of Section A" (mm. 117-44)

pc set	n.o.	set class	Forte label	oics	uics	uics symmetry	mm.
{738291}	[789123]	(012678)	6-7	85674	45654	fsy	117, 119, 121, 124, 126, 128, 137, 139, 141
{a4b506}	[ab0456]	(012678)	6-7	67676	65656	fsy	118, 120, 125, 127, 138, 140
{ab4958}	[4589ab]	(012367)	6-5	45583	15543	asy	122, 129, 142
{172839}	[789123]	(012678)	6-7	67676	65656	fsy	123
{273506}	[902356]	(013469)	6-27	56276	56256	msy	130
{71893a} {7189ab}	[789a13] [789ab1]	(012368) (012346)	6-Z41 6-2	67167 67111	65165 65111	msy asy	131
{b50172}	[b01257]	(012368)	6-Z41	67167	65165	fsy	132
{729a50} {789ab0}	[579a02] [789ab0]	(024579) (012345)	6-32 6-1	77177 11111	55155 11111	fsy fsy	143
{729a54} {123456}	[24579a] [123456]	(013568) (012345)	6-Z25 6-1	7717b 11111	55151 11111	asy fsy	144

15 Note that the uics symmetry, taking the Bb as point of departure and arrival creates a palindrome of notes as well.

The most salient characteristic of the fifth section, A", is its T5 relationship with the first twenty-seven measures of the movement, most of section A. More appropriately than "transposition," the term "modulation," and specifically "modulation to the subdominant," better reflects the role of section A" in relation to the movement's general tonal plan. Table 3 presents a list and classification of the pitch-class sets found in this section, which can be compared to the similar list and classification for section A, table 1. Example 16 shows a progressional analysis of the same section.

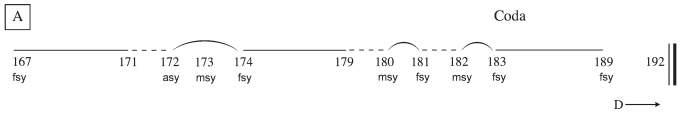


Example 16. Progressional analysis, section A"

The sixth section, B', features the structural dominant of the movement. The material from section B reappears, but this time with a clear emphasis on pitch-class A, the dominant of the overall home pitch center, D. This dominant is resolved in m. 167 with the return of section A material at the original pitch level. Notice how, besides the obvious dominant-tonic relationship of the tonal centers of these two sections (A-D), Ginastera employs other previously used materials in order to reinforce the cadential drive: the fsy trichord with Db (C#) pedal in mm. 155-58; ascending chromatic scales in mm. 159-66; and the chromatic trichord resembling that of section C in mm. 163-66.

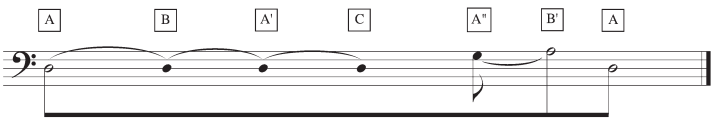
Example 17 presents a progressional analysis of the last section of the piece, which projects two phrases with a short coda section (mm. 183-92). This coda features an fsy tetrachord made up of pitch classes F, E, Eb, D spread over several octaves. In mm. 185-86, Ginastera reintroduces the guitar chord sonority. In this instance, its inclusion could be interpreted as the composer "autographing" his work.[16]

16 The guitar chord as "signature" at the end of Ginastera's music is a common feature. It is also found in some other composers' work, such as Debussy's prelude *Feu d'artifice* and Poulenc's song cycle *Banalités*. For an analysis of Debussy's "autograph," see David Lewin, Music Form and Transformation.



Example 17. Progressional analysis, section A and Coda (mm. 167-92)

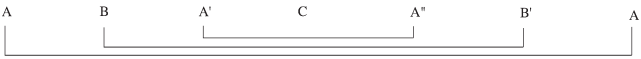
In spite of the disparity of languages employed in each of the sections of the movements, the tonal centers of the constituent sections form a patterned relationship with the whole. Every section features a particular tonal center, as does the movement overall (D). The tonal center of sections A, B, A', C, and the final A is pitch-class D; while the tonal centers for sections A" and B' are pitch-classes G and A, respectively. This tonal succession creates a large-scale cadence in the form of I-IV-V-I, which reflects the movement's tonal background (example 18).



Example 18. Movement's tonal background

Finally, given the significance that symmetry—or the lack of it—plays in the phrase definition of all A sections, note how this concept is extrapolated to other levels of formal organization.

As example 19 illustrates, Ginastera's second movement is a rondo, more specifically one that is symmetrical in design. This feature brings the piece a sense of unity at an abstract level. The actual listening experience may include immediately recognizable singular events such as the guitar chord or the hemiola, general characteristics such as the malambo style, or more subtle relationships such as the symmetrical relationship among pc sets. As a result, listeners are confronted with fragments of varying degrees of abstract information they are to incorporate into that experience.



Example 19. Symmetrical rondo form of the movement

This integrated listening represents a microcosm of the broader experience of listening to Ginastera's compositions. We can hear at the same time a musical syntax that becomes increasingly abstract but is continuously rooted in the gaucho tradition, a continuity that runs from the early *Panambí* ballet to the late Piano Sonata No. 3, pieces some forty-one years apart in composition but equally reflective of his musical connection with the Argentine pampas.

CITED WORKS

Archibald, Bruce. "Some Thoughts on Symmetry in Early Webern: Op. 5 Nº. 2." *Pespectives of New Music* 10 (1972): 158-63.

Béhague, Gerard. *Music in Latin America: An Introduction*. Englewood Cliffs, NJ: Prentice-Hall, 1979.

Chase, Gilbert. "Alberto Ginastera: Argentine Composer." *Musical Quarterly* 43 (1957): 439-60.

Chrisman, Richard. "Describing Structural Aspects of Pitch-Sets Using Successive-Interval Arrays." *Journal of Music Theory* 21 (1977): 1-28.

Forte, Allen. *Contemporary Tone-Structures*. New York: Bureau of Publications, Teachers College, Columbia University, 1955.

Larson, Steve. "The Problem of Prolongation in Tonal Music: Terminology, Perception, and Expressive Meaning." *Journal of Music Theory* 41 (1997): 101-36.

Lewin, David. *Musical Form and Transformation: 4 Analytical Essays*. New Haven: Yale University, 1993.

Perle, George. *Serial Composition and Atonality: An Introduction to the Music of Schoenberg, Berg, and Webern*. 6th ed. Berkeley: University of California, 1991.

Rahn, John. *Basic Atonal Theory*. New York: Longman, 1980.

Straus, Joseph N. *Introduction to Post-Tonal Theory*. Englewood Cliffs, NJ: Prentice Hall, 1990.

Suárez-Urtubey, Pola. *Alberto Ginastera.* Argentinos en las Artes. Buenos Aires: Ediciones Culturales Argentinas, 1967.