

## CHAPTER 3

### PRELIMINARY ANALYSIS

Before probing the structural detail of Ecuatorial, it may be helpful to describe the piece in terms of its surface detail. By establishing a set of descriptive labels for musical events and formal divisions according to repetitions, variations, or prominence of certain qualities, we may make the later structural analysis more efficient and less taxonomic in expository style.

The emphasis here will be on a selective description of elements which are more or less apparant when listening to the piece with the score. However, the formal divisions asserted here are not based entirely on the surface activity; rather, in order to make the value of this preliminary analysis more lasting, we have incorporated data from the later structural analysis to make such decisions. It need hardly be mentioned that Varèse's music, like that of many early 20th Century composers, is not only structured on the surface level; in the case of Ecuatorial the dominant structural feature at any given time is the relative prominence of the various property sets, which do not always make themselves apparent in melodic lines or isolated verticalities. Many of the formal

divisions asserted below are made on the basis of these set-class strengths.

For quick assimilation and for easy later reference, this analysis will be presented in list form, although a verbal commentary will follow. Not every event of the piece is covered in this preliminary analysis; any such omission is for one of the following reasons:

- 1) The passage is anomalous, with no surface connection to other passages;
- 2) The passage consists of minutiae not relevant to general trends;
- 3) The passage is a varied or understated recurrence of earlier material which needs a higher level description to make apparent.

I. Instrumental Exposition (mm. 1-58)

		<u>mm. #s</u>
A.	melodic SC 3-1s {B01}, {234}, piano	1-8
	{012}, organ	19
	directed linear chromatic motion	
	C#5-(B#-B-A#-A)4	1-4
	vertical SC 4-5s {6780}	8
	{BA95}	16-19
	reiterated note G#	8-14
	falling tritones	12; 20
B.	brass event Eb = highest note	21-22
	cyclic chords {5A381}, tmbs, tmps	21
	SC (270/1), {2349}, tmp 1	21-22
	{47A}, organ	22
	{903}, brass	25
	SC 4-5s melodic {1237}, organ	24
	chord {B015}, piano	26
C.	piano/timpani duet	30-33; 44
	cyclic chords {492}, timpani	30-33
	{816B492}, brass	37
	SC (530/1), {AB13}, piano	38
	emphasized notes Eb	31-39
	G#	37-38
	reiterated note G	40-41
	"explosion" <sup>1</sup>	45-47
	falling tritones	47

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<sup>1</sup> Passages which start with a single low pitch and rapidly expand into the upper register are very typical in Varèse's music. This particular formation, identifiable by the descending melodic major third which initiates it, occurs many times in the work; hence the title "explosion" has been fixed.

I. Instrumental Exposition (continued)

	<u>mm.</u>	<u>#s</u>
D. ondes duet	48-53	
rapid organ figure	53	
cyclic sets {690}, tmp 2 {147}, tmbs	54	
SC (531/0), {3468}, tmp 2	58	

II. Vocal Exposition (mm. 59-124)

A. voice entry: i(7) in six octaves	59
notes G and D	
SC 3-5s in voice {670}, {016}	59-63
{B05}	75-76
SC 3-3s {541}, onde 2 {32B}, voice	59-63
{AB2}, voice	72
declamatory voice with piano chords	72-75
space-filling <sup>2</sup> {9AB01}, piano	65-66
{789AB}, voice	66
{6789A}, onde I	75-76
chromatic wedges, voice {345678}	67-71
falling tritones	75
brass event (repeated)	78
 B. "Que Tranquilas" <sup>3</sup>	
sparse version/complete voice part	80-81
full version/abbreviated voice part	88-90
"explosion"	82-83
repeated piano chords	84-87

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<sup>2</sup>Chromatic filling-in of an intervallic space.

<sup>3</sup>Although each appearance of this "theme" has a different text, it will be identified throughout the work by the text of its first appearance, "Que Tranquilas."

## B. (continued)

SC 3-5 {107}, voice	85-86
brass event	90-91
(i.e., {2349}, voice, from tmp 1, m. 21)	
note Eb	91

C. rapid figure, organ	91
note G#	93
space-filling {123456}, ondes	94-95
SC 3-5s, voice {650}	96-97
{781}	111-114
SC 4-5 {2348}, piano	98
"explosion"	102
SC 3-3 {430}, voice	102-103
note Eb	103-104
voice {B0} with repeated piano chords	106-108
voice re-entry: i(7) in six octaves	111
notes G# and D#	
voice wedges {56789AB01}	116-119
"Que Tranquilas"	121-124
full version/complete voice part	

III. Vocal Chant and Obscured Recall of Opening

(mm. 125-154)

recall of materials from mm. 3-15	125-131; 142-147
reiterated note C#	128-130
prayer-like chant in voice	129-154
$\frac{1}{4}$ tones in voice	133-149
chromatic sets, instruments	134-147
voice {B0} with piano chords	149-154

IV. Return and Concluding Motion (mm. 154-215)

	mm. #s
A. organ ostinato	154-159
directed linear chromatic motion	154-161
Ab3-A2-Bb3-B4-(C-C#)5	
reiterated note C#	161-162
repeated piano chords	169-171
"Que Tranquilas"	172-174
sparse version/complete voice part	
declamatory voice with piano chords	178-182
SC 3-3 {014}, voice	179-181
voice wedges {9AB01}	183-187
B. SC 4-1 motive {5746}, voice	189; 196
{9A8B}, piano/organ	207
{6435}, piano/tmp 4	212
{1203}, organ	213
SC 3-5 {0B6}, voice	191; 198-199
space-filling {456789AB0}, piano	194-195
"explosions"	200-203
	211-213
SC 4-5, melodic {6780}, tmp 1	205-206
voice {B0}	208-210
falling tritones	214-215

V. Coda<sup>4</sup> (mm. 216-256)

space-filling {345678}, tmbs 1 and 2	216
notes G# and Eb	217
reiterated note A	217-220

<sup>4</sup>The use of the words "exposition" and "coda" are used only to invoke qualitative associations, rather than imply direct correspondences with the apparatus of Sonata-allegro Form.

V. Coda (continued)

	<u>mm. #s</u>
SC 3-8 {751}, {640}, tmbs/piano	216
{9B3}, voice	225-226
ondes duets	221-224
	242-245
	250-256
$\frac{1}{4}$ tones in voice	222-223
piano/timpani duets	225; 235-236
"Que Tranquilas"	231-234
full version/complete voice part	
note Eb (enharmonic)	239
piano chords	239-241
organ ostinato	246-249

Commentary

The many returns of material shown in this analysis each take on a different function depending upon the frequency or nature of their return. Before beginning the discussion, five terms are introduced for the purpose of this chapter which classify each type of repetitive element.

- 1) Cueing Elements are those with a cueing function; they signal the beginning or end of a formal section.
- 2) Closure Groups are elements which appear many times within a section and which help indicate closure of that section by their discontinuation.

- 3) Continuous Elements are events which appear intermittently throughout several sections and therefore punctuate rather than delineate the form.
- 4) Spanning Elements are those which define spans within the composition by appearing once at the beginning of a section and indicate closure of that section by a second appearance.
- 5) Solitary Elements are those which have solitary appearances early in the work and indicate major structural returns on their recurrence later in the work.

The Instrumental and Vocal Expositions are distinguished from each other by closure groups which are mutually exclusive of each other: in the Instrumental Exposition, these groups are the cyclic chords and the piano/timpani duets; in the Vocal Exposition, the closure groups are the SCs 3-5 and 3-3. On the other hand, there are three closure groups which overlap and therefore bind the two into a larger hyper-section, the Instrumental/Vocal Exposition: the falling tritones, the brass event, and the "explosion." All of these are primary creators of "return" in the section Return and Concluding Motion, except for the piano/timpani duets, which return only in the Coda.

Two other major indicators of return are a pair of



solitary elements: the directed linear chromatic motion (which appears at the very beginning of Return and Concluding Motion, as it did in the Instrumental Exposition), and the declamatory voice and piano chords, having first appeared in the Vocal Exposition.

Two spanning elements articulate the boundaries of the Vocal Exposition: the i(7) spread over six octaves, and the chromatic voice wedges. A large-scale spanning element, the ondes duets, stretches across the entire length of the composition: a single duet in the Instrumental Exposition and the closure group of three duets in the Coda act as a binding element for the whole work.

The brass event and the rapid organ figure are both cueing elements which articulate sub-sections (i.e., the divisions A,B,C, etc. in the analysis) in the two Expositions. All three brass events are placed either at the close of a subdivision or at the point of division itself: subsections mm. 1-20 of the Instrumental Exposition, mm. 59-78 and 80-91 of the Vocal Exposition are all articulated in this way. The rapid organ figure likewise articulates subsections by its presence at or near the points of division: near the beginning of mm. 48-58 of the Instrumental Exposition and at the beginning of mm. 91-124 of the Vocal Exposition.

The section Vocal Chant... is the most individual of the five sections of the work, especially since it

contains virtually none of the elements mentioned so far; of course, it is the absence of familiar elements here which create the sense of "return" so strongly in the following sections. However, this section is not entirely insular, for it contains three cueing elements: 1) the reiterated note, an element which appears at the beginning of every section (except the Vocal Exposition); 2) The voice {BO}, which appears toward the ends of the three middle sections, and 3) the organ ostinato, which ends this section as well as the Coda.

The "Que Tranquilas" theme, although absent from the Vocal Chant... section, does not create a sense of return at m. 172, for it is present at so many disparate moments in the work. Thus, it appears to be a continuous element. However, the various guises in which it appears has a certain progression to it. The most complete versions are the ones at mm. 121-124 and mm. 231-234: they include both the organ figure on top (this is what is meant by "full version") and a complete vocal line, SC 4-15/29 (rather than the abbreviated version, SC 3-5). When we look at the layout of all the "Que Perfectas" passages then (see example 12), we see that it forms closure groups within both the Vocal Exposition and the hyper-section Return...and Coda, and that both groups conclude with a "complete version."

## Example 12 "Que Tranquilas" passages

<u>Inst.Exp.</u>	<u>Vocal Exp.</u>			<u>Chant</u>	<u>Return</u>	<u>Coda</u>
	incompl.	incompl.	compl.		incompl.	compl.
mm. #s	80	88	121		172	237

The analysis also reveals an interesting focus on the pitch-classes Eb and G# throughout the work. The pair receives emphasis twice in the Instrumental Exposition: first in close proximity (mm. 8-14, the reiterated G#, and mm. 21-22, the climactic Eb of the brass event), then simultaneously (m. 38, piano and organ on Eb, trumpet 1 and trombone 1 on G#). The pair appear once again in close proximity in the Vocal Exposition (Eb in voice, m. 91, and G# in trumpets 1 and 3, m. 93). The purpose of these emphasized pitch-classes appears to be directed toward the "voice re-entry" at m. 111, where they achieve their most obvious union: as a transposition by  $T_1^D$  of m. 59, it consists of the pitches G# and D# alone, spread across six octaves.

The pitch-class content of all the voice SC 3-5s are of interest to us as well: no two are at the same  $T_n/T_nI$  level until the Return and Concluding Motion, where {OB6} is heard at m. 191 and once again seven bars later. By its repetition and doubling by brass, onde I, and piano, this appearance of SC 3-5 creates the sense of having arrived climactically at its "goal version"---a

sensation reinforced by the intense emotional fervor of the passage. In at least two senses it does attain a goal: it is the last SC 3-5 in the work, and it presents the last of four possible Tn/TnI levels of SC 3-5 which share the common pcs {60}.<sup>5</sup>

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<sup>5</sup>The four levels are: {760} in mm. 59-61, {601} in m. 62, {605} in m. 97, and {B60} in mm. 191 and 198-199.