

# LIED BY BERIO AND LUMEN BY DONATONI: FROM ANALYSIS TO INTERPRETATION\*

FABIO DE SANCTIS DE BENEDICTIS  
Institute of Music "Pietro Mascagni", Livorno

Fabio DE SANCTIS DE BENEDICTIS graduated with a degree in Violin, Choir Music and in Composition with Giacomo Manzoni. He won various composition competitions and has been published by *fonè*, SAM and Ars Publica. His studies have been published in Italy and abroad, he participated in conferences such as *Analitica*, *Domus Galileiana*, *EuroMac 2011*, or at the Lemmens Instituut, and at Escola Superior de Artes Aplicadas. He taught Harmony and Counterpoint at the University of Pisa and currently teaches at the I.S.S.M. "Pietro Mascagni", Livorno.



## ABSTRACT

Musical Analysis is an intermediate discipline between Theory of Musical Composition and Aesthetics. It enables us to trace compositional processes and to acquire sufficient information for a well substantiated aesthetic evaluation. Musical Interpretation is already in itself a form of Musical Analysis, just as the latter does not exclude a preliminary interpretation of the examined work. These issues assume a particular importance and utility in contemporary music, whose complexity often conceals the broad musical sense. By analyzing Berio's *Lied* and Donatoni's *Lumen*, we intend to offer two examples that would allow us to derive hypotheses of interpretation. By the examination of the main composition techniques we manage to delineate the overall form and its relationship with the articulation of the musical parameters. Thus, *Lied* and *Lumen* reveal a well structured formal course, both narratively and teleologically, on the basis of which, on the one hand, the performer will be able to choose a coherent interpretation, conscious of the formal relations even over large surfaces, while, on the other hand, the hermeneutician will be able to use the same data to formulate a better founded interpretation of the significance of the work.

**Keywords:** Berio, Donatoni, composition techniques, form, figures

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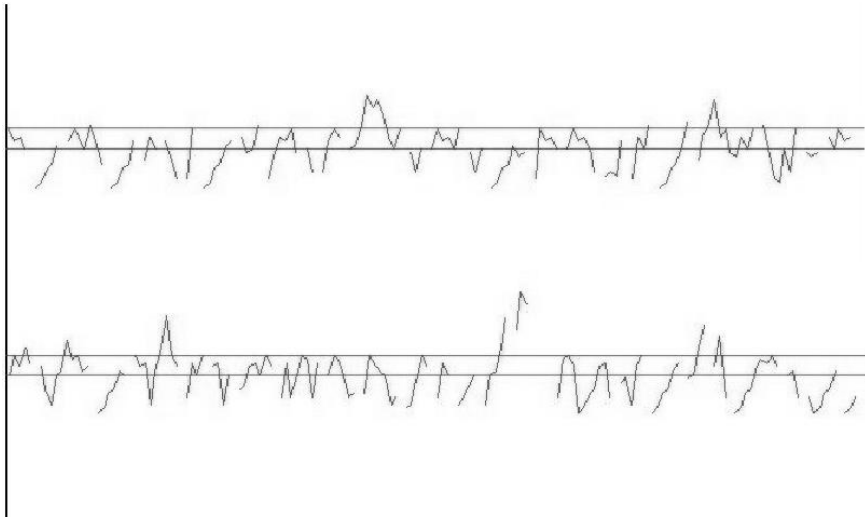
The Musical Analysis is an intermediary discipline between Theory of Composition and Aesthetics. By means of Musical Analysis we can go back to composition processes or to acquire sufficient information to formulate a well substantiated aesthetic valuation [2, p. 2]. The musical interpretation is already by itself a form of analysis, as well as analysis does not totally prescind from a preliminary interpretation of the work. These issues are of particular importance in contemporary repertoire, where complexity often conceals the broad musical sense. By analysing Berio's *Lied* and Donatoni's *Lumen* we intend to offer two examples of analysis from which to acquire hypothesis of interpretation.

As work written for instrument alone, can *Lied* be assimilated to a *Sequenza*, the *Sequenza IX* already existing for clarinet? From the virtuoso point of view certainly not, but, as we will see, from the point of view of composition technique certainly yes. Already to a first look it is possible to observe that the work gravitates around the initial pitches, that is the tetrachord and the grace notes, that have the tendency to propose themselves always in the same absolute pitches, for a better recognizability and coherence.



Figure 1: *Lied* beginning

This process extends to whole work. In Figure 2 the two horizontal lines point out the central *D* and *G*,<sup>55</sup> the diagram shows the notes of *Lied*, divided between first and second page of the score. It is immediate to observe that the greatest part of the piece unfolds around the register of the initial tetrachord.



**Figure 2:** Pitches diagram

We have a sort of “thematic web” founded on the initial elements, typical of the composition technique of the *Sequenze* and in general of Berio's post-serial style.

The segmentation based on breathing, pauses, fermatas, grace notes and recurrence of the initial tetrachord, results in different fragments.<sup>56</sup> From inside these fragments it is possible to enucleate smaller melodic units that will show typological affinity, according to their interval, rhythmic and dynamic conformation.<sup>57</sup> For example in Figure 3 we have the segmentation related to the first two lines. Above we have the main

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<sup>55</sup> The ambit of initial tetrachord. The pitches are considered as written, without considering the transposition at the tone below.  $C_3$  is the central C.

<sup>56</sup> About segmentation principles used, see [3].

<sup>57</sup> We have considered the pitch groups as sets, according to pitch-class set theory, and extended this concept to rhythmic and dynamic sets. In using pitch-class set theory we have used and developed the musical analysis techniques exposed in [7], [8] and [12].

segmentation, below we have the sets, according to the pitch-class set theory.

Figure 3: Segmentation example

It is possible to obtain a paradigmatic scheme<sup>58</sup> that shows the distribution of the smaller melodic units. The first two columns (named *a* and *b* in the scheme) gather the units that show affinity or derivation from the initial tetrachord and grace notes.<sup>59</sup>

	a	b	c	d	e	f	g	h	i	l	m	n	o	p
1	x	x												
2	x	x												
3	x		x	x	x									
4	x						x							
5	x							x						
6	x							x						
7	x							x						
8		x												
9	x													
10	x								x					
11														
12		x								x				
13	x				x						x	x		
14	x													
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27		x												
28					x									
29														
30		x												
31		x			x									
32														
33														
34		x			x									
35														

Figure 4: Paradigmatic scheme

<sup>58</sup> The paradigmatic scheme has been realized on the basis of what exposed in [11] and [15].

<sup>59</sup> The paradigmatic scheme, comprehensive of pitches, can be examined in [17].

The distribution of the syntagmas leads us to draw some conclusions:

- the first area indicates a first formal phase in which you alternate between the original items and a gradual introduction of new elements
- the following area returns to the initial elements
- the last area takes back the procedure of the first area, but with a gradual leaving from the tetrachord.

The succession of Tempo indications confirms, with some slight difference, the division into three parts underlined by the paradigmatic scheme. The tetrachord and the initial grace notes therefore are set to found the formal and perceptive orientation of the listener.

This results are also emphasized by further factors: the statistic distribution of the melodic groups, with prevalence of the initial ones; the tendency to complete the initial tetrachord, from a group of pitches to the following ones; the use of rhythmic and dynamic values that derive and develop the initial ones.<sup>60</sup> Therefore we would seem to have the confirmation of a “Thematic Web” based on initial elements.

*Lied* is not a *Sequenza*, since it does not introduce the virtuosity that countersign these latter.<sup>61</sup> Nevertheless *Sequenza IX* is the only one not to have a dedication, on the contrary of *Lied*. Is it possible to hypothesize that *Lied* is indeed the true clarinet *Sequenza*, or a sort of rethinking the latter? The *Sequenza* for clarinet was initially part of a project involving the voice, so much so that we will find it inside *La vera storia*, a work of musical theatre. Berio's interest in linguistics, structuralism and literary works is well known. Different musical pieces use texts of authors as Joyce, Sanguineti, Calvino, Proust, Machado, Brecht, Cummings, Levi-Strauss, Neruda. Besides we have the use of phonetics in *Sequenza III*, *Thema* and in *O King* (then in *Sinfonia*) as well as in other works. Finally the stream of consciousness is at the base of the composition technique in *Sinfonia*, conception resulting from Joyce and Beckett [9]. Many other literary texts are inferred by the ancient literature: Petrarca, Striggio, Omero, the Bible, the popular repertoire. Can we hypothesize a form of rhetoric, perhaps not

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<sup>60</sup> About rhythmic and dynamic relations we have established the concepts of prime rhythmic/dynamic form and of normal rhythmic/dynamic order, developing what exposed in [7]. For details see [17].

<sup>61</sup> To have a general view on Berio's *Sequenze*, see [1].

conscious, in the distribution and organization of the formal elements in lied? Or more simply can we suppose that Berio's familiarity with linguistic leads him to use redundancy as tool for generating coherence? Before answering to this question I would like to pass to examine *Lumen* by Donatoni.

*Lumen* by Donatoni is a work for piccolo, bass clarinet, celesta, vibraphone, viola and cello. The title is taken from the last incomplete work by Dallapiccola. On the basis of changes of texture, dynamic indications and orchestration, considered as distribution of the instruments and as attack modes, nine panels or sections can be drawn, characterized by a precise profile in the score design, very clear both to the reading and to the listening. According to the presence/absence of the vibraphone superior groupings can be drawn:

Table 1:

Sections:	1+2	3+4+5	6+7	8	9
Measures:	1a-38c	39a-58c	59a-65a	65b-68c	69a-79c
Length in halves	114	60	19	11	12
Vibraphone presence:	Yes	No	Yes	No	Yes

A complete analysis, not shown here, allows us to observe that:

- Section 2 is the *Double* of Section 1<sup>62</sup>
- Sections 3+4+5 follow a process of intensification, as in a *climax*
- Section 6 represents the peak of the score, immediately followed by a brief contrast in Section 7
- Section 8 decreases the strength as in an *anticlimax*
- Section 9 appears as a *Coda*.

This result violates the presumed independence of the panels in the formal writing of Donatoni, more times declared by the author and by some analysts.<sup>63</sup> In fact the form appears teleologically conceived.

The composition techniques of the work consist of processes mainly based on re-writing procedures that transform the figures according to a formal plane finalized to a goal. In Section 2 Donatoni turns the chords of

<sup>62</sup> The term *Double* is not inappropriate, because in Donatoni it is possible to retrace Baroque characteristics, as pointed out by Colazzo in [14], and by Pessina in [13].

<sup>63</sup> About formal panels independence one can see [5], pp. 33 and 89; [6], pp. 39-40 and 42-43; [14], pp. 24 and 160. On the contrary [4] and [16] show a well constructed form, almost classic, in their analysis respectively of Donatoni's *Refrain* and *Spiri*.

Section 1 into arpeggios, adding and subtracting the pitches in a retrograde way respect to the analogous filtering process of the preceding section.

Sezione 1: accordi di Vib. e Cel.

Sezione 2: arpeggi di Vib. e Cel.

Figure 5: pitches filtering in Sections 1-2

To the same way the celesta pitches in sections 3-5 are based on the union of the pitches of celesta and vibraphone in section 2, read in retrograde way (see Figure 6). Similarly, the piccolo pitches in sections 3-5 start with four notes, gradually adding new pitches, selected in a retrograde motion from the new pitches introduced by piccolo and bass clarinet in section 2.

The image displays a musical score for celesta, divided into two systems. The first system covers measures 37 to 40, and the second system covers measures 39 and 40. The score is written for piano and celesta. In the first system, measures 37 and 38 are marked with a '3' and a '5' above the piano part, indicating triplets and quintuplets. The celesta part in measures 37-38 has three passages circled in black. The second system starts at measure 39, which is marked 'ppp, sempre' in both parts. Measure 40 is marked '40 r' and '3' above the piano part. The celesta part in measure 40 has three passages circled in black. At the end of the score, there is a performance instruction: 'punta ppp, sempre tast.' The score includes various musical notations such as notes, rests, and dynamic markings.

**Figure 6:** Celesta pitches

Always in these sections the piccolo introduces phases of intensification through successive re-writings in which the addition of pitches and durations increases the rhythm by augmenting the number of pulses for unity of movement (see Figure 7).

**Figure 7:** Piccolo pitches

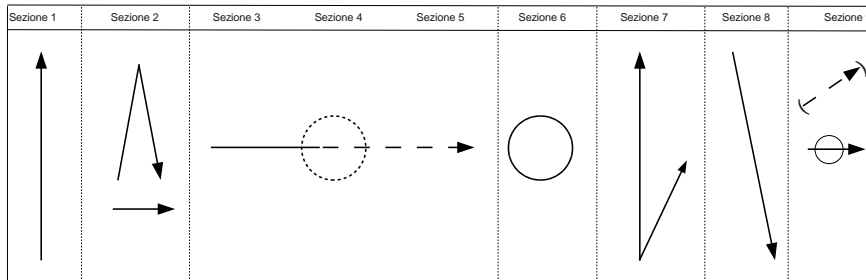
Re-writing processes can be identified also afterward:

- in Section 6 the instruments move exclusively inside structures based on the same pitches:  $D, F, G_b$
- always in this section, the durations of the vibraphone are inferred by the attacks of the chords in the first 4 measures
- similarly, chord attacks in section 7 take back the rhythm of measures 5-7a<sup>64</sup>
- the *anticlimax*, section 8, is based on aggregates that exhaust the chromatic total, and are deduced from the initial pitches or from their developments
- the final *Coda* summarizes the salient figures characteristics of *Lumen*, and the durations of piccolo and vibraphone are the same of the chord attacks of section 7, that is of measures 5-7a.

The frequently used processes of retrograde re-writing can be considered as the formal transposition of the continuous register alternating of the open strings of viola and cello; in fact along the whole work these instruments only use open strings, continually exchanging their

<sup>64</sup> By measure 7a we mean the first movement of that measure; similarly the term measure 7b would mean the second movement and so on.

ambit: when the cello performs the inferior bichord the viola has the superior one, and vice versa. The whole work is based on an extreme formal and figure coherence: from the verticality of initial chords we pass to the oblique profile of arpeggios of celesta and vibraphone in the second section, that produce in turn the horizontal profile of long notes of the winds; in the following sections the lines increase their speed introducing factors of periodic repetition; in the peak of the work the circularity reaches its apex; in the following sections the initial elements are taken back in shortened form, until to the *Coda* that summarizes the figures characteristics of the work as already said.



**Figure 8:** Figures coherence

To conclude, the two examined works overcome the limits of serial language recovering the communication by the use of repeated structures (figures). *Lied* shows characteristics of linguistic redundance likewise the *Sequenze*, almost setting itself as the true *Sequenza* for clarinet. *Lumen* by the interaction of figure and process delineates a teleological form.<sup>65</sup> The data acquired through the analysis allow so to the performer to choose an interpretation consistent with the formal course, aware of the relationships also over great distance, in a not dissimilar way from what it is possible in tonal music. The hermeneutician can use besides same data to formulate a more founded interpretation of the significance of the work.

<sup>65</sup> About figure and process see Donatoni's paper in [10].

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