

Structural encounters: a harmonic, thematic, and formal analysis of *Naturale* by Luciano Berio

Encontros estruturais: uma análise harmônica, temática e formal de *Naturale*, de Luciano Berio

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Resumo

Este artigo apresenta uma análise harmônica, temática e formal de *Naturale* (1985), de Luciano Berio, obra para viola, percussão e voz gravada que integra música folclórica siciliana com técnicas composicionais contemporâneas. Derivada de *Voci* (1984) e do *Corpus di Musiche Popolari Siciliane* (1957), *Naturale* constrói uma narrativa musical em camadas, combinando gravações de campo com performance ao vivo para explorar contrastes expressivos e coesão estrutural. A análise revela como a centralidade de alturas, a estrutura modular e a transformação temática moldam o arco dramático da peça. Destaca-se o papel do intérprete diante do intrincado jogo entre estrutura e espontaneidade, especialmente no tratamento de centros tonais recorrentes e da integração do material folclórico. A investigação seção por seção evidencia os procedimentos de reutilização estrutural, enquadramento harmônico e variação textural adotados por Berio. O estudo posiciona *Naturale* como uma obra híbrida que articula autenticidade etnográfica e vanguarda composicional por meio de uma abordagem analítica multidimensional.

Palavras-chave: *Naturale*, Luciano Berio, Análise Musical, Música Folclórica Siciliana.

Abstract

This article presents a harmonic, thematic, and formal analysis of *Naturale* (1985) by Luciano Berio, a work for viola, percussion, and pre-recorded voice that integrates Sicilian folk music with contemporary compositional techniques. Drawing from *Voci* (1984) and the *Corpus di Musiche Popolari Siciliane*, Berio constructs a layered musical narrative, combining archival recordings with live performance to explore expressive contrasts and structural cohesion. The analysis reveals how pitch centrality, modular formal design, and thematic transformation shape the work's dramaturgical arc. Emphasis is placed on the performer's role in navigating Berio's intricate interplay between structure and spontaneity, particularly through recurring pitch centers and the integration of folk-derived materials. A section-by-section investigation highlights Berio's method of structural reuse, harmonic framing, and textural variation, offering insights for both performers and scholars. The study positions *Naturale* as a hybrid composition that bridges ethnographic authenticity and avant-garde idioms through a multi-dimensional analytical approach.

Keywords: *Naturale*, Luciano Berio, Musical Analysis, Sicilian Folk Music.

Introduction

The in-depth study of a musical score remains an essential part of a serious performer's interpretative process. This engagement not only enables technical preparation but also fosters a nuanced and historically informed understanding of the work in question. To develop a sophisticated approach to performance, a musician must examine multiple aspects of a composition—its harmony, thematic content, and formal design.

This article offers an analytical investigation of *Naturale*, a work by Luciano Berio composed for viola, percussion, and recorded voice. Rooted in Sicilian folk songs, *Naturale* exemplifies Berio's singular ability to synthesize disparate musical languages, blending Western art music structures with vernacular traditions. The analysis presented here aims to deepen the performer's insight into the work's internal logic, structure, and pacing.

Luciano Berio (1925-2003) occupies a unique position in twentieth-century music. His artistic identity eludes straightforward categorization, marked instead by a continuous engagement with contradiction, plurality, and innovation. As Giovanni Morelli (2009, p. 133, 140-141) argues, Berio was not only an experimental composer but also an intellectual and cultural critic whose music interwove poetics and theory, history and sound, in complex and often paradoxical ways. His compositions reveal a persistent negotiation between the known and the unknown, between inherited traditions and radical reimagining of musical form.

Berio's compositional language is characterized by its lyrical intensity and structural sophistication. His work draws from a wide array of disciplines, including literature, linguistics, semiotics, and anthropology, reflecting his own personal poetic through lyricism MORELLI (2009, p. 132). This is particularly evident in *Naturale*, where his integration of folk materials into a contemporary idiom demonstrates both technical precision and deep cultural sensitivity.

Berio's *Naturale* (1985) emerges as a derivation of *Voci* (1984), scored for viola and two orchestras, revealing a compositional strategy grounded in material reuse, structural adaptation, and

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an engagement with folk material. While Berio is known for his intertextual compositional approach, *Naturale* offers a particularly focused lens through which to examine his methods of transformation and integration, both harmonic and formal, of existing material within new aesthetic frameworks. Both compositions belong to a lineage of works in which Berio engages with folk materials, including his earlier work called Folk Songs (1964), and represents a further exploration of transcription as transformation. According to Berio himself, (IRCAM), he conceived transcription as a process involving not only identification with the original material but also experimental modification, sometimes even deconstruction, seeking a constructive tension between fidelity and reinvention.

Naturale, by contrast to *Voci*, strips away the orchestral complexity, reconfiguring its dense textures into a leaner instrumentation of viola, percussion, and pre-recorded voice. Much of the viola material is transferred verbatim from *Voci*, with only minor alterations to sequencing and transitions. This process of derivation underscores Berio's compositional economy and his ability to generate structurally distinct works from the same source material by altering context and instrumentation.

For *Naturale* and *Voci* Berio draw on Sicilian folk songs transcribed by the Italian ethnomusicologist Alberto Favara². These transcriptions were published across four volumes between 1907 and 1959 under the title *Corpus di Musiche Popolari Siciliane* (TIBY, 1957). In *Naturale*, the viola, percussion, and recorded voice constitute three distinct musical layers whose interaction results in a unique and evocative sonic texture. The viola occupies a central position, oscillating between passages of structured freedom and reworked folk material, including work songs, love songs, street cries, and lullabies. The percussion generally serves a supporting role, functioning as a form of sonic commentary that underlines the viola's gestures. The final layer consists of a recorded voice, which intermittently interjects with seven street vendor songs, further enriching the work's folkloric and atmospheric character.

These recordings integrated into *Naturale* stem from a 1968 session in Palermo, Italy, where Berio recorded the local singer Giuseppe Celano, capturing *abbagnate*³ (street vendor calls) and traditional melodies. This is how Berio describes Celano:

He was a remarkable story-teller – he could tell tales for days on end, sometimes sang, and he spoke in a rhythmical manner marking the beat with his feet. He even

² Alberto Favara (1863-1923), a Sicilian composer and scholar, was also a serious folksong collector who engaged in field work, transcribing ethnic music between 1898 and 1923.

³ *Abbagnate* is the plural form of *Abbagnata*.

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had a sword and beat the rhythm with it. He had an astonishing singing technique which enabled him to sing all the *abbagnate*. That is what the cries of Sicilian street vendors are called...Celano introduced me to these tunes and I recorded them on tape. (OSMOND-SMITH, 1985, p. 149)

The addition of these recorded street vendor cries marks one of the most significant divergences between the two works. These recordings are inserted throughout *Naturale* and function not only as sonic artifacts but as structural pillars that delineate the form and generate new harmonic content. Berio draws pitch material from Celano's vocal lines to shape the harmonic environment of the accompanying instrumental writing. This results in an organic integration of archival sound into the live performance space, creating a structure where historical and contemporary, recorded and performed, coexist in mutual resonance.

Naturale was a commissioned work for a dance company and had its first performance on January 1st, 1985, shortly after *Voci* came out. It took place at the "Taormina Arte" festival with choreography by Amedeo Amodio, with scenery and costumes by Luisa Spinatelli; the dance company was Ater Balletto with Aldo Bennici on the viola (VENDRASCO, 2006, p. 54). Formally, it exhibits a more modular and episodic structure than *Voci*, accommodating its choreographic function for Ater Balletto. Transitions between sections are marked by temporal flexibility, such as fermatas and repeated ostinati, allowing the performers to respond to visual or spatial cues. This openness contrasts with the more tightly integrated orchestral writing of *Voci*, which Berio himself regarded as a "great orchestration manual," built from limited motivic material skillfully distributed across spatially separated ensembles (PIERMARTIRI, 2019, p. 641).

The collaboration with violist Aldo Bennici was fundamental in shaping *Naturale*. Bennici and Berio shared the knowledge of *Corpus di Musiche Popolari Siciliane*, with access to original folk songs, ranging from lullabies to laments. In a later interview, Bennici highlighted Berio's sensitivity to the expressive nuances of these materials, which are not simply quoted but reimagined within a complex formal and harmonic framework (PIERMARTIRI, 2019, p. 637). I will present the seven *abbagnate* sung by Peppino Celano in *Naturale*, with the original text in Sicilian language and its English translations.⁴ They will be referred to as VOCE I through VII, since that is how they are labeled in the score⁵. Berio did not comment on the meaning of their words for musical or semantic purposes;

⁴ Sicilian transcription from the recording, and translation to Italian by Mario Tranchina. Translation to English by the author.

⁵ The edition used for this work was: Luciano Berio "*Naturale (über sizilianische Melodien) für Viola, Schlagzeug und Zuspieldband (sizilianischer Volkssänger)*" © Copyright 1985 by Universal Edition A.G., Wien/UE 32565.

however, these translations may be useful for understanding the folkloric context of those aphorisms.

Approach to Analysis

No meaningful analysis of a musical work can be complete without a close examination of its structure. In this study, *Naturale* is analyzed through the lenses of harmony, thematic development, and formal architecture. The piece is segmented by rehearsal letters (from A to R), which correspond to shifts in musical material and are often aligned with different folk sources. Each section is examined individually, with attention given to how Berio manipulates, fragments, and recontextualizes both original and borrowed material.

Analytical methods offer essential tools for understanding the internal mechanisms of a musical work. Among the most foundational approaches are harmonic, thematic, and formal analyses, each addressing specific structural dimensions of a composition and contributing to a comprehensive interpretative framework for performers, theorists, and scholars alike.

Harmonic analysis investigates the vertical dimension of music, the structure and function of chords and their progressions within a tonal or post-tonal context. This type of analysis identifies tonal centers, modulations, cadences, and harmonic rhythm, aiming to understand how harmony organizes musical time and expression. Harmonic analysis can either serve as a generalized framework for exploring tonal principles or as a context-specific investigation into the unique harmonic procedures of a given work. It is particularly valuable for understanding narrative tension, resolution, and formal articulation within a composition.

Thematic analysis focuses on the horizontal aspect of music, particularly the identification, development, and transformation of musical themes and motifs. A theme, in this context, is not simply a melody but a unit of musical thought subject to variation and structural manipulation. Bent and Drabkin (1987, p. 85) emphasize that thematic analysis is central to understanding compositional process and formal design, especially in works that rely heavily on motivic development, such as sonata forms or variation sets. Through this method, analysts can trace how a composer introduces, contrasts, and reconfigures thematic material, thereby constructing meaning and coherence across a piece.

Formal analysis addresses the macro-structure of a musical work, identifying its large-scale sections and the relationships between them. This approach is rooted in the recognition of standard

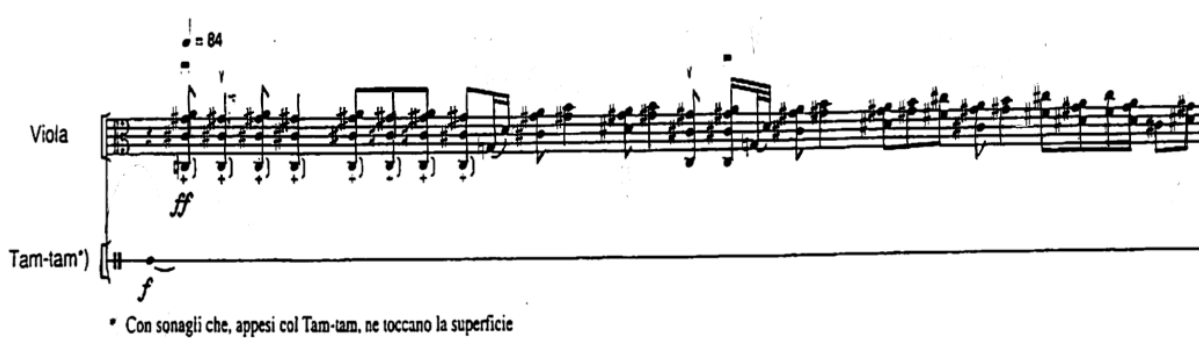
forms, binary, ternary, rondo, sonata, etc., but also extends to more fluid or hybrid structures, particularly in contemporary music. Formal analysis is not only descriptive but also interpretative (BENT; DRABKIN 1987, p. 2-3), offering insights into the listener's perception of musical time, repetition, contrast, and unity. Formal design often interacts with harmonic and thematic processes, and a full understanding of form benefits from the integration of all three analytical perspectives.

Together, these methodologies allow analysts to explore a composition from multiple angles, enriching both theoretical understanding and practical interpretation. When applied to complex and intertextual works like Luciano Berio's *Naturale*, such approaches are indispensable for grasping how the composer navigates the interplay between folk material and avant-garde idioms, structure and spontaneity, tradition and innovation. His use of folk material in *Naturale* transcends quotation or stylization. Instead, he constructs a musical language that is simultaneously grounded in ethnographic reality and subjected to its own formal structure.

The goal of this work is to provide a comprehensive resource for performers seeking a richer and more informed interpretative approach to *Naturale*. By illuminating the structural and expressive mechanisms of the piece, this analysis aspires to bridge the gap between theoretical insight and practical musicianship.

***Naturale*: The Work Section by Section**

Beginning



The image shows the beginning of the musical score for Luciano Berio's *Naturale*. It features two staves: Viola and Tam-tam. The Viola staff starts with a tempo marking of quarter note = 84. The music consists of dissonant chords of three and four notes, primarily using the outer open strings C and A. The Tam-tam part begins with a large stroke marked *f*. A footnote at the bottom reads: "• Con sonagli che, appesi col Tam-tam, ne toccano la superficie".

Figure 1: Beginning of *Naturale*

The piece starts with a big stroke of tam-tam, followed by the viola playing dissonant chords of three and four notes. In these chords, Berio uses the outer open strings C and A, to explore the natural resonance of the instrument. The middle strings play a perfect fifth (C# and G#), which generates dissonances (minor 9th and minor 2nd) against the open C and A strings respectively.

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Throughout this entire beginning dissonant intervals are constant, creating a feeling of unrest. Alternating between binary and ternary rhythms, the viola keeps playing alone vigorously, reminding the dance rhythms so common in Sicilian music. This is a powerful opening that sets the stage for what is to come in *Naturale*: the unveiling of several pictures of folk life in Sicily.

The predominant pitches heard at the viola line are at the top voice, which alternates between the notes A, B and C#. One important detail of the harmonic structure is found in the viola's middle register, which early on alternates between the C# and the D#. In a subtle and skillful transition, these two notes become later the "ostinato" that will accompany VOCE I.



Figure 2: Entrance of VOCE I

Berio extracted these two notes from the *abbagnata* sung by Peppino Celano in the VOCE I (recorded tape). These notes are the tonal center (C#) and its long sustained second scale degree (D#). This relation between C# and D# will be present in the viola line for the entire section.



Figure 3: Transcription of VOCE I⁶

With a very intense and poignant voice, Celano sings nothing more than a simple descending pentachord in the mixolydian mode on C# (G#-F#-E#-D#-C#). Berio creates tension and interest during VOCE I by contrasting the voice against the viola's dissonant pedal on the C string. He purposely built in some freedom for these moments when viola and recording play together. It is up to the violist to decide when exactly to move on once the voice approaches the end. That is also necessary because

⁶ During the transcription it was not possible to recognize any word sang in this *abbagnata*.

Section A (A la Sciacchitana)

In *Corpus* (TIBY, 1957, p. 340-341) Favara writes three versions of *Sciacchitana* that are slightly different from one another, although the overall melodic structure and the key remain similar. Berio follows very closely the strophic structure and the intervals of the original version. He adds quarter-tone inflections, upwards and downwards glissandi, intense vibrato and melismas. In the setting of the second song, he achieves a surprising effect by having the violist pluck a left-hand pizzicato on each note while simultaneously playing with the bow, imitating a glottal-stop. All of these effects add intensity to the traditional song's dramatic character, in a sense, emulating how a Sicilian singer would perform it. As opposed to the song's cadences that fall in C, G and F respectively, here the composer substitutes the pitches to C#, G# and F# maintaining F# as the pitch center of Section A, most likely to match the overall pitch plan of the piece.



Figure 7: Beginning of Section A Second Song

This is a major difference from the same passage in *Voci*, in which the setting of the second *Sciacchitana* is exactly as the original song, cadencing in C, G and F.

Section B

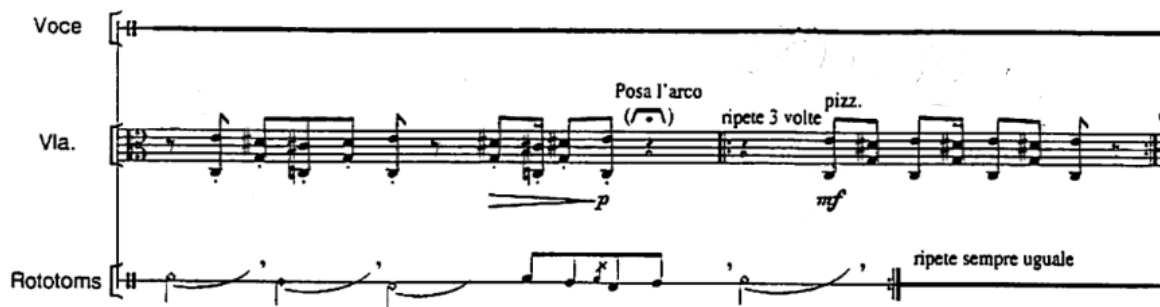
This section starts with a brief bridge of four notes (two with double stops) moving from the pitch center F# back to C#. Immediately a fortissimo outburst of eight 16th notes, played by viola and percussion together, recalls the same material of the opening. Here the percussion finally takes a more active role, playing the three rototoms.



Figure 8: Beginning of Section B

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Once the reprise of the opening material comes to an end the viola plays a repeated rhythmical figure of double stops “accompanying” VOCE II. The viola part clearly creates a sense of ambiguity, not really defining any tonality. The top part consists of a repetition of E-D#-C# (matching two of the pitches of VOCE II) and later E-D# in pizzicato, while the lower part is C-G (preparing for the C major of the next Section).



The image shows a musical score for three parts: Voce, Viola, and Rototoms. The Voce part is a single line with a double bar line at the beginning. The Viola part is in G major and features a repeated rhythmic figure of double stops. It includes markings for 'Posa l'arco (arco)', 'ripete 3 volte', and 'pizz.'. The Rototoms part is a single line with a double bar line at the beginning and a marking for 'ripete sempre uguale'.

Figure 9: Accompaniment of VOCE II

VOCE II⁸ is very similar to VOCE I, and also uses the C# pentachord (G#, F#, E#, D#, C#) always in descending motion.



The image shows a musical score for the transcription of VOCE II. It is a single line in G major with a double bar line at the beginning. The lyrics are: 'V'AR RI CRI A NU U CUORI U O EE. cievusi a 'st'ura v'arrifrisca - no'. The word '(Spoken)' is written above the final note.

Figure 10: Transcription of VOCE II

At the very last note of this *abbagnata*, Celano sings a C natural glissando downwards. It is interesting to notice that, according to the score, this C glissando should overlap with the beginning of the next Section, matching the new tonality of C major presented by the viola. It is not known how many recordings of *abbagnate* Berio had to choose from, but certainly this one presented itself in a very convenient key for him to make this transition.

⁸ This is what was possible to transcribe from this *abbagnata*'s text in Sicilian and its translation into English:

... v'arricrianu u cuooooori... uoeeeee... cievusi a 'st'ura v'arrifriscano!!!!

... they rejuvenate the heart ... uoeeeee... mulberry this time (of the day) they refresh you!

Section C (Abbagnata I)

This song is based on the tetrachord C-D-E-F, which is heard in the viola's A string. With a vigorous character, the viola plays the entire section alone, strumming a pizzicato on the four strings. The two lower strings (C and G) are always open sounding, which contributes to the volume and the projection of the harmony. The two upper strings take charge of the song moving within the tetrachord in intervals of sixths, with the exception of some eventual fifths.

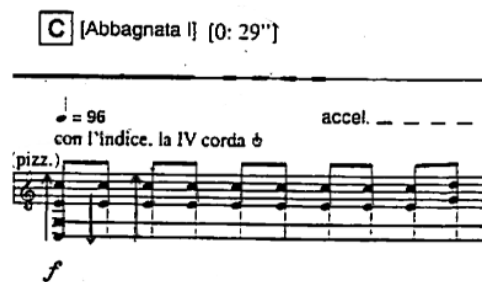


Figure 11: Beginning of Section C

This is the first time a major chord is clearly presented in the piece. Following the pattern of the song, the viola plays short phrases always ending in C. Berio added two quarter notes between the phrases, in which the violist hits all four strings with the palm of the hand in a form of extended technique. Towards the end of the passage, instead of finishing in a perfect cadence (G major - C major, as happens in *Voci*) the harmony takes an unexpected turn. In a chromatic modulation, G Major becomes E_b Major. This transition sets up the pitch center of the next section, Eb.

Figure 12: Transition to Section D

Section D

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This Section contains only VOCE III⁹. The voice sings an *abbagnata* with three notes: G \flat , F, E \flat . On occasion, the descending line includes an E between the F and the E \flat , resulting in an expressive chromatic melody.



Figure 13: Transcription of VOCE III

The viola continues to pizzicato a series of fifths (E \flat -B \flat and E-B) matching the voice's chromatic line. At the *molto espressivo*, towards the end of the section, the viola interacts more directly with the voice when both sustain long E flats, with some occasional grace notes, until reaching a final fermata. The mood here is gloomy, foreboding perhaps, and not at all restful. At this point the marimba has its first appearance, it plays the interval of a fifth (C-G) in pianissimo, using the technique called harmonic tremolo. That fifth builds a C minor chord with the viola's E \flat , which is the next section's harmonic base. Once more the percussion helps to make the connection to the next section.

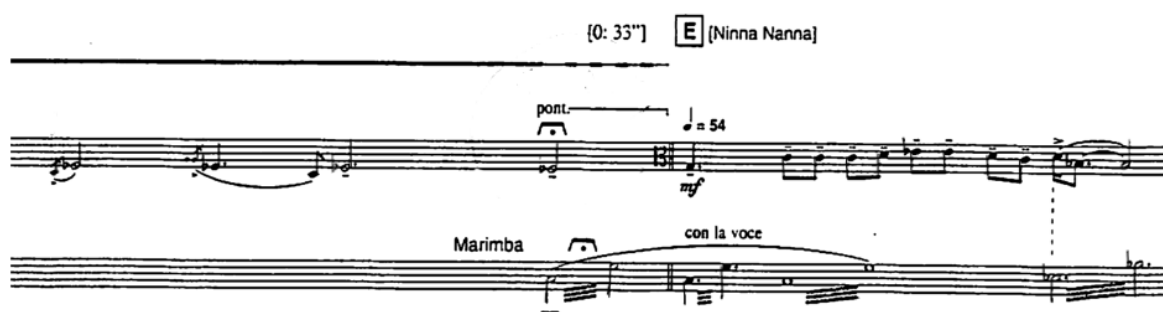


Figure 14: Transition to Section E

⁹ This is the text in Sicilian and its translation into English:

Facciativi ca sunnu asinieddi ru mari ri Carini, asineddelli hannu l'uovaaaaaaa! Asinieddi sunnu a vossia, a ssa vossia s'accatta asinieddi di Carini sunnu cu l'uova. Asineddelli hannu l'uovaaaaaaa.

Look closely to the counter they are Haddock's from the sea of Carini, the Haddock have eggs! Listen they are Haddock, if you buy the Haddock, they are from Carini, they have eggs! The Haddock have eggs!

Section E (Ninna Nanna)

This section presents one of *Naturale*'s most touching moments. The mode is C Aeolian and the melody repeats three times, each time with an intensification of the dynamics. This is one of the few places in the piece where we find triadic chords between marimba and viola, without much dissonance.

Section F

Section F does not include a song, instead, it is a transition that will introduce the following song, *Ladata* (Section G). The section consists of three phrases: a brief bridge followed by two variations on *Ladata*'s last phrase (the last 12 notes with the preceding grace notes). Berio sets these two variations in a way that they function as a prelude to the actual song.

This section is a good example of how Berio builds transitions and bridges in *Naturale*. He usually substitutes or modifies one element at a time, overlapping the changes, creating in this way a sense of continuity. This element is usually a pitch, either in the viola or in the percussion. For example, in the viola part, he needs to connect the previous section's last note (G open string) to a C on the A string. Note in the excerpt how he keeps a pedal on G while working his way up to the C (passing through E^b and F[#]). Once the C is achieved, he drops the pedal and continues on with the first variation (*mezzo-forte*).



Figure 15: Section F

The marimba holds a harmonic tremolo (C-G) throughout the bridge and the first variation. This harmonic tremolo will move up a whole-step to cadence on D-A. The second variation starts with the same C as the first one, but now, above this new pedal (D-A).



Figure 16: Marimba Cadence and Beginning of Second Variation

This second variation, which is not much different from the first one, will arrive at the same A as before, preparing the entrance of Ladata. The marimba will cadence in a similar fashion before returning to D-A, serving once again to make a connection to the next Section (Figure 17). Section G (Ladata).

There are a total of four slow phrases in this chant. The marimba continues to hold the soft tremolo on the fifth (D-A) until the end of the first phrase, while the viola plays the melody centered in A. Berio creates here a special sonority resulting from the ambiguity of the melody in A on top of the accompaniment in D-A. He reinterprets the song by adding another dimension, making it somewhat bimodal.

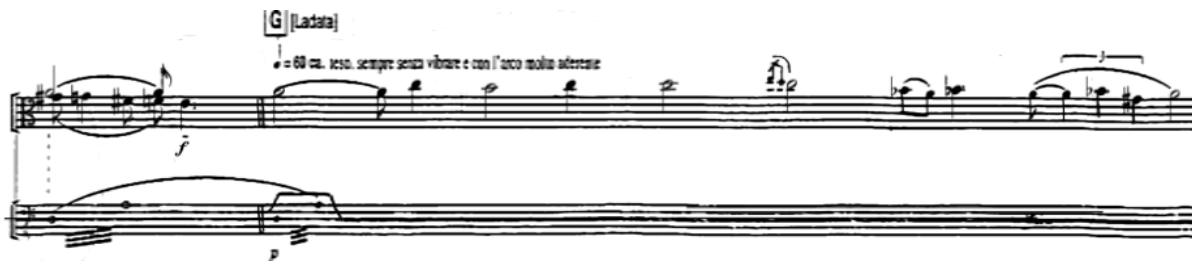


Figure 17: Transition to Section G

When the second phrase starts, the marimba fades out upon the score indication *sparire* (disappearing), and the viola continues until reaching the final A. Immediately VOCE IV10 starts on the same pitch as the viola ended (A), keeping a thread of continuity to the next section.

¹⁰ This is what was possible to transcribe from this *abbagnata's* text and its translation into English:

...nun e' veru ca vunnu na fieddaaaaaa, ma ruciiii! I gelati aviemu stasira, gilati! Una fiedda due soldi, chi beddu culuri, vossia avvicina! I gilati aviemu stasiraaaaa!

...truly, you want a slice, it is sweet! We have "ice cream or cold dessert" this evening, "ice cream"! One slice two "mon-eyes", what beautiful color, come closer! We have "ice cream" tonight!

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Voce IV

NUN E' VE RU CA VUO NNU NA FIE DA MA RU CI

(Spoken)
I gelati aviemu stasira, gilati! Una fiedda due soldi, chi beddu culuri, vossia avvicina! I gilati aviemu stasiraaaaa!

The image shows a musical score for a voice part. The top staff is a treble clef with a melody. Below the staff are the lyrics: "NUN E' VE RU CA VUO NNU NA FIE DA MA RU CI". Below that is a spoken section in a different clef, with the text: "(Spoken) I gelati aviemu stasira, gilati! Una fiedda due soldi, chi beddu culuri, vossia avvicina! I gilati aviemu stasiraaaaa!".

Figure 18: Transcription of VOCE IV

The viola pitches during VOCE IV are repetitions of the following section song's first notes: a drone on open string A over quarter notes with G# appoggiaturas, the final one has a long glissando from G# to A.

La 2^a volta
VOCE IV

ripete 4 volte

Tam-tam

Rototoms

The image shows a musical score for the accompaniment of VOCE IV. It features two staves. The top staff is a treble clef with a melody. The bottom staff is a bass clef with a drum part. The drum part includes "Tam-tam" and "Rototoms". The melody is marked "ripete 4 volte" and "La 2^a volta VOCE IV".

Figure 19: Accompaniment to VOCE IV

Section H (Abbagnata II)

The two songs that form this Section are the very first songs in the Instrumental Music chapter of *Corpus* (TIBY, 1957, n. 749 and 750); The reason for Berio's designation of this section as 'Abbagnata' remains unclear. In both *Voci* and *Naturale* these two tunes are set in the form ABA, La Scala – LuViddanu – La Scala. For La Scala, Berio changes only some of the appoggiaturas probably doing so in order to keep the passage on only two strings, he also omits the original bass line for instrumentation reasons.

[H] (Abbagnata II)

[0: 30"]

Voce

$\text{♩} = 92$
(*esitando*)

Vla.

Rototoms

The image shows a musical score for the beginning of Section H. It features three staves: Voce, Vla. (Viola), and Rototoms. The Voce staff has a treble clef and a melody. The Vla. staff has a treble clef and a melody. The Rototoms staff has a bass clef and a drum part. The score is marked "[H] (Abbagnata II)" and "[0: 30"]". The tempo is marked " $\text{♩} = 92$ (*esitando*)".

Figure 20: Beginning of Section H

To create greater contrast between the first and second parts of *Lu Viddanu*, other than the original major/minor, the composer changes the first part to triple meter and sets a faster metronome marking to the second.



Figure 21: Change to Triple Meter

At the end of the ABA form, the viola plays a long open string fifth (D-A). A decrescendo to a piano generates a certain expectation for the next section.

Section I

This entire section comes from *Voci* (p.70-74) where it serves as transition between *Tubbiana* (Section N in *Naturale*) and *A la Marsalisa* (non-existent in *Naturale*). There are no original folk songs set in this section; instead, Berio takes liberties in elaborating on the folk material from the songs. The pitch is still centered around D and for the entire section the music revolves around the viola's open D string, which is constantly played. The music is erratic in character with abrupt changes of dynamics, as if there are two parts in lively discourse. It is possible to identify these two parts or voices by the divergent high and low registers as well as by motivic differences.

The first motive identified is a group of three descending notes (C-B-A) played in the A string. These are the same first three notes of the song *A la Marsalisa* (found only in *Voci*). An ascending chromatic scale of three sets of sixteenth note triplets leads in a crescendo to the three-note descending figure in both first and last appearances of the motive, as if framing the transition.



Figure 22: Chromatic Scale with A la Marsalisa Motive

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Later in the piece, this combination happens twice, as a bridge, connecting sections: 1) at the end of VOCE V to Section K, and 2) at the end of Section N (Tubbiana).

Responding to this motive, the answers in the lower register are always played in the G string. This musical discussion does not seem to reach any conclusion. All the efforts of the lower part in trying to find a way out always conclude in a glissando, which closes the unison with the open D string.



Figure 23: Higher Versus Lower Register in Section I

Section J

A musical score for the beginning of Section J. It features two staves. The upper staff is for a string instrument (viola) and the lower staff is for a Marimba. The score includes dynamics such as *f*, *pp*, *mf*, and *ff*. There are markings for 'pont.' and a box labeled 'J' above the upper staff.

Figure 24: Beginning of Section J

This section starts with a fortissimo outburst, breaking the “vicious circle” that ruled the previous section. The viola plays a four-string tremolo, reminding the same technique used in Berio’s *Sequenza VI*; the marimba simultaneously plays a D trill to intensify this abrupt disruption. After two beats of tremolo, the viola comes back to the work’s introduction material, alternating the rhythm between binary and ternary. The cluster is formed this time by C-Bb-G-A. With slight chromatic movements in the inner voices, the pitch passes briefly through the same C#-G# (from the beginning of the work) only to settle a half-step lower on G.

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After the outburst's brief intervention, the music calms down and the C-B-A motive from the previous section is heard. Immediately VOCE V11 starts, and we hear Celano's voice singing a descending melody in D major.

Voce V

QUA TTRU A LI VI CA SU BIE -DDI QUA TTRU A MI CI SUO DI RI CHI DDI NU O VE AN CUO RA N'AIU

CHI SU BIE LLI ST'OO LI VE Unn'e' tavola si un c'e' un prattinu c'oliveeee!

(Spoken)

Figure 25: Transcription of VOCE V

Along with the voice recording, the viola plays a line built over a sequence of thirds (G-E, F#-D) extracted from the end of the singer's part. This sequence is repeated six times using different rhythm, double stops, and ponticello. The percussion is active during the VOCE V playing written out scattered short notes, mostly around pitch D. To close the section the viola synchronizes with the end of the recording, playing the same ascending chromatic scale from Section I, only this time the last notes are C-B-B \flat , and in a faster rhythm. Note how the crescendo to a fortissimo will catapult this scale to the striking start of Section K.

[0: 35''] **K**

pont. (p) (f) pont. $\text{♩} = 72/86$ **ff**

Figure 26: Sequence of Thirds in VOCE V

¹¹ This is the text and its translation into English:

Quattro alivi ca su bieddi quattu amici suoooddi; ri chiddi nuove ancuora n'aaaaaiu. Chi su bielli st'oliveeee. Unn'e' tavola si un c'e' un prattinu c'oliveeee!

Four beautiful olives, four friends of yours; I still have the fresh ones, they are beautiful these olives, there is no table without a plate of olives!

Section K

This section is the dramatic center of the entire work. It is the section with the most fortissimo markings in the piece and perhaps the longest; therefore, it can be divided into two parts. There is no indication in the score about any folk song source for this section's first and second parts. According to Piermartiri (2018, p. 13-14) the song which inspired Berio's elaboration on Section K first part is called Chiantu. He elaborates on the song's intervals (mostly in F minor) and intertwines it with figures, some of them quoting elements from his previous works. He uses left-hand pizzicato (from *Naturale's* Section O), pizzicato bariolage, two finger pizzicato, four string tremolo (from *Sequenza VI*), and repeated notes (from *Sequenza VIII*).



Figure 27: Berio's Transcription of Chiantu Second System

Piermartiri (2018, p. 16) explains that in Chiantu's fourth system there is an important motive that will permeate *Naturale* until the end (Ab-Ab-F, repeated three times), called mourning motive (Figure 28). It is used as a connecting motive, resembling a leitmotif. It is stated several times in this section, and reappears before and during VOCE VII, and as an interruption of the final and last song, *Ninna Nanna di Carini*.

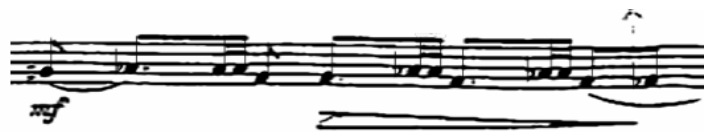


Figure 28: Mourning Motive (treble clef)

The viola starts the second thematic zone in this section with a long passage in pizzicato in a Baroque-like bariolage with the open A string. This passage evokes Bach's Chaconne from his Partita II, which in its turn inspired Berio to compose his *Sequenza VIII* for violin (PIERMARTIRI, 2018, p. 16).



Figure 29: Section K Second Part

The pitch center here is D, and it seems to be in Aeolian mode with some altered intervals (more specifically, raised 7th and lowered 9th). These intervals bring a Middle eastern flavor to the melody, enhancing its expressivity.

Once this pizzicato melody arrives to its end, confirmation of the pitch center D is heard in the continuous repetition of D and A open strings. One last pizzicato chord in *sforzandissimo* defines the end of the section. The next sound to be heard is Celano's crude voice in the recording.

Section L

This section encompasses only VOCE VI¹², which is in D major. Celano's melody alternates cadence points in the first and second grades of the scale, similarly to VOCE I and V.

Voce VI

The image shows a musical transcription of VOCE VI. It consists of two staves of music. The first staff has the following lyrics: MA PI VI E RU RU PU GNA TI N'A DEA RI U NA PU ZZIE DA. The second staff has the following lyrics: VE RA RU CI UO RE Titidda, Rusidda comu t'a passi uora? Bedda ruci uora, MUR TI DDA. The word "(Spoken)" is written above the second staff. The music is in D major and features a melodic line with various intervals and a bass line.

Figure 30: Transcription of VOCE VI

The marimba plays an ostinato in tremolo alternating melodically the pitches of the D major tetrachord (D-E-F#-G) over a bass pedal on the note D. The score instructs the viola to play the two

¹² This is the text and its translation into English:

Ma pi vieru ru pugna ti n'a deeari, ...una puzzedda vera ruci uoreee! Titidda, Rusidda comu t'a passi uora? Bedda ruci uora, murtidda!

But I need to give you two handfuls, (one portion) very sweet now! Titidda, Rusidda, how are you feeling now? Very sweet now, blueberries!

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open strings G and D in double stop repeating at will with accents. Even though the voice and the percussion are clearly in D major, the viola's lower note gives a different flavor to the passage suggesting another pitch center, G. The viola's G-D can be heard as anticipating the next section's tonality, G major (even though an open 5th does not characterize a tonality). This game of pitch center "displacement" will continue all through Section M, only resolving at the end of it.



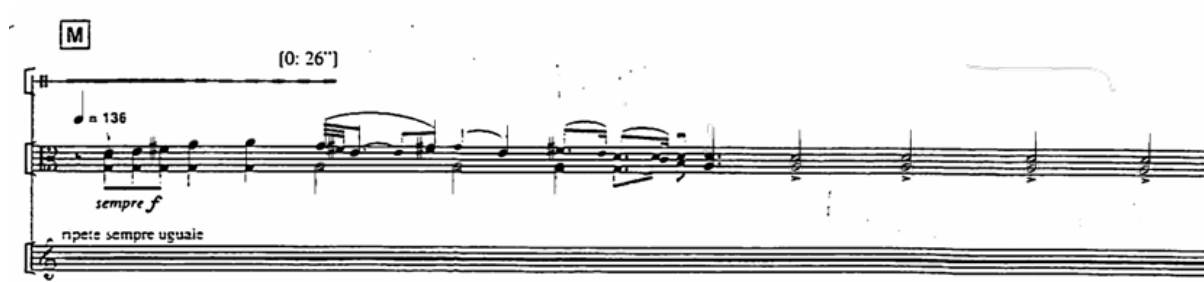
The image shows a musical score for Section L. It features two staves: the upper staff is for Viola and the lower staff is for Marimba. The Viola part begins with a dynamic marking of *sfz* and includes the instruction "(riprendere arco a piacere con accento)". A tempo marking of $\text{♩} = 136$ is present. The Marimba part starts with a dynamic marking of *mf*. A bracket above the Viola staff indicates a duration of "20' ca.". The score is written in a single system.

Figure 31: Section L

Section M

The song set in this section is marked by a rhythmically strong pulse. It is called *Tunazione de li Catitari* and is the same found in *Voci* (p.37-43). It is an ancient female work song used by the women of the Catitu, a sailor neighborhood of Trapani.

The viola plays two full statements of the melody, each statement follows the couplet's pattern of the text: first line is the first phrase and cadences in the dominant, second line is the second phrase and finishes in the tonic. The four, sometimes three, accented half-notes present in all the cadences were added by Berio to keep the rhythmic drive and it is very similar to what would be the beating of the cordage on the marble blocks for the work song.



The image shows a musical score for Section M. It features two staves: the upper staff is for Viola and the lower staff is for Marimba. The Viola part begins with a dynamic marking of *sempre f* and includes the instruction "ripete sempre uguale". A tempo marking of $\text{♩} = 136$ is present. The Marimba part starts with a dynamic marking of *mf*. A bracket above the Viola staff indicates a duration of "(0: 26'")". The score is written in a single system.

Figure 32: Beginning of Section M

At the end of the first statement, when the viola arrives at the tonic, G-D open strings, the marimba changes the pitches of its pattern to B-C#-D-E over a G in the bass, continuing the game of “displacement” Berio started last section. These notes in the marimba (B-C#-D-E) plus an A, are the same notes that start the melody in the viola’s second statement, which is now in D major.



Figure 33: Displacement of Harmony

Again, there is an ambiguity created by the “displacement” between the melody (in D) and the accompaniment (B-C#-D-E over a G) which will finally resolve when the final cadence is reached: viola in D, marimba D-E-F#-G (no drone in the bass).

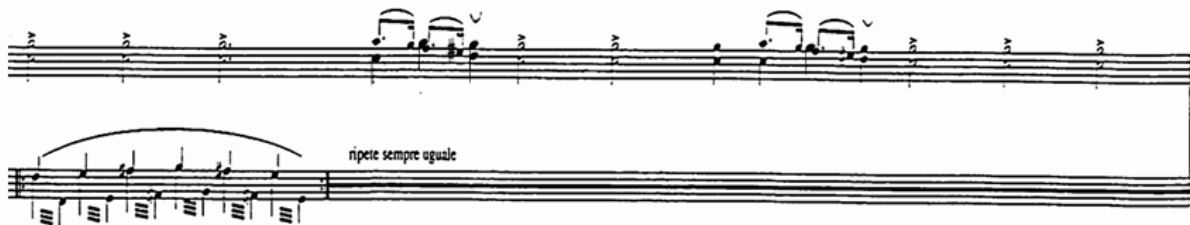


Figure 34: Final Cadence on D (Section M)

The cadenza’s dotted 8th note rhythm, with its accented half-notes, is repeated twice as if establishing the arrival point, but that does not last long. In an abrupt break of the established resolution, a new conflict arises as the viola outbursts in a fortissimo four string tremolo followed by three accented chords. The marimba stops playing while this brief transition evokes the beginning of the piece. These chords played by the viola present similar interval display as the ones that started the piece (7ths, 9ths and 2nds). The two outer strings are kept open while the middle voices move

ascending until only G# and A remain. They are played col legno joined by the rototoms in preparation to the next section. It is interesting to note how these are the same two pitches that start Tubbiana.

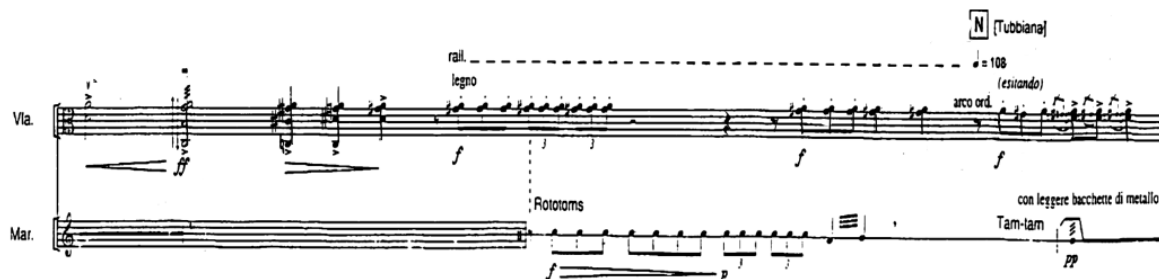


Figure 35: Viola Outburst Before Section N

Section N (Tubbiana)

Tubbiana is a dancing song from Palermo found in the instrumental chapter of *Corpus* under n. 753. Like most Sicilian music, the original is in 6/8 but Berio surprisingly transformed it in a simple meter, extracting only the first from the four sections of the original dance.



Figure 36: Tubbiana Melody in Simple Meter

During this song, a swishy atmosphere is provided by the tam-tam, being lightly struck with metal mallets. At the end of the tune, we find the same scale that started and ended Section I. Berio sets it again as a connection from one tune to the following one. In conjunction with that, he craftily uses a few notes from the next song as an introduction to the new section, like other transitions seen earlier. In this case these notes are the three descending notes (D, C, B).



Figure 37: Transition to Section O

Section O

It is in *Voci* (pp. 86-89) that it is possible to identify this section's song, *Canto di Lavoro dei Pescatori di Corallo* (Work Song of the Corral Fishermen). Berio maintains the key of G major but presents it in a very interesting way. He transforms many of the notes into acciaccatura, creating a rhythmic ornamentation that enriches the original. These notes are to be played pizzicato with the left hand at the same time they are also played by the bow. Bennici mentions that this effect is supposed to sound like shells (PIERMARTIRI, 2019, p. 644).



Figure 38: Melody in Section O

This sailor song is the last truly happy moment in the piece, and it consists of two repeated phrases. After this melody the music starts preparing for another transition leading to more conflict and sorrow, and finally to the end of the work. The last four notes of this song (D, C, A, G) are repeated three times, each slightly different: first with slur in pianissimo, second with a D \flat instead of D, and third with A \flat instead of A in mezzo forte.



Figure 39: Transition with Pitch Unfolding

Skillfully, Berio uses pitch unfolding once more, gradually changing the character from joyful to sorrow. *Naturale* is finally moving towards its end when the pitch center arrives at D \flat , which enharmonically is the same as C \sharp , this way closing a long trajectory that started at the beginning.

Section P

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A frantic run of 16th notes precedes the dramatic entrance of Section P. This is the last fortissimo outburst of the work, a four-string tremolo, purposely breaking the relative calmness. It acts the same way as the ones at Section J and right before Section N.



Figure 40: Beginning of Section P

This is a transitional section in which it is possible to see Berio's process of auto-citation and transformation. The short motive used only once in *Voci* and brought to *Naturale* (Figure 5), returns here after the tremolos. This motive suffers the same process of pitch unfolding described in the previous section, where it is transformed into the mourning motive, presented at Figure 28 (PIERMARTIRI, 2018).¹³ Note how the F# and the C# become gradually F and C as the music calms down and finally only the F remains, with the return of the two A, 32nd notes.



Figure 41: Pitch Unfolding to the Mourning Motive

This entire passage requires great artistry from the performer, for it covers a wide variety of emotions and techniques. From the enraged four-string tremolo until the inert grief of the mourning motive, there are several gradual mood changes.

Underneath all this turmoil the marimba returns softly playing a harmonic tremolo (Ab-D \flat). When this interval of fourth meets the F, from the mourning motive, the three pitches of a D \flat major triad are present, although its treatment does not sound tonal. The fact that matter is that D \flat (or C#) is established, creating a pitch center return to the beginning of the work.

¹³ First seen in Section K.

Section Q

The harmonic return to *Naturale*'s beginning is ratified by the last entrance of the recorded voice, VOCE VII. Celano sings the same descending C# pentachord (G#-F#-E#-D#-C#) as in VOCE I and II, and the viola plays the pitches of the mourning motive (Ab-F) against the open G string creating dissonant intervals.

The image shows a musical score for Section Q. It consists of three staves: Voce VII, Viola, and Marimba. The Voce VII staff has a box labeled 'Q' and contains the text 'VOCE VII', 'passi rapidi', '(0. 20")', '(spari)', and 'campane'. The Viola staff has the instruction 'senza vibrare' and a tempo marking '♩ = 50'. The Marimba staff has the instruction 'Rotoloms con bacchette di legno' and a tempo marking '♩ = 50'. Dynamic markings include 'p', 'pp', and 'ff'.

Figure 42: Section Q

Once more, as in Sections E and G, the marimba tremolo (Db-Ab) makes a connection between two sections. At a certain point the viola plays the fifth Db-A, without the low G, but still sounds dissonant, reinforcing the idea that there is not a feeling of tonality in the organization of these pitches. To reinforce the dissonances there is also a glissando to an A clashing with the already established Ab.

The *abbagnata* in VOCE VII¹⁴ is the shortest one, only seventeen seconds long. It seems that he is selling firecrackers, which are very common during religious festivities.

The image shows a musical transcription of VOCE VII. It consists of two staves. The top staff is a vocal line with the lyrics: 'QUAN TU A- MU A SPI LA RI A STU IU O CU RI FUO CU'. The bottom staff is a vocal line with the lyrics: '(Spoken) Bum! Bum!'.

Figure 43: Transcription of VOCE VII

¹⁴ This is what was possible to transcribe from this *abbagnata*'s text and its translation into English:

Quantu amu a spilari a fuocu...Bum! Bum!

How much do we have to pay for these fireworks...Bum! Bum!

What follows in the recording, however, is an intriguing sequence of sounds. Celano's voice shouts "Boom! Boom!" There are some popping noises in the background. Suddenly, loud real gunshots surprise the listener, dominating the scene. Once the shots are gone, the only sounds left are the viola playing pianissimo and five church bell strikes. To elucidate this sequence, Bennici (PIERMARTIRI, 2019, p. 644) tells the amusing story behind those noises and the gun shots:

LP¹⁵: Here at VOCE VII Celano sings a story that one is shot and dies.

AB¹⁶: This is a Luciano Berio story, the real story is this: Celano speaks and says "How beautiful the ocufocu." Ocufocu are the fireworks. And, on this big frying pan, he has chickpeas, do you know what chickpeas are? In Sicily, they throw those in a pan and call it roasted curdled chickpeas. When you put them on the pan it explodes and make the sound pahhh. The same way chestnuts also explode. So, I could not convince Berio that the machine guns had nothing to do with the blows. But, consider that Berio always had in mind the student protests of 1968, those that had police intervention. Despite the fact that I told him it had nothing to do with the mafia. But, he wanted to insert that anyway so he put in those rounds of gunfire. It's quite a story; from machine-gun shots to chickpeas in a large frying pan is a long way. Besides, chickpeas on a pan do not kill anyone.

With these sound effects Berio certainly achieves a great impact on the listener. His intent is to symbolize the "death" that had being present in the piece for a long time.

Section R (Ninna Nanna di Carini)

The actual five church bells inserted in the recording are labeled as part of Section R and overlap well beyond the lullaby's first phrase. It seems that Berio was seeking to create a special sonority for the end of the work, one that could imply different meanings, an open end. Bennici mentions: "Initially, there was only the viola, at the first edition. Then, as he went on, he added other things."

The song chosen to end *Naturale* is a unique lullaby in B Locrian mode, which Berio called *Ninna Nanna di Carini*. In *Corpus* this song is n. 525 and bears the name *Alavò*, from Carini, a town in the Province of Palermo. The song was transcribed by Berio with minor rhythmical adjustments to the original melody. He also added a lower A before the final B, giving a rocking quality to it. The

¹⁵ Leonardo Piermartiri.

¹⁶ Aldo Bennici.

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viola plays the melody the entire time with harmonics, an effect that gives an ethereal quality to the sound.

After the first phrase, the music is interrupted by a return of the mourning motive,¹⁷ recalling sufferings of the past. That is only a brief disruption of the song's serenity, which soon restarts its second phrase. This time the marimba joins with a harmonic tremolo in triple piano enhancing the delicacy of the moment.

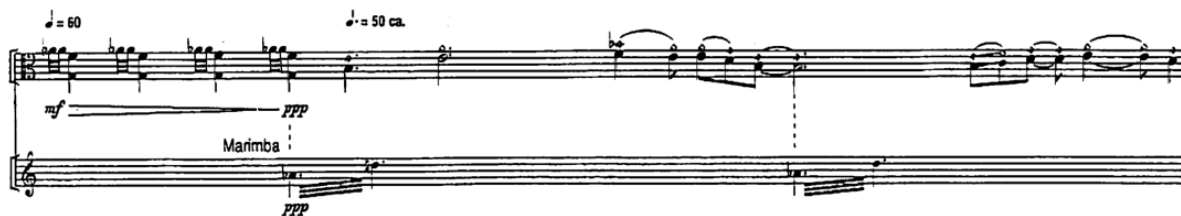


Figure 44: Mourning Motive followed by Marimba Tremolo

With a constant D in the top and a chromatic descending line from A@ to E, the marimba line is quite ambiguous, suggesting the mode to be in E Phrygian. However, because this line is not very defining and the melody had been in the viola quite for a while, I will consider that in B Locrian. *Naturale* ends with two repetitions of the melody's last six notes and glissandos between the notes A and B.

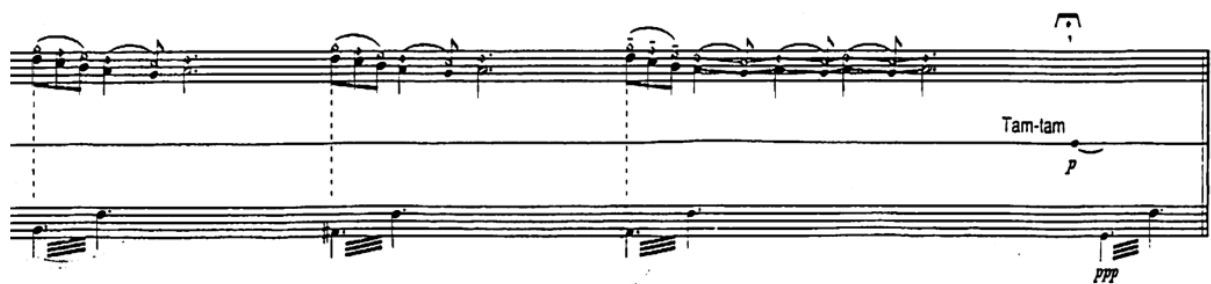


Figure 45: End of *Naturale*

Bennici (PIERMARTIRI, 2019, p. 644-645) suggests an image as if someone is closing the scene, whistling because he is leaving and getting softer every time. In fact, the interpretation of the scene is personal, both to the performer and the listener. However, there are no better words to describe the summary of this musical journey than Bennici's own words:

¹⁷ Originally in *Voci* this interruption is a series of repeated notes recalling *Sequenza VIII*.

... you find yourself ending up with a lullaby, which can have different meanings. In this case, it may seem like a closure, but the lullaby always has a perspective of future. Think of it not as finishing the piece, but that the lullaby starts something else. Try to find your personal reading of it. ... Excuse me, I seem to be rhetorical about this, but this is the beauty of this composition that is not a piece for viola. It is a piece for ... it is a minute (little, short) life, a fraction of life where there is dancing, there is love, there is death, and there is rebirth. All condensed in about 20 minutes.

Analysis

This article approached the analysis of the work in two phases: the contextual background, which was studied in the previous chapter and the specific analysis. The specific analysis is divided into three main areas which are related to each other: harmonic, thematic and formal, each offering a distinct yet connected perspective on the work's musical organization.

In consonance to the findings of Piermartiri (2018), this work was started by identifying the original folk songs and the seven recorded *abbagnate*, followed by all the remaining sections, labeling them in their mode, pitch center or tonality. The collection of all this information resulted in the creation of Table 1.

Structural Encounters: A Harmonic, Thematic, and Formal Analysis of *Naturale* by Luciano Berio

Rehearsal Letters	SECTION			PITCH CENTER, MODE			INSTRUMENTATION		FORMAL FUNCTION
	VOCE	FOLK SONG	FREE	VOCE	VIOLA	PERCUSSION	VIOLA TECHNIQUE	PERCUSSION	
			Intro		C#		chordal	Tam-tam → tacet	Introductory
	VOCE I			C# (major)	C#		ostinato double stops	(tacet)	Introductory
			Bridge		C# → F#		melodic	(tacet)	Transitional
A		A la Sciacchitana			F#		quarter-tones	Tam-tam (metal mallets)	Expository
B			Intro		C#		chordal	Rototoms	Transitional
	VOCE II			C# (major)	C# → C Major		al tallone/pizz/ostinato	Rototoms + Tam-tam	Introductory
C		Abbagnata I			C (major) → Eb		chordal pizz./hand noise	(tacet)	Expository
D	VOCE III			Eb (minor)	Eb		pizz/quasi legno/melodic	Tam-tam (circolarmente)	Introductory
E		Ninna Nanna			C aeolian	C aeolian	tenuto, espressivo	Marimba (harmonic trem)	Expository
F			Bridge		Eb --(atonal)--> A	C aeolian → D	melodic	Marimba (harmonic trem.)	Transitional
G		Ladata			A (D dorian dominant)	D (+ A)	teso, senza vibrare	→ tacet	Expository
	VOCE IV			E (minor)	A (E sub-dominant)		grace notes, gliss/ostin.	Tam-tam + Rototoms	Introductory
H		Abbagnata II			D		double-stops/drone	Tam-tam (tremolo)	Expository
I			Voci's transt.		D		ponticello/drone	(tacet)	Parenthetical
J			Intro (mod.)		D (+ A)	D	arpeg tremolo/chordal	Marimba (trill)	Transitional
	VOCE V			D (major)	D (major) + C and G	D	dbl-stops/ tallone/ pont		Introductory
K		Chiantu			(F+Ab) → D aeolian		pont./two-finger pizz.	Rototoms (wood) → tacet	Expository
		K (Muntagnisa)			A (D aeolian dominant)		due corde (pizz.)	Rototoms	Expository
L	VOCE VI			D (major)	D (+ G)	D (major)	open strings/ostinato	Marimba (melodic trem.)	Introductory
M		Tun. de li Catitari			G → D	D → A → D	open strings (+ melodic)	Marimba (melodic trem.)	Expository
N		Tubbiana			D		double-stops/grace note	Tam-tam (tremolo)	Expository
O		Pescatori di Corallo			G (major)		left hand pizz.	Tam-tam (tremolo)	Expository
P			Fig 7.5 Fig 7.34		Db (+ Ab) → unfolding	Db (+ Ab)	arpeg tremolo/melodic	Marimba (harmonic trem.)	Transitional
Q	VOCE VII			C# (+ Bell C#)	→Db		senza vib./drone/ostinat	Rototoms	Introductory
R		Ninna Nanna di Carini			B Locrian	(D → E)	harmonics	Marimba (harmonic trem.)	Expository / Closing

Table 1: *Naturale* Section by Section

This methodological division into harmonic, thematic and formal perspectives allowed for a multidimensional understanding of the material. By treating these elements as interdependent rather than isolated parameters, this study aligns with analytical approaches that emphasize musical structure from factors whose meaning must be discovered within the work itself. Perle (1991, p. 7-9), Furthermore, the classification of tonal centers was done by principles derived from pitch centrality theory allowing modal organization without requiring functional harmony.

Harmonic Analysis

The relations of pitch throughout the piece are well conceived. Berio used the seven recorded *abbagnate* to determine how the pitch centers would relate and flow through the whole work. Berio reworked the prime material from *Voci* in a puzzle-like fashion to create *Naturale*, rearranging the order and inserting the seven recorded *abbagnate* sung by Celano. He certainly organized these seven in a specific order to create a linear discourse, choosing those that would match the pitches of *Voci*'s sections to create this new work.

Of the seven *abbagnate*, three (I, II, VII) are centered in C \sharp and seem to define a major mode (mixolydian): G \sharp -F \sharp -E \sharp -D \sharp -C \sharp . In its turn, VOCE V and VI are a half-step higher: A-G-F \sharp -E-D. The two other left are VOCE III in E \flat minor (emphasis on G \flat) and VOCE IV in E minor as well.

We can clearly see how he framed *Naturale* so there is a departure point from C \sharp followed by a wandering to different pitch centers (E \flat , A, D, G), and finally a closure when C \sharp is back at the end of the piece with VOCE VII. Even the five church bell strikes that Berio inserted in the recording are a C \sharp , making us suppose he chose specifically that pitch among other recordings of church bells he might have had.

The recurrence of half-step displacements between pitch centers (C \sharp -D-E \flat) provides a subtle but effective structural backbone. This technique also mirrors similar pitch relationships found in atonal set-theory-based works, where centrality is perceived via repetition and register rather than tonal function (STRAUS, 2005, p. 105). These relationships foster coherence across the non-functional landscape of *Naturale*, effectively balancing Berio's experimental idiom with the modal contours of Sicilian folk material.

The procedures of the harmonic and melodic writing either tries to follow or is inspired by traits found in these vocal recordings, the songs, and dances that Berio uses. It is possible to see a certain "respect" for the original material, which does not exclude the fact that Berio imprints some of his "modernist" style.

For example, in VOCE I, the singer alternates long notes as moments of rest in C \sharp and D \sharp as if staying temporarily in the "dominant" (D \sharp , second grade of the scale) to resolve in C \sharp . This alternation between the two notes (first and second degree of the scale, corresponding to the relation

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dominant-tonic) is also clearly heard in VOCE V and VI. This alternation is used in the viola's introductory gestures between A-B in the top voice (later expanding to include C#), and also C#-D# in the middle register.

The work's harmonic structure is based precisely in the half-step relation between the C# (present in the first and last VOCE), and the D that dominates all the area from Section G until Section N. This creates two big zones of harmonic contrast, where it is possible to see a sort of "recapitulation" as if it was a tonal work.

There is also a zone in C Aeolian (*Ninna Nanna*) reached through a short E_b (VOCE III) which form respectively half-steps between C# and D. Finally, there are short zones in E (VOCE IV), and B (*Ninna Nanna di Carini*) that expand for another half-step, both ways, the cluster already mentioned (C-C#-D-E_b). This fundamental relationship of half-step motion also helps explain the interval's role in defining the sonority at the very beginning of the piece, where the viola articulates chords using the outer open strings C and A, while the inner strings form a perfect fifth (C# and G#), creating dissonances of a minor ninth and a minor second. When comparing the opening of *Naturale* to that of Berio's *Sequenza VIII* for solo violin, which unfolds through a gradual expansion of the register, a certain resemblance becomes apparent.

In *Naturale* the half-step-centered harmonic fields do not merely serve as compositional devices but become central to the expressive landscape the performer must navigate. The recurrence of pitch centers such as C# and D, combined with the integration of pre-recorded material, demands precise intonation, an acute sensitivity to color, and a deep structural awareness. In this sense, the harmonic mapping becomes a vital interpretive tool, guiding dynamic contours, articulatory transitions, and gestural phrasing across its fragmented yet coherent sonic landscape.

Thematic and Formal Analysis

In modern music, it is often difficult to characterize with clarity the procedures in the thematic and formal plans. This happens because in this kind of music, the intent is to contradict the general artistic common practice, for example the sonata-form. At the same time the non existence of a common-practice among different composers, and sometimes among different works by the same composer, makes it difficult to find "models" of analysis. Therefore it is necessary to create an appropriate model for each work.

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This analytical challenge is particularly evident in Luciano Berio's *Naturale*, where the interplay between composed material and pre-recorded Sicilian folk songs defies traditional formal categorizations. As shown previously in Piermartiri (2018), Berio's integration of folk elements serves not merely as quotation but as a structural framework that influences the work's form and thematic development. This approach necessitates an analytical model that accounts for the fluid boundaries between original composition and ethnographic material.

Considering the mosaic construction of *Naturale*, it was attempted to apply a formal function to each of the sections of the work (Table 1 far right column). Of course, formal functions are used more in tonal music, but that could be a possible way to generate an idea about the work's structure. The problem with this approach is its subjectivity. For example, one could consider each section that presents new material as "expository" (the songs and the seven VOCE), while another would consider the VOCE functioning as an "introduction" to the songs. A third idea could consider the VOCE working as a "transition" between songs. Many of the VOCE, in fact, have multiple functions, they prepare the key for the song to come, but they also have their own material.

Berio himself provides insight into this structural ambiguity. In his composer's note he describes the recorded Sicilian songs as being "commented on" by the voice of Celano, suggesting a dialogic relationship between the live and recorded elements (BERIO, 1985). This perspective aligns with Schullman's (2016) concept of "associative formal analysis," where form emerges from the interplay of recurring motifs and textures rather than from adherence to classical models. Therefore, these "comments" could imply different functions at the same time.

In another attempt to clarify *Naturale's* structure, the folk songs from *Corpus* as well as the seven VOCE, were organized into a simplified table (Table 2) to identify Berio's compositional approach. The middle and right columns present the songs alongside their respective expressive character or mood, while the left column consolidates all introductory and transitional sections that precede each song.

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VOCE/Intro/Transition	SONG	MOOD
Beginning	-	Coarse/Dance
VOCE I	A la Schiacchitana	Sad
B –“Beginning”	-	Coarse/Dance
VOCE II	Abbagnata I	Happy
VOCE III	Ninna Nanna	Delicate/Sad
F (intro)	Ladata	Intense/Suffering
VOCE IV	Abbagnata II	Happy
I – J	-	Disruptive
VOCE V	Chiantu + Muntagnisa	Grieving
VOCE VI	Tunazione	Happy
-	Tubbiana	Happy
-	Pescatori di Corallo	Happy
P (transition)	-	Disruptive/Grieving
VOCE VII	Ninna Nanna di Carini	Delicate/Ethereal

Table 2: Thematic Table

This table helps to see more clearly the connection between all the VOCE and the songs, and how Berio distributed the recordings evenly throughout the work. In the Mood column, it is noticeable that in the first half of the work the moods alternate more often. At the center of *Naturale*, after two disruptive sections, there is the most intense and full of suffering song, *Chiantu*. After that intense emotional turmoil, Berio compensates with three happy songs in a row. Section P breaks that wave of optimism, and reminds us once more the suffering by presenting again the mourning motive. After some striking sounds of gun-shots, the work ends by setting a delicate child’s song in an ethereal mood, suggesting an open-ending idea: both death and birth are part of life itself.

Conclusion

Berio’s process of comment and analysis of *Voci* resulted in the creation of *Naturale*. The new element that stirred up the elaboration in the material from *Voci* is the inclusion of the recordings of Celano’s crude voice. These seven recordings have impacted on the material that came from *Voci* in many ways. They act as a harmonic frame to the work’s structure, starting in C# with VOCE I

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and II, and ending in C# with VOCE VII. Berio also used them to “comment” on the songs by spreading the seven recordings evenly throughout the work. They also have a “multi-functional” nature, as they can be perceived either as introductory or transitional, or even expository because they have their own material.

This multi-functional nature creates different layers just as Berio himself described: “A musically significant work is always made of meaningful layers that are at once the agents and the materials of its existence. They are the actor, the director, and the script all in one...” (BERIO, 2006, p. 14).

Berio’s construction of formal and harmonic trajectories across *Naturale* reveals a refined compositional logic that transcends conventional categorization. The structural return to C# at the end of the work is not only a harmonic gesture but also a narrative closure, framing the entire cycle as a circular or spiral form. This cyclical approach resonates with oral traditions in folk music, where refrains and returns create coherence across diverse material.

Furthermore, the alternation of expressive moods—mapped thematically between lament, dance, and lullaby—suggests a dramaturgical reading of the piece. The placement of “*Chiantu*” and “*Ninna Nanna di Carini*” at climactic moments hints at an intentional emotional arc, reinforcing the interpretative potential of the formal layout. Each section acts not merely as a thematic block but as a semantic unit, contributing to an overarching expressive continuity.

This analytical lens foregrounds *Naturale* not only as a hybrid of tradition and modernism but as a carefully crafted composition wherein every thematic recurrence, harmonic shift, and formal junction serves a performative and structural purpose. For the performer, this implies a reading that transcends technical execution and invites a dramaturgical awareness, an engagement with the piece as a living discourse shaped by both inherited and invented idioms.

In sum, *Naturale* occupies a unique position within Berio’s oeuvre as a work that bridges ethnographic reference, compositional innovation, and performative immediacy. Its success lies in how it renders the complexity of tradition audible through the fragmented, refracted lens of modern music. The analysis undertaken here hopes to contribute to a deeper understanding of these intricate processes, while also offering practical insights for interpreters engaging with this singular piece.

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