

# Developing an interpretation of Luigi Nono's *...sofferte onde serene...*<sup>1</sup>

Luciane Cardassi<sup>2</sup>

Independent Researcher | Canada

**Abstract:** This article discusses preparation and development for my audio and video recording of one of the most important pieces for piano and tape from the twentieth century: *...sofferte onde serene...* by Italian composer Luigi Nono. The text contextualizes the piece in Nono's output, discusses important aspects of the composition and proposes learning and performing strategies for pianists interested in this repertoire.

**Keywords:** Luigi Nono, Performance, Piano and Tape, Fixed Media, Mixed Media.

---

<sup>1</sup> Submitted on November 15th, 2016. Approved on December 23rd, 2016.

<sup>2</sup> Brazilian-Canadian pianist Luciane Cardassi is a noted performer of new music. She holds a D.M.A. in Contemporary Music Performance from the University of California, San Diego (UCSD), a Master of Music Degree from the Federal University of Rio Grande do Sul (UFRGS) and a Bachelor of Music Degree from the University of São Paulo (USP). Her primary music advisors have been Aleck Karis, Celso Loureiro Chaves, Antonio Carlos Borges Cunha, Ney Fialkow, and her piano teacher of many years, Heloisa Zani. Among Luciane's recent projects is the multimedia concert "Going North" with music by Brazilian and Canadian composers, the "rockets duo" with harpsichordist Katelyn Clark, "duo CardAssis" with pianist Ana Claudia Assis, and "duo Cardassi/Oliveira" with percussionist Fabio Oliveira. The common thread among these three duos is the focus on commissioning new works, and expanding the repertoire for their instruments with electronics. Luciane is an independent researcher and often writes about her experience learning and performing music from the 20th and 21st centuries. E-mail: [luciane@lucianecardassi.com](mailto:luciane@lucianecardassi.com)

This article introduces my audio and video recording<sup>3</sup> of one of the most important works for piano and tape of the twentieth century: *...sofferte onde serene...*<sup>4</sup> by Italian composer Luigi Nono. The recordings<sup>5</sup> were done after exhaustive study of the score, tape part, and previous recordings of the piece, followed by a number of performance decisions, which led to my personal interpretation of the work. Luigi Nono's *...sofferte onde serene...* invites both pianist and listener to discover new ways of listening through the use of extremely soft sounds, economical harmonic materials, often at extreme registers of the instruments, articulated between frequent silences and fermatas. Perhaps more importantly, this piece suggests new temporalities between the piano and tape, which follow different but intermingling paths. This proposal of new temporalities allows differing interpretations of the piece by pianists, which will also differ with each performance. Lastly, *...sofferte onde serene...* is the result of a special type of collaboration between composer and performer: a non-hierarchical, true partnership on the creation of art, which I believe should be more encouraged in today's contemporary music scene. In this article I will provide a short introduction to the piece, discuss my strategies for learning both the score and the tape part, and suggest paths for other pianists to follow in order to develop their own creative performances of this majestic work.

## 1. THE WORK

Luigi Nono is arguably one of the most important classical composers of the twentieth century. His work *...sofferte onde serene...* for piano and tape<sup>6</sup> marks the beginning of his late creative period. The title – suffering, serene waves – is a reference to grief and the waters of Venice. The “suffering” is in fact a reference to his grieving for his parents as well for the death of a close friend's newly born child, while

the waves of serenity require a more metaphorical, albeit biographical, explanation. Nono lived his entire life in Venice, and the implied imagery of water, mists, and cathedral bells are integral to this work, especially the ability of water and fog to delay and distort sound. In his introductory text to the LP release of *sofferte* in 1979, Nono invokes waves to describe the process of grieving for his parents and its influence on the experience of time embedded in the construction of this work: time in the context of *sofferte*, as for Nono during his period of grief, is not an accumulation of successive episodes, rather of memories and present moments that overlap and merge (CONLEE, 2015).

The piece came after a creative crisis for the composer. Before *...sofferte onde serene...*, Nono's

---

<sup>3</sup> Recordings available on soundcloud: <https://soundcloud.com/luciane-cardassi/luigi-nono-sofferte-onde-serene> and on youtube: <https://www.youtube.com/watch?v=aoL6x1O77i0> and <https://www.youtube.com/watch?v=hu7JLLm7cfY>

<sup>4</sup> Suffering, serene waves.

<sup>5</sup> These recordings and live performances were developed in collaboration with composer Darren Miller, who worked for this project as sound technician.

<sup>6</sup> Although the current term is “fixed media”, we continue to use “tape” as this is how it is referred to on the score and in the title of the work.

works had an explicit political message. However, in the early seventies, he realized that “his previous works, with all their explicit political engagement, had been easily misunderstood as bare ‘pamphlet art’, their political contents shadowing their intrinsic musical features, so that the latter were not properly perceived by the listener” (ASSIS, 2014: 204). Therefore, *...sofferte onde serene...* inaugurates a new approach to composing for Nono,

bringing the inner musical structures and features to the foreground, focusing on small instrumental forces, on subtle harmonic fields and clearly differentiable vertical sound-aggregates, on extreme soft dynamics and fine articulation marking, on fragmented successions of sections, and on highly elaborated dialogue with old historical forms (ASSIS, 2014: 204).

This shift does not mean that Nono became less political. On the contrary, he was deeply engaged with the Central Committee of the Italian Communist Party in this period. What changed was his way of embracing politics within his music. Politics assumed a different dimension, it became engraved into the finest details in music, into the almost inaudible sounds. Nono’s music from then on invites the performer and listener to be courageous, to take risks, to produce sound even when it is barely audible. Politics did not need to be in the title, or sung out loud. Politics were in the subtleties, emphasizing the differences between people, inviting everyone to question their own identity. Of course his music has stood the test of time and stands on its own merits, long after his politics resonate with current audiences.

An essential aspect of this piece is the intense collaboration between composer Luigi Nono and pianist Maurizio Pollini. The creative collaboration between Nono and Pollini started in 1971, for the composition of *Como una ola de fuerza e luz*, for piano, soprano, orchestra and tape. Besides Pollini, Nono was also joined by Claudio Abbado in this collaboration, and the result of this partnership seems to have fascinated him. “Claudio Abbado and Maurizio Pollini: their new music activity is the development of an artistic partnership into the acquisition and adoption of musical responsibilities that result from the human necessities of our time” (NONO, in STENZL, 1975: 143). Indeed, their collaboration took a much deeper meaning than a partnership in music, and their friendship seems to have been decisive in Nono’s artistic collaboration with them.

Starting in 1975 and with several recording sessions in 1976<sup>7</sup>, always at the Studio di Fonologia della RAI, in Milan, Nono and Pollini collaborated on *...sofferte onde serene...* for piano and tape. The recording sessions consisted of Nono improvising with the tone-material provided by Nono in sketches, and experimenting with different types of articulation, varying the order of pitches, and in

---

<sup>7</sup> The recordings were made by studio engineer Marino Zuccheri.

different tempi. They also recorded pedal hits and knocks on the body of the piano, and used many different positions for the microphones, including very close proximity and quite distant positions. The result of these recording sessions, painstakingly spliced together, mixed and organized by Nono, became the tape part. The piece as a whole was generated from these recording sessions, or one could say, the creative explorations of Pollini and Nono. In the traditional sense of the word 'composer', Nono is the composer of this piece, but one cannot forget that the input and creative energy of Pollini is at the core of *...sofferte onde serene...* When I perform this piece today, I am, no doubt, in dialog with the artistry of Maurizio Pollini as much as I am playing a piece by Luigi Nono. The deep collaboration between the two transcends decades and can be felt today, in each performance, by the pianist who embraces the collaborative process, and goes hand in hand with these two giants of the twentieth century western classical music world.

Indeed, the composition process of *...sofferte onde serene...* involved experimentation and his deep collaboration with Pollini. From this process rose a final score that includes various degrees of uncertainty and unpredictability. Nono achieves this

through the use of 'shadow' sounds, similar sonorities that come sometimes from the piano, sometimes from the tape, and that generate a perceptual (con)fusion for the listener. This (con)fusion is enhanced by relatively free time relations between piano (live) and tape, allowing the performer on the piano and the performer controlling the sound-projection to intertwine a great variety of sonic relationships (ASSIS, 2014: 206).

Different interpretations are possible due to this final aspect. When categorizing works for piano and tape according to their rhythmic interaction between both elements, Ding (2006: 255) places Nono's piece among the works that have largely independent interaction, with sectional synchronization<sup>8</sup>. In fact, the relative freedom of the performer to choose his or her own sonic points of interaction with the tape offers many possibilities inside each large section. Each pianist can technically develop a unique interpretation of the piece, and each performance will have minute unpredictable subtleties, creating unique live performance experiences and recordings.

## 2. THE SCORE

The score for *...sofferte onde serene...* offers interesting challenges for the pianist. The first observation is that it is a manuscript.<sup>9</sup> Although one of the most beautiful music manuscripts I have seen, it can sometimes raise questions about pitch (mainly due to ledger lines), but these can be solved

---

<sup>8</sup> For other types of interaction see Ding, 2006.

<sup>9</sup> This comment refers to Ricordi, 1992. In fact, most of Nono's music from this period is still printed in manuscript form.

with a bit of patience and a pencil. Overall, the technical challenges encountered in this piece would continue to exist even with a computer-based version of the score. Pianists today are not used to reading from manuscripts, therefore, this may present obstacles for some.

A second observation about the score is that it does not include a graph or notated version of the tape. Works for acoustic instruments and electronic media (so-called mixed media) often provide an idea of the electronic sounds (in this case tape, or fixed media) on the music score. The way this notation is made varies enormously from piece to piece. When no notation is provided (and even sometimes when it is provided) there may be also timing indications that should be followed with the use of a stopwatch or click track. In the case of *...sofferte onde serene...* there are neither. What Nono's score provides is timing cues at the end of each section, which he calls reference numbers for the tape, as shown below:

1 =	54"	<i>f</i> – begin after ca. 3"
2 =	1'56"	Begin after ca. 3"
3 =	2'57"	Begin immediately
4 =	5'11"	Begin immediately
5 =	6'49"	Begin immediately
6 =	9'16"	Begin immediately
7 =	11'49"	Begin immediately
8 =	13'14"	Begin after ca. 2"

Tab. 1 – Reference numbers for the tape in *...sofferte onde serene...*

These reference numbers are found at the end of each section<sup>10</sup> on the score, and the performer should only move on to the next section at the time indicated. Without a stopwatch or click track, this indication is rooted only through attentive listening. As Andrade (2013: 56) points out, when referring to interpretation of works for mixed media: “the performers are required to trust their listening capabilities as the main guide for their interpretative process.”

Knowing that the tape part consists totally of piano sounds, what the performer does is adjust his or her live performance of each section to musical gestures heard on this virtual piano, the “inflexible” tape part. This is where the creativity of the performer comes to the foreground. The performer is making chamber music with the tape. With a piece of approximately 14 minutes, each tape section is long enough (from 54” to more than 2’) to allow a number of performance decisions. The sound cues the performer chooses to synchronize to are relatively free. The tempo varies continuously, with subtle changes, from  $\text{♩} = 44$  to  $\text{♩} = 54$  to  $\text{♩} = 60$ , with *accel.* and *rall.* Besides tempo changes, there are several

<sup>10</sup> The term “section” is used in this paper referring to the group of bars that correspond to each of the 8 audio sections, as on the score. For sections from an analytical perspective, see ASSIS, 2014.

fermatas, of different lengths (see Ex. 1). The result is a very fluid performance, like a written *rubato*. But this only happens properly if the pianist knows the tape part very well. That is the key point of learning *...sofferte onde serene...*, the pianist has to be totally familiar with the tape. One would argue that this is true for any instrumental piece with tape, a statement I would agree with. But in this case, the decisions prior to, and during, performance depend 100% upon this familiarity. There is no stopwatch or click track. We need to listen. And listening, according to Nono, is “very difficult. I think it is a rare phenomenon today. (...) Perhaps one can change the rituals: perhaps it is possible to try to wake up the ear. To wake up the ear, the eye, human thinking, intelligence, the most exposed inwardness. This is now what is crucial” (NONO, in ASSIS, 2014: 205).

The image shows a handwritten musical score for piano, likely from Luigi Nono's *...sofferte onde serene...*. The score is written on multiple staves and includes various tempo markings such as 'ACCEL.' and 'RALL.' with specific tempo values like '♩=60a', '♩=44a', and '♩=54a'. There are also 'PED.' markings and a section labeled 'TENUTE AL LIEVIMENTO A MASTRO [54' s] ATTACCA DOPO 3' ca.'. The notation is dense and complex, reflecting the intricate nature of the piece.

Ex. 1 – Constant changes in tempo and several fermatas, at the second system page 6 of *...sofferte onde serene...*

### 3. THE TAPE

Knowing that the interaction between piano and tape takes place without a stopwatch, and is therefore based exclusively on the performer's listening, it is crucial to know the tape by heart, especially the transitions between reference numbers. Without trying to “describe” the tape part here, I would like to propose listening to the transitions as suggested by Ding (2006: 257)<sup>11</sup>:

- Reference number 1, 0'54<sup>12</sup>: The timbre is muddy and materials mostly are drawn from the piano part until 0'54<sup>12</sup>, where there is a *sforzando* piano cluster, comprising notes from E3 to A3, which has never occurred before either in the tape or piano part. In addition, it has a distinctively clean timbre and lasts for 3 seconds.

<sup>11</sup> Since the tape part is not always in the equal temperament tuning system, the notes referred here are approximate pitches.

<sup>12</sup> The timings used in this paper are those corresponding to each of the references provided by Nono.

- Reference number 2, 1'56": In the second subdivision, the music has a lot of echo effect until around 1'51.5", where a silence appears and lasts for 3 seconds, followed by a wooden, close sound, and then a piano cluster at 1'56".
- Reference number 3, 2' 57": Starting from 2'40", the music consists of short gestures of one or two high piano sounds. The only exception is a fast gesture of three high piano sounds, B5/C6 – B6/C7 – B5/C6, which happens between 2'56" and 2'57" – reference number 3.
- Reference number 4, 5'11": A very low piano A appears around 5'01.5", repeats, and changes to a half step up, B b , at 5'11".
- Reference number 5, 6'49": Starting from 6'24", the tape consists of piano high clusters only until 6'49", where a loud B2/C3 piano sound comes in.
- Reference number 6, 9'16": A piano G3/A3 sound occurs at 9'08" and G3/G #3/A3 at 9'10.5". The restatement from the opening sneaks in with a piano E b 1/A6.
- Reference number 7, 11'49": The tape part is quiet from 11'42" to 45.5", followed by a long G #5 on top and two shorter A3/B3s below. A soft piano cluster on very high and very low notes comes in at 11'49".
- Reference number 8, 13'14": A low, long piano sound comes in at 13'08" and lasts until 13'14", where it becomes quiet. The tape has a percussive sound at 13'15.5", and the pianist is to come in a half second later.

These suggestions can be helpful in first listening to the tape. They may speed up the learning process for a pianist entering the world of *...sofferte onde serene...* Once the transitions are solidly in the pianist's memory, the minute interactions that take place inside each section can become the focus of their interpretation. Many of those interactions will be in the "unpredictable" category, but some can and should be chosen by the pianist, leading to minute differences of interaction between piano and tape that will characterize each interpretation of the piece.

When studying the tape part, and the piece as a whole, it is also important to consider the collaborative process between pianist and sound technician for a convincing performance. The volume level of the audio, the placement of the speakers (usually one under the piano, two at the sides) and the necessary volume adjustments during the performance make of this work as much a piece for the sound technician as one for piano.

The collaboration between Pollini and Nono did not end with the premiere of the piece. For a long time Pollini was the only performer of the piece, and Nono was the audio technician for most performances, which means that together they developed a high level of chamber musicianship, which is quite rare in the world of mixed media. Indeed, performers today rarely have a chance to work long with the audio technician for their concerts, either when at a concert with live electronics or with fixed media. This intense collaboration between performer (Pollini) and sound technician (Nono) undoubtedly led to experimentation with acoustic nuances, and fine-tuning the final version of the composition, especially with respect to sound projection. In fact, Nono's works after *...sofferte onde serene...* seem to develop topics explored first in this piano piece: the composer's emphasis on refraction, distortion, prolongation, and especially resonance. "This achievement occurs not only in spite of the inflexible instrumental forces (the unresponsiveness of the tape; and the fixed attack, tuning, and decay characteristics of the piano) but perhaps even as a result of them" (MILLER, 2014: 40).

#### 4. MAKING DECISIONS

Before attempting a complete performance of this piece, two things need to be done: the music has to be under the pianist's fingers, and the tape has to be internalized. This is not a fast process. The piano part itself will require some time to be decoded, and the tape part needs to be listened to many times, and broken down in small sections, to be totally internalized. I suggest a slow learning of the score, one section at a time, followed by an initial practice with the tape, to mix things up and give the pianist a sense of completion, even if for a small part of the piece. For example, the first page of the piece, which goes to the first tape reference at 54", is a world unto itself. Learning the pitches, the registers, the rhythm and especially the tempo changes, will require some time. Once that is solved, playing with the tape part can be quite enjoyable. First, developing the feeling for the internal timing of those 54" that needs to become totally natural. Once the timing for the section is internalized, interesting nuances can be found in the interactions between piano and tape in this short section. The long and short fermatas will help us listen for specific gestures from the tape, so we can choose our own cues in our dialog with it. Not that we need to make decisions to the millisecond. As already stated, the unpredictability is a big aspect of this kind of interaction, but the more one knows the piano and tape parts, the more these small interactions will come to the foreground, and produce a unique and exciting performance both for the pianist and the audience.

When I first learned this piece I worked exhaustively on the first page, piano part and tape part separately, then together, until I was able to play the page with confidence. Confident I would not need to wait for the next section (having arrived too early at the end of the page), nor having to jump ahead to next section (having arrived too late at the end of first page). While doing this, I started looking for specific gestures from the tape part that I enjoyed interacting with inside this section. Each time I would listen for different options. It is important to reiterate that we are talking about gestures a second or two apart (the whole section lasts less than 54"! ). There is no need to drill down to this level of detail, but it does not hurt to start thinking about it, even at this initial stage. Just to provide an idea of what I am talking about: on page 9 I wrote down some timings on my score, 3', 3'09", 3'25", 3'33", on top of the bars I wanted to line up with (see Ex. 2). Then I would practice each tiny section over and over, until I was comfortable with it. This does not mean that every time I played the piece I lined up 100% with those gestures from the tape, but they provided an extra layer of possibilities for me to listen for, and interact with, which would provide me with a lot more confidence that the large sections were synchronized. I believe that this microscopic approach led to a much richer performance of the piece.

Ex. 2 – My added timing marks to page 9 of *...sofferte onde serene...*

Once I mastered the listening and interacting with the tape in large sections, my performance assumed another level. At this level, the waves that come and go, interacting with the waters of Venice, became part of my performance. Sometimes a small gesture on the live piano occurred as an instigator of the gesture on the tape, other times as a memory of an event that was just heard. The unpredictability of this piece invites this kind of nuance. I highly recommend that pianists approaching this work choose their own microscopic interactions, which will undoubtedly lead to a much more enjoyable learning process as well as their unique interpretation. As Conlee (2015) beautifully wrote: “sofferte is a complete flux of past and present: waves disappearing one into the other.” This amazing imagery of the tiny waves disappearing into one another was helpful for my interpretation as I hope my suggestions will be helpful to other pianists approaching this piece.

## 5. FINAL REMARKS

Learning a piece of music such as Luigi Nono’s *...sofferte onde serene...* in today’s music world, where the immediacy of premieres and live electronics prevail, is indeed a rare occurrence. As I have mentioned earlier, this is not a short process, I personally spent 3 months working on this piece daily. Despite all this, the rewards can be immense. The more rare, the more special this opportunity can be.

There are very few pieces for piano and tape that treat the performer as a thinking individual, expected to determine his or her own path, making interesting interpretative decisions. *...sofferte onde serene...* is undoubtedly one of them. This can be perceived as an indication of Nono's interest for humanity in its social and politic realms, and his care for friendships and human relations, as one can gather from this long lasting relationship with Maurizio Pollini.

The collaborative process involved in creating and performing *...sofferte onde serene...* also reflects what I believe is the future of our work: artists of all expertise, genres and styles working in parallel, creating together, establishing a new collaborative world. It is time to leave behind the old-fashion hierarchical roles of composer and performer, and focus on true collaboration, non-hierarchical partnership, and shared authorship.

## REFERENCES

ASSIS, Paulo de. "Revisiting Luigi Nono's Suffered, Serene Waves." In: CRISPIN, Darla & GILMORE, Bod (Eds). *Artistic Experimentation in Music – An Anthology*. Leuven: Leuven University Press, 2014.

CARDASSI, Luciane. *...sofferte onde serene...* by Luigi Nono. Banff, The Banff Centre, 2009. Available at: <https://soundcloud.com/luciane-cardassi/luigi-nono-sofferte-onde-serene> Audio recording.

\_\_\_\_\_. *...sofferte onde serene...* by Luigi Nono. Banff, The Banff Centre, 2009. Available at:

youtube part 1: <https://www.youtube.com/watch?v=aoL6x1O77i0> and

youtube part 2: <https://www.youtube.com/watch?v=hu7JLLm7cfY> Video recording.

CONLEE, Jade. "Suffering, Serene Waves". *Serpentine magazine*, June 2015. Available at: <http://serpentinemagazine.com/2015/06/suffering-serene-waves/>

DE ANDRADE, Iracema. "La música electroacústica mixta: el intérprete y los desafíos de la praxis musical contemporánea." *Revista Vórtex*, Curitiba, vol.1, n.2, p.49-64, 2013.

DING, Shiau-Uen. "Developing a Rhythmic Performance Practice in Music for Piano and Tape". *Organized Sound*, Cambridge, v. 11(3), p. 255–272, 2006.

MILLER, Darren. "The Collaborative Role of the Technician in *...sofferte onde serene...*". *Revista Vórtex*, Curitiba, v.2, n.1, p.37-47, 2014.

NONO, Luigi. *...sofferte onde serene...: per pianoforte e nastro magnetico*. Milan: Ricordi, 1992. Score.

STENZL, Jürg (Ed). *Luigi Nono: Texte, Studien zu seiner Musik*. Zürich: Atlantis, 1975.