Recovering Music-Theatre Works Involving Electronic Elements: The case of *Molly Bloom* and *FE…DE…RI…CO…*

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This article aims to reflect on the main constraints encountered in recovering music-theatre works that involve a variety of diverse aspects that are relevant to their performance. As well as the score, scripts or other additional documents, the works considered here also include electroacoustics recorded on magnetic tape, consequently requiring specific approaches in order to preserve such kinds of works. Video recordings of concerts are important for understanding, documenting and eventually restaging these works. This idea is not new; audio-video recordings have for many years served as sources for documenting live performances (music-theatre or art performances). However, it is still important to discuss just how and with which tools these very important documents might be preserved and exploited. Hence, the study of the structure of *Molly Bloom* and *FE…DE…RI…CO…*, both with music by Constança Capdeville, enables an understanding of the processes in which documentation is relevant to preserving such a valuable cultural heritage.

1. INTRODUCTION

This article seeks to reflect on an achievable methodology for restaging Capdeville's works, particularly those which are within the music-theatre context and which include magnetic tape recordings, while drawing attention to the tools currently able to assist us in the fields of materials organisation and musicological analysis.

Constança Capdeville is one of the most important composers of the second half of the twentieth century, a remarkable figure in Portuguese contemporary music creation, who died early at the age of 55 in 1992. She was born in 1937 in Barcelona, where she began her musical studies, but lived most of her life in Portugal, where she settled in 1951. Composer, pianist and percussionist, Capdeville developed a practice and an aesthetic reflection that remained within what she liked to call music-theatre. She linked sound research to theatrical and gestural elements, as well as to poetry, literature and cinema, seeking both to discover and to invent new forms of relationship between arts while simultaneously rethinking, in depth, the forms of education and musical performance itself (Serrão 2006: 111-12). Her artistic production was at its enlightened peak during the 1970s

and throughout the 1980s. The composer applied the term 'music-theatre' to embrace several kinds of disciplines and means as material – literature, poetry, music, dance, theatre, cinema, painting, slides, narrations, audio recordings, lighting, or other objects – using them in the most diverse combinations. Capdeville's approach to avant-garde music is revealed through, but not limited to, the following aspects: a close connection with the music-theatre context while absorbing some compositional and aesthetic practices adopted by other composers such as Mauricio Kagel, Sylvano Bussotti, Luciano Berio or Dieter Schnebel; and the use of new sonorities, especially through the exploitation of new possibilities in timbre (the prepared piano, greatly influenced by John Cage, or innovative experiments with percussion instruments, heavily influenced by Edgar Varèse). She was very attentive and sensitive to other artistic fields; as a result, any deserving materials might serve as the pretext to their musical conceptions. Commonly observed within Capdeville's documentation is the current practice of reusing materials from different sources, such as excerpts of music by other composers, texts by poets or writers or even drawings by famous painters, coupled with her ability to endow them with new garments and to assign them new meanings, constituting a latent feature of her aesthetics. She also discloses a strong link with music from the past, including excerpts from the Requiems of Mozart and Fauré, Monteverdi's *Vespers*, Debussy, Webern, Stravinsky, and Satie, whose figure Capdeville re-established among us (Castro 1992: 86).

Capdeville's recourse to quotation of musical and other sources as a compositional element runs transversally through all her music-theatre works, and one may even assert that the act of quotation is sometimes the performance itself. Capdeville adopts the live performance as a means of expressing her ideas with the intention, on the one hand, of freeing herself from the prevailing means of expression and, on the other hand, as a provocative way of reacting to changes, both political and cultural.

This section sets out an overview of the general aesthetic considerations implicit in Capdeville's works

before presenting two case studies on how to assemble the materials of this composer while also making a brief systematisation necessary for re-performing both works. We correspondingly do not intend here to do any analysis either of the music or the scenography but rather to study the structure of the two works, which might later be further developed in order to carry out a musicological analysis of them. For both case studies, *Molly Bloom* and *FE…DE…RI…CO…*, a video exists that features a certain performance, and through this, we aim to study all the available documentation in order to track certain creative processes in Capdeville's music. The idea is to bring back the work, gathering all possible elements and enabling a type of archaeological study of the work. Indeed, video recordings from performances are undoubtedly particularly useful documents for enriching the documentation, as this enables the viewing of interactions among the performers, their gestures, movements, scene sequences, scenery, stage placements of musical instruments and so on. However, the video recording is not always a reliable source and, as we observe throughout the presentation of our case studies, it can sometimes play tricks.

Throughout this article, we closely analyse both documents and the audio-video recordings.

2. DIFFICULTIES IN RECOVERING MUSIC-THEATRE WORKS INVOLVING ELECTRONICS

The documentation left today about music-theatre works that involved different devices including electronics, such as magnetic tape recordings, raises some issues. As stated by Federico Avanzini and Sergio Canazza, the preservation of works involving technological means differs from that of classical music, mainly because they are stored not only on paper, that is, scores, but also in other formats such as magnetic tape, which are more susceptible to destruction and require new approaches as regards their appropriate preservation (Avanzini and Canazza 2012: 90). Within the paper-based documents, one can find scripts, scores, recordings, sketches, images and additional notes. Although the information is incomplete, unreliable, unreadable or partial, it will normally be sufficient to study the work and, if possible, to bring it to life again (Magalhães and Pires 2017). Even when the performers are still among us, memory itself represents an untrustworthy source and hence the greatest care must still be taken to treat such evidence as one source of many (Emmerson 2006: 209). This is a serious problem that we currently face and which tends to worsen as we head into the future, especially if performers intend to perform these specific works again.

> The main difficulties encountered arise out of the sheer complexity of these works, which creates further difficulties to their study, performance or even to deciphering the working documentation; combined with the obsolescence of the technological means that prevents access to some crucial contents; and alongside the absolute absence of national preservation, documentation and valuation strategies, leading to the dispersion and loss of many crucial documents. (Pires, Magalhães and Nogueira 2018: 357)

This statement holds particularly true for the case of Constança Capdeville. Indeed, in her own collection (which includes scores, magnetic tapes and other documents) warehoused at the Portuguese National Library (BNP), some materials are still dispersed or even lost, and the scarcity of information explaining their connections makes any re-performance of most of Capdeville's works very difficult, while hindering the production of musicological studies deriving from these documents.

For example, in addition to the score (when it exists), Capdeville often deployed different kinds of scripts: a general script, a lighting script, a script for recorded sounds and scripts for specific performers. Moreover, her collection includes individual scripts containing specific and differentiated annotations, occasionally made by the performers themselves during rehearsals. Two scripts were often necessary to mark changes on the stage, with performers often moving from one side to another, and correspondingly needing directions. The general script, which usually contains the symbol 'CC', describes the title of the sequences, the main lines within each sequence, the musical moments, the recorded sounds that appear at a certain moment and performers' locations on stage. Making an analogy, Capdeville's general script is similar to a logbook, including general descriptions about the whole performance, and somehow it replaces the full score.

Therefore, these kinds of works result from the sum of several parts constituted by performers, lights, slides, recordings, toy instruments and other objects, musical instruments, texts, images and so on, all gathered and combined in order to provide the unity required for the work. One aspect that is important to the study of the structure involves paying attention to the additional notes written in these scripts by the composer or even by the performers as, collectively, without any exception, these usually specify relevant information about the processes ongoing within the work. Capdeville also commonly made further changes during the rehearsals and, because she was frequently a performer, modifications were occasionally made even during the shows. Such information was not usually written down although it sometimes appears in the scripts of performers, but nevertheless, it still hampers our task in trying to restore a certain unity to the work.

At the time, the composer took advantage of a diversity of means and technologies, which are now

obsolete, no longer feasible or lost. This reflects a tangible problem impacting on the preservation of such works today. As regards tape recordings, there is limited information available about how these sounds were produced even though we are still able to source help from the sound technicians who worked closely with the composer on the tape editing process. However, the nature of the original is not hugely significant as long as the musical meaning remains implicit in the process. Eventually, after long in-depth examination of the documents, the discovery of the existence of a video recording proved to be a very important and useful step in helping to complete the pieces of this puzzle. Owing to the complexity of these works, it is thus our task to preserve and systematise these materials and, in the case of Constança Capdeville, with her vast and still dispersed documentation, we more than ever need to resort to video recordings whenever available and, in addition, to take advantage of the participants who contributed to these performances in order to recreate such works. Finally, when Philip Auslander states that 'whatever survives of a performance in the form of a photograph or videotape is no more than a fragmentary, petrified vestige of a lively process that took place at a different time in a different place' (Auslander 2008: 46), he encapsulates just how much work there is still to do in this field.

Furthermore, to study such works, which are performances comprising actors, dancers, musicians, technicians and so on, as well as different tools such as objects, lights and electroacoustic elements (tape recordings), correspondingly tailored methodologies are required. In this sense, musicology must be considered as a transversal discipline that borrows from such other disciplines as philology, library science, conservation and restoration, audio engineering and so on. Thus, the solid development of relevant philological methodologies is essential, methodologies that include strategies for the consistent analysis of the creative processes of these complex kinds of work (Bressan 2018). This strategy needs to consider every kind of document, given how decisive they are to understanding the complexity of these multifaceted works. As pointed out by Orio and Zattra, musicology needs to apply methods borrowed from philology to the study of electroacoustic music or, for instance, musical works that include several means of production. The comparison of different sources helps and reinforces the listening analysis based on visualisation tools such as spectrograms and sonograms (Orio and Zattra 2007). In addition to this, it is also relevant to note the importance of documentation for the preservation of this type of work, particularly the use of methodologies from areas such as conservation and restoration in order to complement the methods of musicology: 'Once completed, the analysis does not provide us with any definitive analytical conclusions

about the work, but acts as a learning process which improves our understanding of the work as the analysis progresses' (Zattra 2004: 37). A documentation process, which implies the production of new documentation through interviews and the collection of contextual documentation in order to identify the authors and produce documentation, is an ultimate strategy for recreating performances such as those of Constança Capdeville. As Andreia Nogueira states, by documenting to preserve both the collection and the production of documentation, conservation becomes more complete and effective, allowing us to pass on to future generations, if not the works themselves, traces of their existence (Nogueira 2018).

3. STUDYING THE STRUCTURE OF BOTH WORKS

3.1. Case Study: *Molly Bloom* (1981)

For a brief period of her career, Capdeville collaborated in theatre pieces, composing the original music. *Molly Bloom* was staged during 1981 in São Luiz Theatre, and then, in 1982, it was exhibited in Trindade Theatre, in order to celebrate the centenary of James Joyce's birth. The theatre piece introduces a monologue taken from the last chapter of the modernist novel *Ulysses* by James Joyce, and was produced by Carlos Quevedo. This monologue was performed by Graça Lobo, acting the role of Molly Bloom. Capdeville composed the original music, Carlos Alberto Augusto created the recordings and sound effects, and the artist Júlio Pomar designed the drawings for the theatre programme and the stage scenery (Rodrigues and Pomar 1982). There was also special cooperation from the actor Ruy de Carvalho, who recorded on magnetic tape the narration of a text which corresponded to the second part of the penultimate chapter of *Ulysses* and preceded Molly's monologue. Quevedo intended to reveal what Leopold Bloom, Molly's husband, was thinking, to prepare the audience before hearing Molly's monologue. The text of Molly's monologue from the last chapter of *Ulysses* by James Joyce is not complete. Quevedo's intention was to remove specific references that would only be comprehensible in the light of the entire book of *Ulysses*, in order to make the monologue text intelligible to the spectator, while respecting its sequence. The idea was thus to stress the inner reflection on the love story between Molly and Bloom. The background is an aluminium chamber, an effect created through the lighting, which shows Molly's bed. During the monologue, the actress is always in her bed, except when she gets up to pee; accordingly, the music marks the changes in position within the scene. This information comes from a personal interview with Quevedo and he considers there to be only one break in the

monologue: a subsection corresponding to the moment in which Graça Lobo gets out of her bed to use a chamber pot before then returning to bed. He considered this moment as a rupture in the movement but not in the narrative, and attributed the role of expressing these actions to the music.

Within Capdeville's collection are the following documents about *Molly Bloom*'s theatre piece: a short script (referring to the musical interventions presented throughout the play); the text recited by Ruy de Carvalho; and a tape containing some electronic sequences (a non-edited recorded magnetic tape, as the final assembled performance tape remains lost). While seeking more information about the performance, we interviewed the following participants: Carlos Alberto Augusto, Carlos Quevedo and Graça Lobo. Augusto, who was responsible for the sound effects, remembers one part of the process but does not know where we might find the original tape used in the performance. In turn, Quevedo remembers part of the play's conception process, but no longer possesses any materials from it, not even a script. Lobo lent us a video recording that featured the play, which has since been digitised. Despite the poor quality of this document, the video visualisation was very useful for the systematisation and articulation of the existing documentation, besides helping to understand the several interactions of the various elements of the piece, such as musical interventions, texts, lighting effects, and gestures or movements on the stage performed by the actress.

To obtain an overall understanding of the structure of *Molly Bloom*, we began by watching the video recording and describing the various events that were happening throughout the theatre piece, paying particular attention to musical interventions and lighting. Then, we analysed the sequence of the electroacoustic sounds recorded on the unedited magnetic tape (provided by the BNP), which had previously been digitised, making a comparison of the audio track extracted from the video recording with the audio track from that unedited magnetic tape, to verify whether all the initially prepared sounds for the work featured in the performance and to confirm their respective order of appearance.

Furthermore, through analysing the video, some paper sheets and a few scores, which Capdeville labelled 'interventions', were also identified. Thus, the video helped to establish when these sound interventions took place throughout the performance.

As set out in Figure 1, which exhibits the general structure of *Molly Bloom*, the theatre piece is divided into two main sections: one corresponding to the 'preface' of Ruy de Carvalho's pre-recorded voice on tape, which was played while the audience took their seats, and the subsequent section corresponding to Molly's monologue. In Figure 1, the video line shows that the performance lasts for about one hour and thirty

minutes. The upper bar, labelled 'Light' indicates the lighting arrangement throughout the performance. Darker shading in the upper bar indicates low lighting levels, while lighter shading means the lights are on, and finally black bands mean the lights are off or there is a blackout. The bar in the middle, labelled 'Tape' represents the recorded sounds and the moments at which these appear within the play. (These sounds will be described below.) The lower bar refers to the voice that delivered Molly Bloom's monologue, and indicates the duration of the speech performed by Graça Lobo.

As regards the tape recording process, in a personal interview, Augusto recalled that Capdeville left musicians with great freedom as long as the gesture was appropriate. Additionally, some of her instructions were often modified or improvised, irrespective of whether they were accompanied by the composer's instructions and written down in detail to a greater or lesser extent.

While studying the documents, eight interventions were identified through paper sheets and scores although, according to Augusto, only six were really performed. Augusto stated that, at the time, he worked with two reel-to-reel tape machines, a Revox tape recorder and a four-track TEAC. Normally, he worked at Capdeville's home, transporting his machines to create the sounds under the direction of the composer. As for the method for working on the tapes, this might involve recording basic sound materials, either from acoustic sources or electronically generated, or selecting the material in order to generate new sounds using transformation processes. For instance, some sounds were extracted from vinyl recordings while others were recorded from outdoor sound sources. For example, a train that appears in several of her works was the sound of a train from Estoril station. To capture these kinds of sounds, Augusto used a Nagra portable audio recorder.

Thus, Figure 1 displays the interaction of the element of voice with the elements of light and tape. In short, through this figure, we may easily perceive the inputs and outputs of the main features making up this theatre piece. It also makes it simpler to compare the various parts and understand how they mutually communicate during the performance.

There was no live sound, except the voice of the actress, and everything else heard throughout the performance was pre-recorded. In order to schematise it all in keeping with Figure 1, the recordings were then divided into nine sounds (S1, S2, …), respecting the order of appearance during the theatre piece, as can be seen below:

- S1: Ruy de Carvalho's narration and accompanying background sound (Figure 2). Capdeville essentially resorts to the prepared piano and records several separate moments that are then superimposed, in order to create the desired sonority.
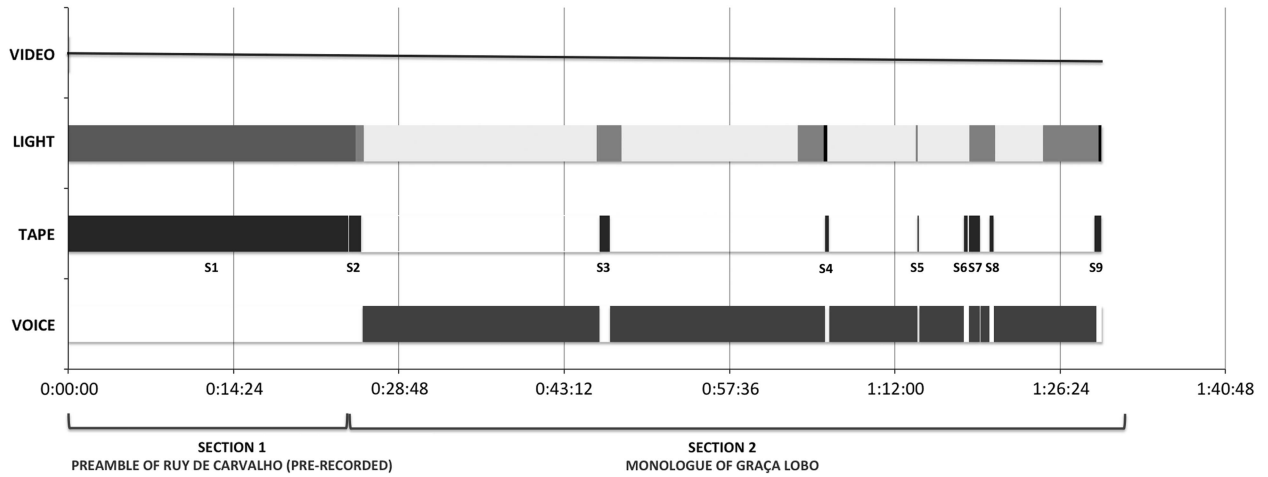
Figure 1. The structure of the theatre piece *Molly Bloom*.

- S2: Helena Vieira sings an excerpt from the aria 'Là ci darem la mano' from Mozart's opera *Don Giovanni* (Interventions 2 and 3 in Capdeville's documentation, Sound example 1).
- S3: Irish song 'The Young May Moon', the score of which is included in Capdeville's collection (within the documentation of *Molly Bloom* existing in the BNP). Figure 3 corresponds to the prepared piano background; clips were placed on the high-note strings of the piano, as indicated in Intervention 4.

- S4: Sound of the train (Sound example 2), which, as noted above, serves to emphasise the interruptions of Molly's thoughts.
- S5: Fart sound (following Molly's speech after she says, 'If I at least could give a fart, do whatever I wanted'; then, after the recorded sound is heard, she says: 'I am quite relieved').
- S6: Prepared piano and percussion (presented in Intervention 5 in Capdeville's documentation at BNP)
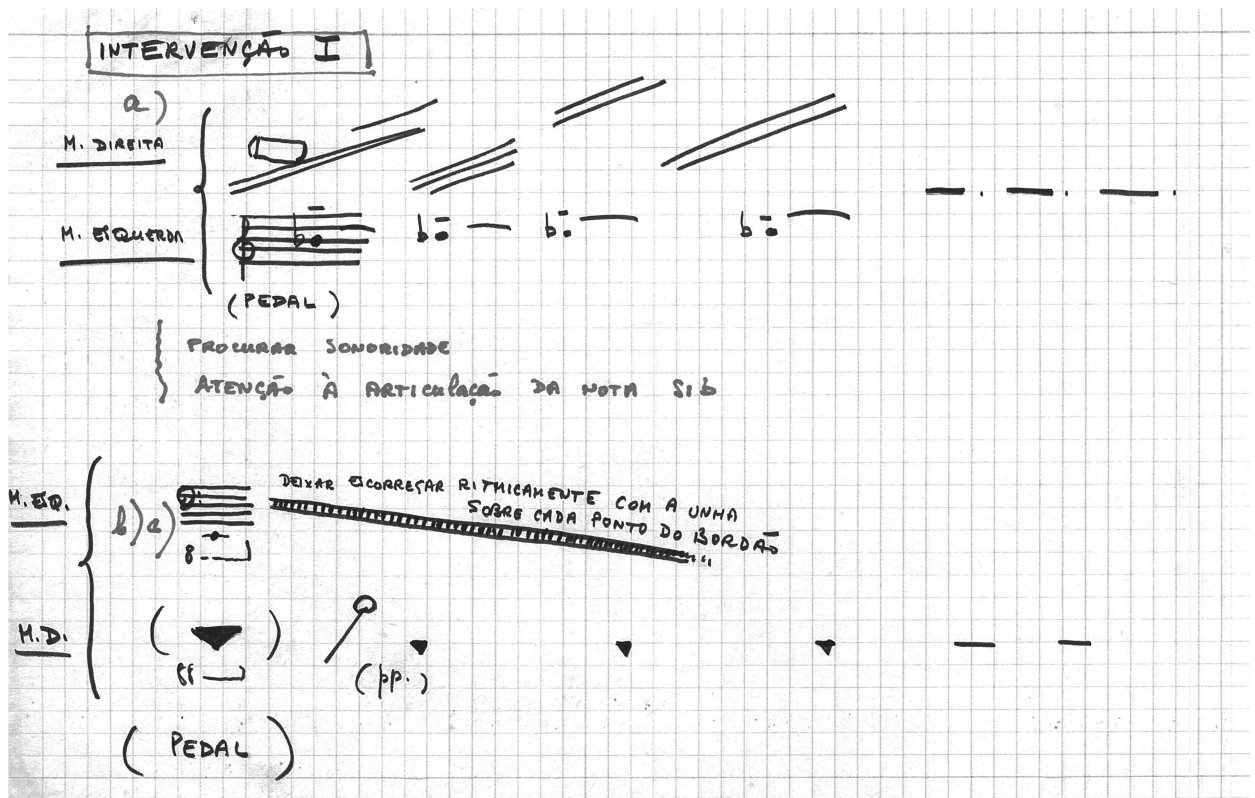

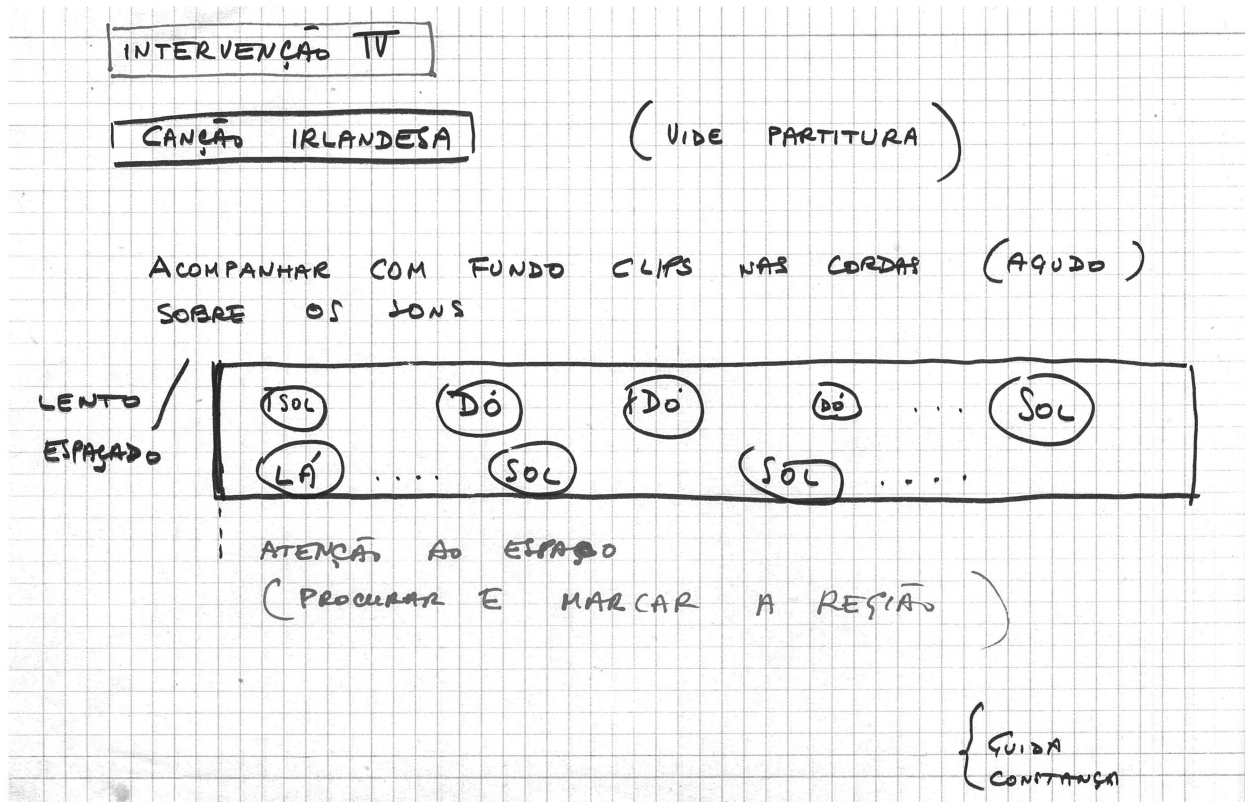**Figure 2.** Intervention 1. With permission from BNP.

Figure 3. Intervention 4. With permission from BNP.

- S7: Peeing sound (Sound example 3)
- S8: Prepared piano and percussion (a repetition of S6, and so also Intervention 5)
- S9: A long cello solo is heard, which begins to go out of tune and then, on the piano, a glass slips quickly onto the strings (Figure 4, Sound example 4).

Most of the sounds resulted from recourse to the prepared piano technique. For instance, S6 and S8 were created in a particular way with the prepared piano once more making an appearance. A set of sounds, including a gong in water (in a bowl), the slap of a palm of the hand on the piano while a drumstick cable picks up the vibration, Indian bells and wind chimes were all recorded separately and then superimposed. To make the peeing effect, Augusto recorded a tap running into a basin. Finally, the recording of the train was captured in Estoril train station with the portable equipment mentioned above.

3.1.1. Final notes

In the case of *Molly Bloom*, while analysing the structure through the video, we did encounter some limitations, mainly because the video does not answer all the questions. As an example, it was difficult to understand the function of the music within the play, which, at times, may indicate changes of location, or even a potential division of the play's structure. While organising the documentation for *Molly Bloom*, including analysing the video, we discovered certain inconsistencies, and only after interviewing Carlos Quevedo did these contradictions start to become clearer, once he had helped in demystifying some of the uncertainties that arose while watching the video. The contribution of Carlos Alberto Augusto was also crucial in that he was able to clarify some aspects of the recordings. Augusto also confirmed that not all the interventions, which are part of the BNP's collection, were used during *Molly Bloom*'s performance. Indeed, there are a number of important missing materials without which a re-performance of the work would be difficult: the general script of *Molly Bloom* (which could also reveal additional information about the scenery that is not visible in the video); the original text of Molly's monologue (from the last chapter of *Ulysses*) adapted and translated into Portuguese; and the original tape that was used during the performance of *Molly Bloom*. Live performances such as *Molly Bloom*, which include different technological tools (lights and recorded sound), cannot be studied in a traditional way from the point of view of musicology. In order to study this work, the musicologist can take advantage of the opportunity to access several singular documents in the context of a musical work, as mentioned above, while also resorting to technological tools such as graphical

Figure 4. Intervention 6. With permission from BNP.

representations (scores, sonograms, spectrograms or formal schemes), or symbolic representations (computerised analytic descriptions of the work and so on). Thus, in order to preserve the play, recourse to methods associated with musicological studies and with the production of additional documentation, such as interviewing participants, can also be a viable strategy. However, the production of documentation through interviews, *a posteriori*, despite seeking to address these faults, cannot respond to all the elements that constitute the identity of this work, especially with regard to the performative practice. Therefore the musicological study is feasible and a re-performance of *Molly Bloom* is still potentially possible, despite the necessary adaptations that must be made as a result of some core elements being missing.

3.2. Case study: *FE…DE…RI…CO…* (1987)

The music-theatre work *FE…DE…RI…CO…*, by Constança Capdeville, commemorates the 50th anniversary of the death of Federico Garcia Lorca. It was premiered at the Calouste Gulbenkian Foundation, in the Multipurpose Room of the Modern Art Centre (CAM), under the auspices of the event 'Encontros com Lorca', on 10 March 1987, performed by the ColecViva Group. The ensemble was made up of Luís Madureira (voice), João Natividade (dance), Olga Prats (piano), Alejandro Erlich-Oliva (double bass), António Sousa Dias (direction assistant), Constança

Capdeville (direction and piano) and Paulo Graça (lighting), while also counting on the special participation of the Portuguese actress Eunice Muñoz. Her presence during the performance, despite seemingly very discrete, was actually extremely powerful as she acted as an omnipresent character.

In an introductory note, Capdeville expresses the following thoughts about this work:

> More than a scenic musical performance of a poem, a popular melody or a drawing authored by Garcia Lorca, *FE…DE…RI…CO…* intends to capture and suggest, through fifteen short 'flashes' extracted from the work of the poet, the atmosphere left by the poem, popular melody or drawing. (S.A. 1987)

Capdeville considers the symbology of Lorca extremely rich but, in *FE…DE…RI…CO…*, she opted to focus on two features that seem constant presences to her: 'Nana' (Lullaby) and the exclamation 'Ay amor…'. In this work, some allusions are made to Lorca's friends, for example Salvador Dali (suggested by the reproduction of such works as 'Deus Gala dans le Couloir' or 'Angelus de Gala'). Furthermore, the voice of the Argentine actress Lola Membrives can be heard via the tape-recorded fragment from 'Bodas de Sangre', as can *Nana* by Manuel de Falla, who Lorca very much admired, which is heard after the performance ends.

The water, the mirror and a written statement, reflect the sensitivity of Lorca – symbols, emblematic objects and pieces of the complex puzzle from the poet's mysterious universe as stated Capdeville in the

programme notes of the spectacle (S.A. 1987). The sound of water, pre-recorded on tape, starts and ends the performance. Capdeville explained that the choice of *FE…DE…RI…CO…* as the title related to an outburst by Lorca, who was once walking and heard a voice pronouncing his name but whispering it syllable by syllable. He then turned around and there was nothing there except for the moving of branches of an old shrub.

This work is divided into 15 sequences: *Este é o Prólogo*; *Canção dos Ceifeiros*; *A voz do Poeta*; *Duplo embalo*; *Silêncio*; *Mutação*; *Canção*; *Palimpsesto I*; *Duas Histórias com Sombras*; *Palimpsesto II*; *O passeio de Buster Keaton*; *Estampa e Canção*; *Palimpsesto III*; *Introdução e embalo do espelho adormecido*; and *Eu sei que o meu perfil será tranquilo*. It was written for piano, double bass and voice, accompanied by a dancer, while also integrating intervenient elements such as lights, recorded sounds on magnetic tape, objects and small percussion instruments. *FE…DE…RI…CO*'s materials are today widely scattered and need to be systematically organised. Within this collection, we may encounter a variety of documents including scripts which replace the full score, as there is no full score. Also included are scores of some music pieces presented during the performance, but which are not part of the BNP's collection, since they belong to the performers themselves; these include, for example, 'A Canção dos Ceifeiros', provided by Luís Madureira, an arrangement of the piece 'Jeux de Gargantua (Coin de polka)' for piano, double bass and percussion done by Capdeville from the work '3 Petites pièces montées' by Erik Satie, and 'Binks' Waltz' by Scott Joplin, both of which are part of Olga Prats' private collection. Other relevant documents are excerpts from texts and several additional notes, some including descriptions of the scenes, and others explaining locations on stage, describing props or scenery decoration, objects, instruments, and so on. Yet others include drawings and a magnetic tape recording. As the information still remains incoherent and unregulated, we need to interrelate the resources and appropriately organise them so as to ensure some consistency. For this work, Capdeville deployed three levels of scripts: 1) short script, indicating every scene, or the main lines, but not specifying the content this particular script served to guide Capdeville's as a performer as it contains the symbol 'CC' (Figure 5); 2) scripts for lights and sound recording, which was a reduced version with only the main lines; and 3) individual scripts, created by the interpreters themselves, as they came from distinctive artistic backgrounds. According to Sousa Dias, who also produced the magnetic tape used during the performance of *FE…DE…RI…CO…*, Capdeville's scripts pose a particular problem as a result of their lack of uniformity, consistency and articulation, which in turn, were a consequence of the diversity of artistic inputs incorporated into the performances.[1]

The search for the documentation of the work also unearthed a video of one *FE…DE…RI…CO…* performance, which enabled the identification of its structure.

In Figure 6, the bar entitled 'Sequences' gives the structure of the 15 sequences of *FE…DE…RI…CO…*. The work lasts around 45 minutes as shown on the x-axis. These sequences convey a sort of illustration of the various facets of Lorca that present musical and theatrical events, embracing fragments of poems or prose, slides displaying drawings, popular melodies (sometimes harmonised on the piano), as well as the lighting and pre-recorded sound effects. The 'Tape' bar once again indicates the recorded sounds and the order in which they appear. The 'Light' bar refers to the lighting effects. For example, black bands correspond to blackouts; the darker grey colour corresponds to low light or the focus points for a particular moment in the scene; the lighter grey bands from sequence 6 to sequence 13 mean lights on, but for sequences 8, 10 and 13 (named *Palimpsestos*) Capdeville referred to 'work lighting' in order to indicate changes in the scene. Between all the sequences, there is a black out in the lighting and, at the end of this bar, there is a long, extended blackout that is then followed by the performance of the song *Nana* by Manuel de Falla, sung by Luís Madureira.

As mentioned above, one of Capdeville's common practices was to take ideas from diverse artistic fields. For instance, she used as materials *O Passeio de Buster Keaton* (S.A. 1987), or quotes from *El Público*, both from the field of theatre. She also used, in Sequence 12 entitled '*Estampa e Canção*', fragments of the play 'A Casa de Bernarda Alba' (S.A. 1987), namely a mute interpretation of the figure of Bernarda Alba, performed by Eunice Muñoz (see Figure 7). The three theatre pieces were written by Federico García Lorca.

In *FE…DE…RI…CO…*, both live and recorded sounds were presented. Capdeville, besides using materials such as texts (poetry or prose), songs and drawings, which were always related to Lorca, also created the original music, mainly through playing with percussions and prepared piano in the style of Cage. In a scene from Sequence 14 entitled '*Introdução e embalo do espelho adormecido*', all the performers gathered around the piano sliding marbles over the strings of the instrument. Through the popular melody *Las Tres Hojas* by Lorca, included in Sequence 7 (*Canção*), the composer created a percussion accompaniment to the voice, in which the performers struck the body of the two instruments, the double bass and the piano. An eclectic combination of ideas and thoughts emerges throughout these sequences.

The video recording depicting the music-theatre work helps us to understand its existing documentation. Nevertheless, as with *Molly Bloom*, analysis of

[1]Personal interview with Sousa Dias, 20 April 2017, Faculdade de Belas-Artes da Universidade de Lisboa.

"FE... DE... RI... CO..."   SEQUÊNCIA   CC

1) • ESTE É O PRÓLOGO (FUGIDA (JN). JÁ ESTOU EM CENA. ESCURO)

2) • CANÇÃO DOS CEIFEIROS (OFF) – CONTINUO EM CENA. ESCURO

3) • A VOZ DO POETA (PROJECTOR SOBRE MIM. SOLO DE LIVRO) LEVANTO NO ESCURO. VOU PIANO

4) • DUPLO EMBALO (NANA LORCA. QUIETA PARA SEGUINTE)

5) • SILÊNCIO (DESENHOS (JN). ATENÇÃO DIAPOSITIVO MÃO)

6) • MUTAÇÃO "PSST... O PÚBLICO". ATENÇÃO AO BIOMBO. "PODEMOS COMEÇAR?"

7) • CANÇÃO "DEBAJO DE LA HOJA" PARA FINAL DIRIJO-ME PIANO

8) • PALIMPSESTOS I   CAIXAS DE MÚSICA. ATENÇÃO DEIXAS (EM)

9) DUAS HISTÓRIAS COM SOMBRAS. AT. DEIXA (AO) "CLARO... LA GALLINA" LEITURA CONTO.

10) PALIMPSESTO II (MUDANÇA CENA B. KEATON)   1. BRAVO! (PALMAS)
    2. RISINHOS, COCHICHOS
    3. GARGALHADAS
    4. APUPOS. ASSOBIOS
    5. SUSPIROS. AH! (alívio)

11) "O PASSEIO DE BUSTER KEATON" (VÊM)

12) ESTAMPA E CANÇÃO (LLORA, METIRANIQUES E MOZO) VESTIR CASACA PAPASALO

13) PALIMPSESTO III   D. BOISO - TRAVESSIA - (DESPIR CASACA – IR JUNTO CORDAS PIANO)

14) INTR. E EMBALO AO ESPELHO ADORMECIDO (TEXTO E PERC. JUNTO CORDAS PIANO)
    IR JUNTO COPO – BARULHO ÁGUA

15) EU SEI QUE O MEU PERFIL SERÁ TRANQUILO   ÁGUA. ESTATELA
    ESCURO

16) FINAL   NANA FALLA.

Figure 5. Example of a general script indicating the main lines. With permission from BNP.
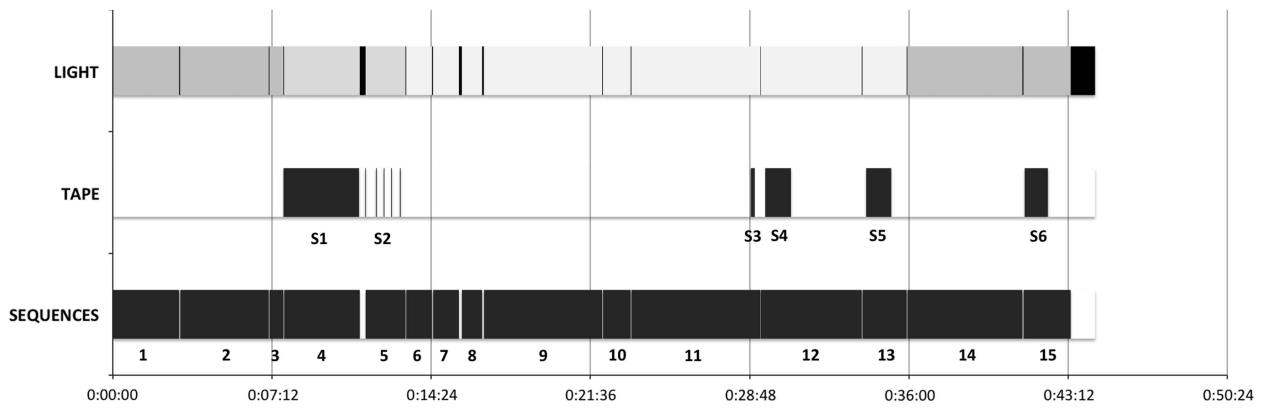
Figure 6. General structure of the music-theatre work *FE…DE…RI…CO*.

Figure 7. Images extracted from the video of the performance of *FE…DE…RI…CO* in 1987. The video was provided by FCG.

the video gives rise to certain limitations. After comparing the video with the scripts available, we have

noticed that not all of the Sequences are present. The video starts in Sequence 3; hence the timings of the first

two sequences are the results of conjecture. In order to achieve this, we based our assessment of the lengths of time involved on the descriptions by participants (see the 'Sequence' bar in Figure 6). To recreate Sequence 1, *Este é o prólogo*, João Natividade suggested that the time depended on the size of the room, and the distance between the stage and the exit. During this scene, the dancer pretended to run away from two pursuers, running from the stage to the exit, before forcefully closing the door and beginning the next sequence. For Sequence 2, entitled *Canção dos Ceifeiros*, the singer Luís Madureira helped in clarifying the duration through the song's score. The video likewise features an interruption in Sequence 13, which is *Palimpsesto III*. However, taking into account the previous *Palimpsestos* I and II, the last was assumed to also correspond to a change in scene, and so we have made a rough estimate of the time, although this is only conjecture.

Returning to our interest in studying the electro-acoustic element in conjunction with the other components, once again the video reveals that pre-recorded sounds appear throughout the work. These recorded sounds are presented in the middle bar of the chart in Figure 6, and highlight certain moments of the performance which are described below:

- S1: Sound of water with the purpose of reflecting the symbology of Lorca as mentioned above (Sequence 4, Sound example 5);
- S2: Sound of the sentence 'Ay amor...' (Sound example 6) – which is repeated five times at intervals of around 20 seconds in coordination with the projection of slides, with the dancer simultaneously mimicking the figures that are being displayed in the projected slides (Sequence 5, named 'Silêncio').
- S3: Sound of the train (also appearing in Sequence 11)
- S4: Sound of the voice of the actress Lola Membrives (Sequence 12)
- S5: Sound of the 'Electronic tuning fork' (as designated in the script by the composer), there is a continuous sound of wind instruments and sparkling percussion sounds appearing occasionally (Sequence 13, Sound example 7)
- S6: Sound of water, a repetition of S1 above (Sequence 15)

Even in the recordings, the reuse of materials is noticeable and typical of Capdeville's creative process. For example, the sound of the train, which accompanies the fall of an American girl fainting in the *FE… DE…RI…CO…* scene '*O passeio de Buster Keaton*' (in Sequence 11), is exactly the same sound as used in *Molly Bloom* (listen to Sound example 2 from S4 in *Molly Bloom*). This recurrent usage of the same sounds possibly took place for aesthetic reasons or, alternatively, on technical grounds as, at the time, accessing

sound libraries was not as straightforward as it is today. However, recycling certain sounds also encapsulated an aesthetic decision, for instance by enabling a certain cohesion between musical works. In any case, the reutilisation of recorded sounds was commonplace in Capdeville's works, whether for aesthetic, technical or practical reasons. *FE…DE…RI…CO…* features both acoustic and recorded sounds. The sound of water is pre-recorded and it was extracted from a recording already existing from a tape of the *Lúdica* (a work for which Capdeville composed music for dance). There is a sound produced live, made by the pianist Olga Prats, called the wood cradle sound, in which Prats swung the chair from side to side to recreate a dry sound of wood passing through air while the sound of water runs (Sequence 4). The sound of the train was also pre-recorded (at Estoril train station, the same sound as in *Molly Bloom* as noted above), and the recorded voice of Lola Membrives was extracted from a vinyl recording. Finally, the sound technician, in close cooperation with the composer, then edited the recordings of all the sounds. According to the pianist Olga Prats, the sound of the cuckoo clock (which belonged to Capdeville's repertoire of sounds) and the sound of a cow were created live (both in Sequence 11 '*O passeio de Buster Keaton*'). Capdeville usually used small acoustic instruments or objects to represent the specific sounds that she had imagined, all done by the performers during the performance. Some of the objects that Capdeville often used were bells, a music box, cellophane paper, a device for making bird sounds and brass frogs of different sizes, in addition to acoustic instruments, voice, double bass or piano. Piano pieces such as waltzes or ragtime works were also occasionally used.

As mentioned above, we are here concerned with studying the structure of these works, represented through charts providing a general overview of the entire performance so as to understand the communication of all the voices involved in the performance. For *FE…DE…RI…CO…*, we did not intend to focus on musical analysis in any traditional sense and hence this analytical approach is still pending, and subject to development in due course.

Within the *FE…DE…RI…CO…* documentation, there are a significant number of untitled notes written on the scripts, which at first glance make no apparent sense and so require a certain amount of study to become intelligible. In the specific case of Capdeville, the establishment of a methodology to study her works implies paying attention to several layers of information, interweaving correspondences between the various elements, hence the need to analyse each element that appears in the scene while correlating the information, and, whenever possible, complementing it with traditional analysis. Musical works that incorporate recorded sounds on tape require the preservation

not only of the tape itself but also of devices capable of reproducing the stored data. For musicological research, preserving the original magnetic tape recordings used for sound processing represents a priority just as essential as preserving the graphic schemes and notations. Additionally, the preservation of works such as *FE…DE…RI…CO…* requires a documentation database to incorporate both hierarchical and semantic knowledge.

3.2.1. *Final notes*

The scripts used for *FE…DE…RI…CO…* are an example of a certain inconsistency within the documentation of Capdeville's collection. As mentioned above, the composer created several levels of information, which need associating across all levels so that we are able to perceive the categories of interaction existing among the different elements, and only after that are we able to systematise the existing information. The existing video, despite its paramount importance as a witness to the performance, is still insufficient as a source. Also in the case of *FE…DE…RI…CO…*, as detailed above, some sequences do not exist in the video and were only identifiable through studying the scripts and comparing them with the video recording.

Moreover, the existing information is not just found within the Capdeville collection available at the BNP. Some parts of the work are found elsewhere because they belong to the performers who participated in the show and had documents specific to their instruments. For this reason, it is important to collect all the existing documentation, including materials belonging to the performers involved in *FE…DE…RI…CO…*, for instance within the private collections of Luís Madureira and Olga Prats, both mentioned above, in order to assemble together the maximum number of elements and to complete the pieces of the puzzle. Once again, the production of documentation through interviews with those involved has proved to be effective in helping to gather and systematise the existing information, which may lead to a re-performance of the work. Even if some elements are missing, and the gathering of information is still a work in progress, a re-performance of *FE…DE…RI…CO…* should still be possible. Nevertheless as with *Molly Bloom*, it is also important to document the failures, the losses and the inconsistencies, so that we will understand the entire process of recovery of the work.

4. CONCLUSION

In the present article, we have paid special attention to the main limitations on restaging two particular musical works, especially the problems encountered when trying to gather all the information available about them. The documentation left by Capdeville is vast, diverse and complex, and not easy either to understand or to work on, even at the level of the identification and organisation of materials for inventory. As it is our goal to preserve these musical works through documentation processes, our concerns have focused on two main crucial points: the organisation of the documents, and the tools required to preserve them. This has therefore required gathering disparate elements, such as scores, scripts, Capdeville's notes on paper sheets and audio recordings. It has also been important to include interviews with the participants involved in the performances in order to produce documentation gaining a comprehensive understanding of the full creative process. With the aim of defining creative processes, the documentation process needs to follow some preliminary steps, such as having a deep knowledge of the existing material (whether sounds, gestures, images, sequences or paper-based), before establishing a database collection of visual, critical and historiographical information alongside all other existing documentation, including the author's texts, interviews, photographs and films. Only with such information can it become possible to build a general overview of the creative process of the work and thereby give musicians and musicologists the foundations on which they can build either an analysis or a performance of the work. To quote Nogueira, the production of documentation is indispensable for history and knowledge in general. Memory is volatile and precarious, hence the need for something that materialises the intangible or ephemeral, enabling its transmission to future generations (Nogueira 2018). For both case studies presented above, the production of the documentation is still in its early stages. As we become more and more involved with the works, we find new aspects that lead us to other authors that provide new information. Therefore, what becomes evident is the need for and urgency of the establishment of new documentation repositories, as well as of an interdisciplinary network or collective preservation practice, involving musicologists, archivists, conservators and other experts, with the intention of enabling the continuity of this recent musical heritage.

Even so, and despite the great efforts made, because of its complexity, the complete understanding and study of these relevant music-theatre works is still some way off. Consequently, these particular musicological methods and techniques should continue to be developed, and the knowledge acquired by the study of these remarkable works will surely be a determining factor in the future studies of music-theatre works both by Capdeville and by other composers of the past or present. These efforts related to musicological studies and documentation allow a possible re-performance of such works.

Acknowledgements

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