



Artistic Research Report

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Title of the research:

*This is not my U*****E*: The use of film and A/V elements as a pivot role in contemporary opera.

Artistic Research Question:

How can the integration of film and audio-video media (e.g. digital visuals or electronic music) in opera affect my compositional process while enriching the dramaturgical possibilities in the writing of a new opera production?

Keywords: Contemporary opera, Film, Multimedia, Dramaturgy, Audiovisual, Opera singers, Interdisciplinary performers, Electronic music, Michel van der Aa

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1 Abstract

This research explores the integration of film as a dramaturgical element within contemporary opera, with a specific focus on its role in shaping narrative, character development, and audience perception. Over the course of two years, I have investigated the compositional and theatrical possibilities that emerge when opera, A/V elements and film interact, aiming to expand the expressive potential of these mediums.

Structured in three different cycles, this paper examines the evolving relationship between live musical performance, electronic music composition, and visual storytelling. Through a combination of desk research, artistic experimentation, and practical composition—drawing insights from the creative processes of composers such as Michel van der Aa, Richard Ayres, Sivan Eldar, and others—this research highlights the challenges and opportunities of hybrid opera-film formats. The findings demonstrate that film can serve not only as an aesthetic addition but as a fundamental component of dramaturgy, capable of deepening character psychology and reinforcing musical structures. Additionally, the research reveals the complexities of balancing digital and organic elements in opera, contributing to a broader understanding of contemporary music-theater composition.

Through this process, I gave myself the freedom to experiment as much as possible and learn by observing from composers and artists who stimulated and inspired my creativity. As a result, this paper has culminated in the development of *This is not my U*****E* (2024-2025), a new opera production for soprano, baritone, sinfonietta and A/V elements.

2 Introduction

2.1 Motivation and goal

I arrived in 2022 in Rotterdam where at first I started studying film music. This was for me a shifting year that opened up a new cycle of musical exploration, where I worked on electronic music experimentation and reconnected with my passion for visual arts, creating multimedia pieces that fuse music and digital visuals. Throughout this period, I also actively engaged in theatrical and concert performances as a composer and performer, collaborating with talented musicians to play my compositions.

All these new artistic experiences have transformed my way of living and writing music, leading me towards the end of the first academic year to develop my first one-act multimedia opera, *Promenade over the Universe* (2023), for soprano, 4 musicians ensemble and A/V elements. Opera is a genre which I had never approached, but which immediately captivates me because of its possibility of being a container of stories and fantasies that would otherwise be impossible to realize. At the same time, I participated as a spectator in various concerts, events, and music fairs. Among all, the performance of [*The Book of Water*](#) (2021-2022) composed by the Dutch composer Michel van der Aa (1970 -) particularly struck me. I soon discovered that van der Aa is not only an excellent modern musical composer, with fresh and bold ideas, but also an all-round artist, capable of developing very complex projects, contemporary works with

narrative approaches that reflect modern themes and structures, breaking away from traditional linear narratives. These narratives often embrace unconventional perspectives, addressing today's social, psychological, and technological issues. Instead of strictly adhering to classical narrative techniques, they incorporate experimental forms, interactive elements, and interdisciplinary influences, allowing for a more immersive and multidimensional experience. My artistic practice is rooted in the desire to explore contemporary storytelling within opera, trying to reshape the audience's perception of narrative through technological innovation and unconventional dramaturgy. Therefore, van der Aa at that time became the first interdisciplinary composer that I knew and in whom I mirror myself, taking him as a first model of inspiration in order to reach my compositional visions.

From my perspective, film provides a unique tool to extend opera beyond the constraints of the stage. It allows for shifts in perspective, rapid changes in setting, and non-linear storytelling that would otherwise be difficult to achieve in live performance. At the same time, opera offers film an immediacy and a visceral connection to the performer's presence, something that purely cinematic works often lack. My challenge has been to find a balance where neither medium dominates but instead reinforces the other, creating an immersive and multidimensional experience.

2.2 Contextualization

The term multimedia is often used broadly to describe the integration of various artistic and technological elements within a single work. However, in my artistic practice, I define multimedia as a structured, interconnected system where visual, sonic, and performative components are not mere additions but fundamental elements of dramaturgy. Multimedia in this context extends beyond the juxtaposition of different media; it actively redefines the way music is composed, performed, and experienced. One key aspect of this approach is interactivity. The latter introduces a dynamic relationship between the performer, the media elements, and sometimes even the audience itself. This interaction can manifest in different ways: real-time processing of instrumental performance, motion-tracking systems that allow performers to control audio-visual parameters or generative processes where artificial intelligence or algorithmic composition plays an active role in shaping the outcome. In this sense, interactivity challenges the traditional hierarchy of composition and performance, introducing an evolving, responsive environment where media elements communicate fluidly.

Nowadays, in contemporary music, there is a growing focus on multidisciplinary, with many artists blending digital art, new technologies, and immersive sound experiences to create works that can be applied in various physical and virtual spaces. Increasingly, composers are using new technologies to express their visions and tell stories that were previously impossible to convey. By incorporating video installations, lights, and spatialized audio, they are creating three-dimensional realities that fragment time and space, generating art that conveys modern concepts and engages audiences on a deeper level. From live performances to installations and interactive experiences, there are countless ways to explore the possibilities of electroacoustic music and multimedia art.

At the same time, this field poses many challenges and requires a deep understanding of both music theory, of any kind and genre, and contemporary technological tools. Composers and artists must navigate complex software programs, audio and visual editing techniques, and hardware interfaces, while also grappling with questions of aesthetics, narrative structure, and audience engagement. Despite these challenges, the rewards of working in this field are many. For artists, the opportunity to explore new creative frontiers and collaborate with other artists and technologists can be immensely

satisfying. For audiences, the chance to engage with cutting-edge multimedia works can be a transformative experience.



Fig. 1 - Michel van der Aa, *Upload*. Dutch National Opera & Ballet.¹

Recent compositions such as *Micro-Macro*² (2015) by Ryoji Ikeda (1966 -), *Upload*³ (2019-2022) by Michel van der Aa (1970 -) (fig. 1), or *Ask Ada*⁴ (2021) by Yannis Kyriakides (1969 -) are just a few examples of the many multimedia works that have emerged in recent years. Despite sharing common stylistic elements, each composer applies audio-visual material in unique ways, creating works that span different musical forms and performative spaces.

Based on my experience, one of the most compelling aspects that the multimedia component can offer when integrated into a project is its ability to guide the audience into a far more immersive, captivating, and magnetic experience than what a traditional medium, composed solely of musical and physically tangible scenic elements, could provide.

¹ Dutch National Opera. [Michel van der Aa's Upload](#). Published in 2021. Accessed July 2023.

² [Micro-Macro](#) (2015) is a multimedia installation created by the Japanese artist and composer Ryoji Ikeda. The piece consists of two large-scale projections of intricate, abstract visual patterns and shapes, accompanied by a soundscape of glitchy, minimalist electronic music. This multisensorial work evokes the vastness and complexity of the universe, as well as the microscopic world of atoms and particles.

³ [Upload](#) is an immersive musical theater experience created by the Dutch composer and director Michel van der Aa. The Opera combines live performance with virtual reality, allowing the audience to enter a fully interactive and multi-dimensional world. Upload pushes the boundaries of traditional theater and invites the audience to become active participants in the performance.

⁴ [Ask Ada](#) is a music theater work for singers, 6 instruments (violin, viola, cello, harp, piano, percussion), electronics and video. The work revolves around Ada Lovelace, daughter of Lord Byron and famously credited as having written the first computer algorithm in 1843. Commissioned by The Greek National Opera it will be premiered there at the Alternative Stage in June 2021.

Paolo Giulierini⁵, director of the National Archaeological Museum of Naples, emphasized at LuBec 2021⁶ that immersiveness should be more than entertainment, it should serve as a transformative, cathartic experience⁷. Drawing from classical languages, he linked immersion to *baptizo* (Greek for baptism) and *immergo* (Latin for seeking a way out), highlighting its historical and philosophical significance as a passage between states, whether life and death, past and present, or personal and societal change.

Crucially, resurfacing from immersion marks the moment of transformation, where individuals apply newfound insights. Artists must therefore carefully curate themes, whether personal or societal, to provoke reflection. Immersion should not be passive but should lead to conscious engagement with reality.

In composition, the balance between electronic and acoustic elements is pivotal. While multimedia works often favor electronics for their adaptability to audiovisual contexts, incorporating acoustic instruments preserves human expressivity. My research supports this integration, as acoustic sound remains essential for a fully immersive musical experience. In orchestral settings, blending electronics and sound design varies widely, shaped by the interplay of orchestral timbres, synthesized sounds, and field recordings.

2.3 Research question

How can the integration of film and audio-video media (e.g. digital visuals or electronic music) in opera affect my compositional process while enriching the dramaturgical possibilities in the writing of a new opera production?

2.4 Specific audiences and readers addressed

This research is intended for composers, opera singers, and sound and digital artists interested in creating operatic works that integrate audio-visual multimedia as a central element of dramaturgy.

⁵ Paolo Giulierini is the Director of the National Archaeological Museum of Naples (MANN). Giulierini has been praised for his innovative approach to museum management, which has included a focus on digitizing the museum's collections and creating engaging multimedia experiences for visitors. He has also worked to expand the museum's outreach efforts, collaborating with other institutions and community organizations to make the museum more accessible to a wider audience.

⁶ LuBec 2021. [International Summit on Immersivity](#). Accessed February 2023.

⁷ From the speech: "I would like to start with a reflection on the theme of immersiveness because this word - to immerse oneself - is a very important verb that has echoes in classical languages. For example, we know that in ancient Greek, to immerse oneself is translated as 'baptizo', which is the verb that gives rise to the word baptism. Those who go through immersiveness, who immerse themselves, in the case of Christian baptism, in water, are no longer the same. From a religious point of view, this means becoming a new adherent of the spiritual doctrine. From a philosophical-anthropological perspective, on the other hand, the act of immersing oneself is, in fact, a state passage, which in many ancient civilizations has often been associated with the passage between life and death. Lastly, the verb to immerse ourselves, even in the Latin language, from the verb 'immergo', also means seeking a way out. In Italian, for example, the idiomatic figure 'to immerse oneself in the past' is often used to seek consolation and escape from the brutality of the present."

3 Research Process

3.1 First research cycle

3.1.1 Overview of first research cycle

In this first research cycle, I focused on the artistic work of Michel van der Aa, analyzing how he integrates film, electronics, and live performance into a cohesive multimedia opera. Specifically, I examined *One* (2002–2003) and *Upload* (2020), two works that are nearly two decades apart yet provide insight into the evolution of his compositional techniques. These works illustrate how van der Aa merges live musicians with prerecorded electronic elements and video, creating immersive theatrical experiences.

To understand van der Aa's methods, I conducted a detailed score analysis, studied his compositional processes, and explored his approach to film-music synchronization. I experimented with audiovisual synchronization techniques and tested different ways of integrating film and electronic elements into a musical performance.

The outcome of this research cycle was the development of a structured approach to integrating multimedia into opera. I gained a deeper understanding of how film can shape musical structure, how electronic sound design interacts with live performance, and how synchronization can enhance narrative impact. These insights directly influenced the first stage of my opera *This is not my U*****E*, where I began applying multimedia techniques to construct a layered and immersive operatic experience.

3.1.2 Reference recordings

[01 Reference Recording 1 \(Massimiliano Vizzini\) - *Promenade over the Universe*](#)

[02 Reference Recording 1 SCORE \(Massimiliano Vizzini\) - *Promenade over the Universe*](#)

[03 Reference Recording 2 \(Massimiliano Vizzini\) - *Promenade over the Universe* \(Birds Song\)](#)

Massimiliano Vizzini - Music, libretto, visuals

Performed and recorded at Batavierhuis (Rotterdam, NL) during the Sounding Here festival on 24th of June 2023

Date of composition: April-June 2023

Duration: 35'

Hanna Aïlane - Soprano, Lluïsa Paredes - Cello, Irene de las Muelas - Piano, Massimiliano Vizzini - electronics

I chose *Promenade over the Universe* (2023) as a reference recording for this first research cycle because it is, in fact, the first multimedia musical theater work that I have composed, and it is also very recent, perfectly reflecting my current state of technical skills in this field. It is a work that I self-produced and developed in the last part of my first year of my Master's at Codarts. With this work, I aimed to blend together different musical and artistic experiences that I encountered during the year. I combined classical musicians, electronic music, visuals, and surround sound.

3.1.3 Feedback and reflection

Based on the feedback I received from the singer Hanna Aïlane, soprano playing the protagonist character of the opera, Irene de las Muelas, pianist of the ensemble, from the audience present during the Batavierhuis concert premier, and as well with my own reflection, I'm being able to set some focal points on which to build and be able to improve technical and musical aspects for the current research cycle:

1. Connection between A/V materials performers: The use of visuals enhanced the singer's understanding of the opera and influenced their singing and acting style positively. Singing with a video projection of themselves allowed them to feel the presence of a second character and added depth to the performance. The performer missed out on some poetic images due to limited exposure to the visuals, which could have inspired her further. Some compositions lacked rhythm and cues in the fixed electronica, making it challenging for the performers to synchronize during certain songs.
2. Music: Despite the music being fresh and appreciated by the most, the lack of adjustment in the balance of different elements within the audio tape for the actual performance might have impacted the overall impact of some songs.
3. Vocal techniques: The performer emphasized the importance of incorporating clear landmarks in the vocal score to aid memorization, practice, rehearsal, and performance, especially in the absence of a conductor. Also, it was complicated to achieve acoustic balance during rehearsals without the amplification set up.
4. Visuals: The use of visuals, particularly in the "Floating Around" scene, where the singer addresses and sings toward the screen, received very positive feedback from the audience, suggesting that it was effective in enhancing the performance.

My own reflection: I think *Promenade* was a beautiful first experiment full of successes and failures. Many visuals were temporary but they have been invaluable in understanding even better how I want to develop the graphic part of the work. As for the music, I have to work even more on mixing the electronics and balancing them with the acoustic instruments. Vocal writing is perhaps the most challenging part and from which I learned the most from this performance. In fact, there are many parts that I will have to update in the second draft of the score, in order to make the study, execution and interpretation of the work even clearer and easier.

In summary, the integration of A/V materials and their influence on the performers were mostly positive. However, challenges related to synchronization, memorization of music, and acoustic balance were noted in some instances. The performers appreciated the creative aspects of the music writings but also highlighted the importance of providing more clear cues for vocal entrances and pauses.

After the feedback received, my focal point for this cycle has concerned the interaction between media and on-stage singer, specifically on the A/V and vocal music writing techniques through which it is possible to devise interactive dynamics between video, electronic music, and acoustic singer in a smooth, effective, and creative manner.

3.1.4 Data collection & data analysis: my findings

The resources that I analyzed and studied for this first part of the research are divided into multimedia materials including the performances of the works *Upload* (a film of the opera was uploaded into [Medici.tv](#)) and *One*, which I bought from the official Van der Aa website shop. Of the latter, I also analyzed the scores featured in the [Nkoda](#) catalogue.

I also looked into two videos of *The Making of Upload*⁸ (uploaded from the official channel of the [Dutch National Opera and Ballet](#)) and *The Making of Sunken Garden*⁹ (2013) (uploaded on the Aa's youtube channel). Eventually, I read many articles in which there are interviews with the composer, among the others, the interview held by the researcher and musicologist Jelena Novak¹⁰, the second by the interdisciplinary scholar Jonathan W. Marshall¹¹, and finally an article by the artistic researcher Lea Luka Sikau¹² who recounts the experience of the rehearsals and behind the scenes of *Upload*.

3.1.4.1 Case Study 1: Connections between Human and Post-human in *Upload*'s use of Multimedia technologies.

Michel van der Aa¹³ (b. 1970) is a renowned Dutch composer known for integrating film, soundtracks, and technology into his compositions. His 2021 film opera *Upload*, premiered by Dutch National Opera and other international institutions, blends a chamber ensemble, electronic music, film, and motion capture to explore the concept of eternal life through digital uploads. The opera examines themes of identity, humanity, and our relationship with technology, asking if we can transfer our consciousness into a computer and whether we remain ourselves in the process.

Van der Aa's work, driven by projected films, stage action, and real-time virtual avatars, recalibrates traditional operatic practices. The opera's narrative centers on a family dealing with the father's digital disappearance, exploring the existential questions surrounding digital immortality. While *Upload* utilizes cutting-edge technology, van der Aa emphasizes that it should always serve the story, not overshadow it. For him, technology is a tool for enhancing the narrative, much like adding an instrument to an orchestra, reflecting the humanist core of his work.

Although not inventing anything new from a literary perspective, as it is a theme addressed in many science fiction books and films, with Michel van der Aa, however, I had a rather different sensation. It is no longer just a science fiction story, distant from us, almost impossible to imagine, but thanks to his way

⁸ Nationale Opera & Ballet. [The making of Upload](#), published on March 21, 2021. Accessed July 2023.

⁹ Michel van der Aa. [The making of Sunken Garden](#), published on March 29, 2017.

¹⁰ Jelena Novak. "Music Beyond Human: A Conversation with Michel van Der Aa." *International Journal of Music New Sound* 55, no. 1 (2020): 7–22.

¹¹ Jonathan Marshall. "Freezing the Music and Fetishising the Subject: The Audiovisual Dramaturgy of Michel van Der Aa." *Sound Scripts* 2, no. 1 (January 1, 2009).

¹² Lea Luka Sikau. "Rehearsing Upload". *Sound Stage Screen* 02, no. 2 (March 31, 2023), 61-79. Accessed August 2023.

¹³ Before studying composition with Diderik Wagenaar, Gilius van Bergeijk and Louis Andriessen, van der Aa trained first as a recording engineer at the Royal Conservatory in The Hague. In 2002 he broadened his skills with studies in film direction, at the New York Film Academy.

of constructing the story, the characters, and the technologies he employs, it makes it all very close to us, something we expect to happen in the near future.

In order to be as specific as possible in describing the multimedia techniques used, I will divide the analysis into two main parts: the electronic audio side, and the video projections side. However, the projections could be further divided into three main specific techniques: the use of the space and interaction between actors and video, the use of a film with actors and a plot, and the use of augmented reality through the use of live motion capture.



Fig. 2 - Moving screens interaction. (Upload Film, Dutch National Opera & Ballet).¹⁴

3.1.4.1.1 Upload: Space and interaction

During my first viewing of *Upload*, it was clear that the video component was a central element of the performance. Large glass screens on rails displayed 3D visuals, film, and real-time projections throughout the opera. Lea Luka Sikau describes the minimal yet complex setup during rehearsals at the Dutch National Opera: “The set consists of seven giant screens. Two singers stand on stage: baritone Roderick Williams gazes into a motion-tracking camera, while soprano Julia Bullock watches his oversized avatar projected on the screens.”¹⁵

These interactive screens function as a third character, continuously projecting images and transforming throughout the opera. The daughter character interacts most with the projections, moving among them and shifting them using the rails (fig. 2). The glass screens, translucent even during projections, allow for dynamic three-dimensional interactions with the singer. The positioning of the screens creates layers of

¹⁴ Dutch National Opera. [Michel van der Aa's Upload](#).

¹⁵ Sikau, “Rehearsing Upload,” 61.

depth, enabling Van der Aa to achieve various movement effects based on the singers' positions (fig. 3). Additionally, the singer can manipulate the screens to alter the scenic perspective.

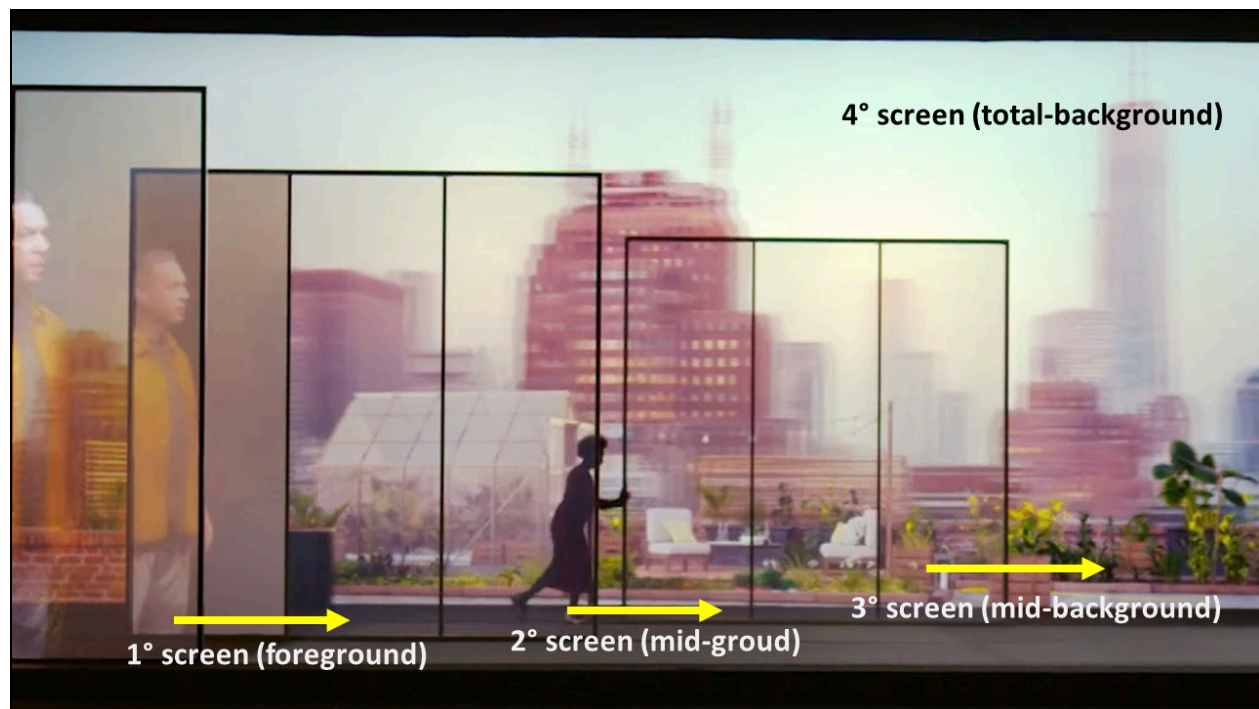


Fig. 3 - Screens prospective levels. (Upload Film, Dutch National Opera & Ballet).¹⁶

Speaking about the central aria of the opera, sung by the character of the daughter, the composer tells us more about the visual aspect of this scene:

We have four screens on stage. Three screens are made of glass and they can be projected upon and they can be viewed as a window just behind a window, and in this scene, it starts on the smallest screen. We see these fractal graphics made by fractal artist studio [Julius Horsthuis](#). It's almost like a journey in the head of the avatar. We see this abstract landscape starting on one screen and then spreading throughout the stage and it kind of reflects this imaginary space in the head of the avatar.¹⁷

In this case, the 3D visuals created by the graphic studio serve to enter into the molecules of the digital avatar of the father, thus becoming traveling spectators inside the neural network of the upload. The daughter can actually influence the space of the upload. When she passes through it with her hand, you can see how the pixels of his body move. When she passes the screen, you can see how the upload reacts to her person (fig. 4). So, it is very much an entity that is part of the production, the physical part of the stage.¹⁸

¹⁶ Dutch National Opera. [Michel van der Aa's Upload](#).

¹⁷ Boosey & Hawkes. [Anatomy of a Scene: "Upload" by Michel van der Aa](#), published on April 28, 2023. Accessed July 2023.

¹⁸ Ensemble Musikfabrik. [Interview with Michel van der Aa](#). Mareike Winter, August 2020. Accessed July 2023.



Fig. 4 - Stage Actor and Digital Avatar screen interaction.¹⁹

3.1.4.1.2 Upload: AR - Augmented Reality

The opera extensively uses real-time augmented reality projections of the father's digital avatar, created through motion capture technology. Cameras scan the singer in real-time (fig. 5) and transform his movements into a digital avatar. Motion capture, commonly used in video games, tracks actors' movements via sensors or markers placed on their bodies. Multiple cameras capture these movements from various angles, creating a 3D representation. Specialized software then processes this data to reconstruct the actor's motion digitally. Van der Aa focuses on transforming Roderick Williams's body into a virtual figure, with projections of the avatar's face disintegrating into particles, each time with different granular effects, as discussed in his interview with Winter:

The way we want to do the upload is that a singer Roderick Williams does the upload himself live on stage. So we are now developing a technology where we have a series of cameras that film the singer, the singer's face and body, which is then transferred to the projection screens with very low latency. So we see a digital version of him playing almost like a puppeteer. And he sings live and synchronizes with the upload. The upload in turn interacts with the ensemble, with the music and with the daughter. And also the other way around.²⁰

¹⁹ Dutch National Opera. [Michel van der Aa's Upload](#).

²⁰ Winter, Interview with Michel van der Aa.



Fig. 5 - Baritone Williams surrounded by cameras for real-time scanning. (The Making of Upload).²¹

According to the composer, the complex technological system is crucial to represent the concept of 'upload.' For effective dramaturgy, real-time synchronization with near-zero latency is essential, meaning the actor's movements must correspond nearly instantaneously with the digital avatar's actions (fig. 6). This synchronization is key to creating a believable interaction between the live performer and the digital representation, enhancing the dramatic impact. While the scenic effect itself is impressive, van der Aa highlights the delicate balance between entertainment for "wow" moments and dramaturgical entertainment that surprises while encouraging reflection.

Indeed, even though the film is generally the more static component of the work, it still maintains the concept of interactivity. The character of the father, who in the context of the story depicted in the film would be inside the Swiss clinic, never actually appears on the screen. Instead, through a clever technique that relates the film's screenplay to the theatrical staging, the character of the father moves away from the cameras of the AR scan and positions himself at the center of the stage. This gives the illusion of him being part of the film despite actually being outside of the footage. This effect is further emphasized by the dialogues between the actors in the film and the actors on stage (fig. 8), who interact as if they were all in the same location at the same time. This blending of the real and the digital, the live and the recorded, contributes once again to the multi-layered and immersive experience of the performance.

²¹ Nationale Opera & Ballet, [The making of Upload](#).



Fig. 6 - Example of digital transposition through AR.²²

3.1.4.1.3 Upload: Film

While AR technology adds an interactive element to the opera, the film section is more static, representing the pre-upload phase where the music pauses, and the film takes center stage. It depicts the clinic where the upload occurs, explaining its process and implications. Van der Aa also directs and writes the films in his works (fig. 7), ensuring seamless integration with music and stage action. During the film scenes, the father's avatar shifts back to human form, with the actor leaving the camera station to interact with the film characters. The score includes film cues and dialogue, aiding in syncing music with the visual narrative. Van der Aa shares more about his film process:

During the libretto making process, we quite soon imagine going back in time to the clinic where the father is uploaded. We thought it would be very nice to have those parts in the film, so there are film projections, and often in my works film projections are more than just then a simple film, they are also there to create a connection to the actual space of the stage. So the singers on stage react to the film images.²³

²² Dutch National Opera. [Michel van der Aa's Upload](#).

²³ Nationale Opera & Ballet, [The making of Upload](#).



Fig. 7 - Upload film shooting. (The Making of Upload).²⁴



Fig. 8 - Stage actor-film actors interaction. (Upload Film, Dutch National Opera & Ballet).²⁵

²⁴ Nationale Opera & Ballet, [The making of Upload](#).

²⁵ Dutch National Opera. [Michel van der Aa's Upload](#).

3.1.4.1.4 Upload: Soundtrack

The visual component is central to conveying the opera's story, while the electronic music, described by Van der Aa as the 'soundtrack,' is a key feature of his sonic world. Rather than being pre-recorded music, the soundtrack interacts with live acoustic instruments, acting as an extension of them. Much of the soundtrack consists of recordings or real-time ensemble performances, processed with effects like reverbs, echoes, pitch modulation, and distortion.

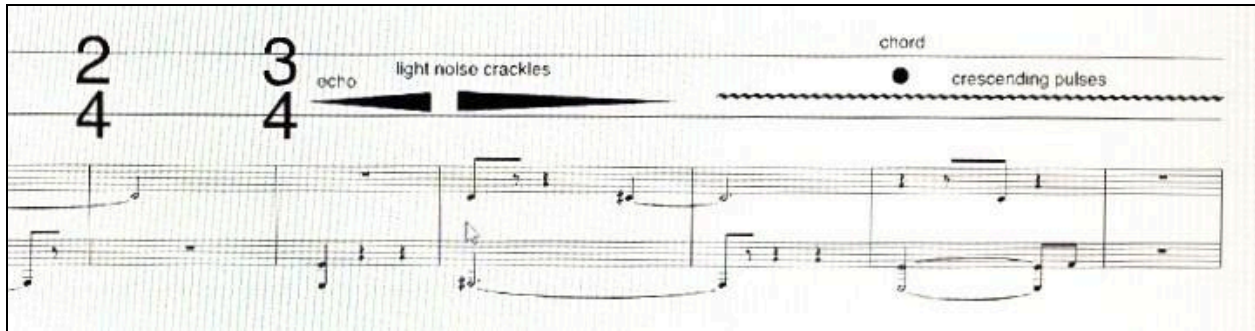


Fig. 9 - The soundtrack textual and graphic notation.²⁶

Various live electronic techniques are used, as indicated in the score (Fig. 9). For example, echo effects are created by recording the tail of a musical phrase, which is then transformed and reverberated. This technique helps transition between live singing and the pre-recorded film projections. The score also includes symbols reminiscent of contemporary music, such as thickening lines for clusters and dots for bursts of distortion or percussion. Textual notations like tremolo, crackle, and pulses are used to guide the electronic musician (Fig. 10).

The real-time recording technique is also applied to the vocals. In one scene, the father's voice is recorded live by a scientist, who asks him to pronounce vowels and consonants. This recording is then used in the composition, adding a real-time electronic layer to the music. Van der Aa describes this as another way of creating a digital alter ego of the acoustic voice.

But the truly astonishing aspect of the electronic component is that all of this is done in real-time thanks to the use of proprietary software that van der Aa has been using for several years. In fact, it was created at the request of van der Aa himself and only the composer is in possession of this instrument which is not marketed or purchasable. As indicated in the score (fig. 12), the electronic musician will use a laptop connected to a six-channel surround system, controlled by the DoubleAplayer (mentioned in the score as a DAP), which allows for flexible sample playback. The program makes it possible to adjust the timing of the electronic track in sync with the conductor's tempo, compensating for temporal modulations. In this way, the electronic track is no longer something external and predetermined but becomes a musician on par with a member of the acoustic ensemble, effectively transforming (once again) a digital component into something organic.

²⁶ Aa. *Upload, Film Opera*, 74.

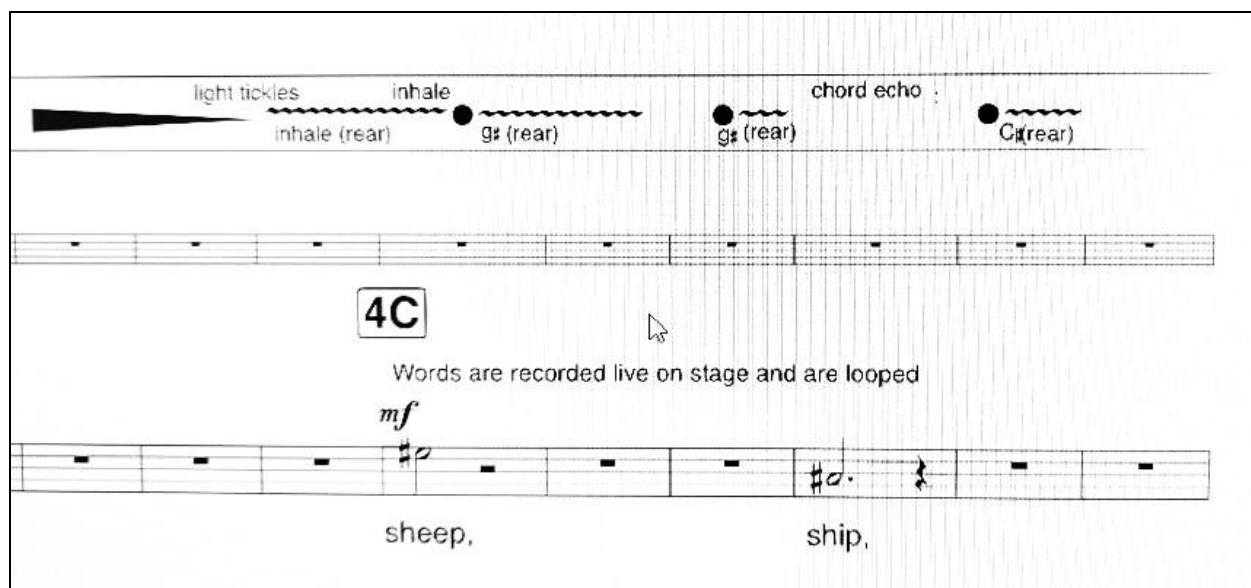


Fig. 10 - Soundtrack notation and voice live recording on stage.²⁷



Fig. 11 - Vocal live recording and video interaction. (Upload Film, Dutch National Opera & Ballet).²⁸

²⁷ Aa. *Upload, Film Opera*, 108.

²⁸ Dutch National Opera. [Michel van der Aa's Upload](#).

Furthermore, it is clearly specified that this 'laptop player' must be placed among the other musicians with a clear view of the conductor. They will also need to trigger the parts where the film scenes are present. The composer himself, in an interview with the online magazine *Fifteen Questions*, explains the aesthetic thought process behind the composition of the electronic music and how it interacts and is essentially fused together with the acoustic musical elements:

The electronic layer in my work often is created with recordings of the musicians that are performing the work on stage. So the soundtrack becomes their alter ego, the live performers dueling with their own recorded sound. It's a dramatic tool, but also serves as a tool to defy the expectations of the audience. The acoustic sound world of the ensemble or the musicians blend in such a way with the electronics that the source is not clear anymore.²⁹

Therefore, van der Aa employs electronic music almost with the purpose of misleading the audience, transporting them to a realm of the "indefinite," detaching them from the sonic reality they are accustomed to, challenging them to discern what is "real" and what is not. The result is that the listener's attention is consistently captivated by these unexpected sonic formulations, irrespective of whether they personally enjoy the music or not. However, considering the opera's brevity, which doesn't even exceed an hour and a half, this electroacoustic intrigue is sustained throughout the entirety of the work. Yet I think that as the opera progresses towards its second half, the impact of the sought-after dramatic effect by the composer might become slightly less effective.

<p>• The soundtrack is played back from a laptop through "doubleAplayer", a software program that handles the playback of samples in a soundtrack in a musical and flexible way. The program makes it possible to adjust the tempo of the soundtrack by following the conductor and compensating for tempo fluctuations.</p> <p>One musician is needed to control the program and synchronize the soundtrack with the ensemble or orchestra. This 'laptop player' should be placed amongst the musicians on stage with an unimpeded view of the conductor. This person also should trigger the video cues in the opera.</p>	<p>1 Percussion player</p> <p>2 Violins</p> <p>1 Violas</p> <p>1 Violoncellos</p> <p>1 Double bass (low C string)</p> <p>Soundtrack (laptop, 1 player, 6 channel surround)</p> <p>Film (4 channels, 5 screens)</p> <p>* can be high-quality sampled instruments, like the <i>Synthesizer Library II</i> (grand piano), <i>Spectrasonics Keyscape</i></p>
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Fig. 12 - Legenda of Upload score.³⁰

While Michel van der Aa's use of electroacoustic music is initially captivating, keeping the audience engaged through unexpected sonic manipulations, its effectiveness may diminish as the opera progresses. The reasoning behind this is that, over time, the audience becomes familiar with these compositional strategies. What was once surprising or disorienting in the first half of the opera might start to feel predictable or formulaic in the second half, reducing the intended dramatic impact. This phenomenon is common in works that rely heavily on a particular technique or aesthetic device to create tension or engagement. If a composer repeatedly employs similar electronic manipulations or structural surprises without introducing significant variation or escalation, the audience may start to anticipate them, making them less striking.

²⁹ Fifteen Questions. [Interview with Michel van der Aa "Between two layers"](#). Accessed July 2023.

³⁰ Aa. *Upload, Film Opera*, 2.

3.1.4.2 Case Study 2: *One*, a singer duet with her digital mirror.

One (2002), premiered in 2003 by Barbara Hannigan, is a chamber opera for solo soprano, video, and soundtrack. It has been performed at festivals including the Berliner Festspiele, Paris Festival de L'automne, and the Venice Biennale. In 2004, Van der Aa won the Matthijs Vermeulen Prize for the work. The opera explores five elderly women recounting their stories, with the protagonist's evolving relationship with them gradually revealed, portraying a woman who has lost her own identity. Van der Aa, who directed both the film and staging, says the text serves more as a sound source than a narrative, with fragmented, often incomprehensible dialogue.

Although his first opera, *One* already displays Van der Aa's use of stage and video interaction, a technique he refines in *Upload*. The film serves not just to deepen the drama, but to extend the character's emotions and thoughts, representing alter-egos and new dimensions. While *One* uses simpler scenography, with two fixed screens and minimal set pieces, it achieves intricate video interactions with stunning synchronicity.

The opera's focal point is the interaction between the singer and her digital reflection. The synchronization of live and recorded performance creates a seamless duality, but Van der Aa also plays with asynchronous moments, challenging the performer's virtuosity through densely interconnected vocal sections.

3.1.4.2.1 *One*: Multimedia synchronism

For multimedia synchronization, I mean all the parts within the opera where the actor on stage and the actor in the video synchronize their movements or voices. There are several sections where the two characters move, sing, and react in perfectly synchronized and homorhythmic ways, creating a highly effective dramatic effect. For example, as you can see in the examples below, parts of the choreography where the actress moves the table and then rests her head on it are executed in (almost) perfect synchrony (fig. 13) with the video counterpart.

There's also a brilliant theatrical effect where the actress, running to the side of the stage, brings her filmed version out of the screen, and immediately after, running towards the center of the stage, her video image re-enters the video scene (fig. 14). This creates a marvelous mirror effect, as if the screen projecting the images becomes a reflection, a virtual water mirror. It's important to emphasize that for the successful execution of the mirror effect, it's crucial that the actor on stage and their video counterpart wear the same clothes, have the same haircut, and generally resemble each other as closely as possible.

In *One*, many sections feature the two characters singing in unison or homorhythmically, with the filmed singer punctuating specific words or syllables in perfect sync. This precise synchronization is achieved through the careful construction of the score and electronic track, though it remains a challenging piece for singers accustomed to multimedia interaction and contemporary music. Electronic music plays a crucial role in this synchronization, as there is no conductor or click track, unlike in *Upload*. The opera, for a single singer with no additional musicians, relies on cue points within the electronic track to establish tempo and trigger musical phrases. Occasionally, a track labeled 'clicks' (fig. 15) marks the tempo, seamlessly integrated into the music. The opera begins with the soprano alone, using a flashlight to create a rhythmic and sonic structure, establishing both a visual and auditory rhythm.



Fig. 13: Synchronicity between stage and digital singer. (from *One* opera film).³¹



Fig. 14: Synchronicity between stage and digital singer. (from *One* opera film).³²

³¹ Michel van der Aa. [One](#), published in 2022. Accessed July 2023.

³² Aa, [One](#).

The image shows a musical score for a five-part ensemble. The parts are: choir/pitch, clicks, soprano video, and two soprano vocal lines. The time signature is 4/4. The 'clicks' part is a rhythmic track consisting of a series of eighth and sixteenth notes. The 'voice' part is a vocal line. The 'soprano video' part is a video track. The 'soprano' part is a vocal line. The lyrics are: 'Wi - - - - - thin this'. There are annotations: '<<< [flashlight climax]' and '(standing center stage) *mf*'.

Fig. 15 - The “fake” click track.³³

Another object that is used throughout the opera is wood, specifically small branches of dry trees that, when broken, produce that distinct dry and characteristic sound we all recognize. By establishing this musical motif, the composer can employ these sharp hits of broken wooden sticks and the flashing of torches to his advantage within the electronic track, effectively creating a click track that is organic to the music. This click track is not recognizable to the audience but only to the singer.

The image shows a musical score for two vocal lines. The time signature is 4/4. The lyrics are: 'Un - ta - ma - ble waves of dark - ness brea - ching po - rous black rocks. A form of heat that does not rise. While trees turn wet with night Bones be - come bran - ches. A bea'. The score is marked with 'ff' (fortissimo).

Fig. 16 - Pre-recorded voice and live voice homorhythmic synchronicity.³⁴

In the same way, the vocal writing also plays a fundamental role in creating the synchrony effect between the two characters. There are indeed many homorhythmic or unison passages (fig. 16) that create a very impactful double reality effect. This compositional choice amplifies the sensation of interaction and connection between the singer on stage and their filmed counterpart, contributing to making the relationship between the two characters more tangible.

³³ Michel van der Aa. *One, Chamber opera for soprano, video and soundtrack* (London: Boosey & Hawkes, 2002). Accessed August 2023.

<https://www.nkoda.com/instrument?ref=947d7cf9-703e-41d2-a9b8-527f2b9d452f>

³⁴ Aa, *One, Chamber opera for soprano, video and soundtrack*, page 9, bars 81-85.

3.1.4.2.2 *One*: Multimedia asynchronism

In the asynchronous sections, the two characters interact with slight time differences, creating virtuosic and complex vocal effects. Electronic cue points are vital, guiding the timing and phrases for their exchange. For instance, in one section, the singer and her digital mirror fragment the libretto into rapid, chaotic vocal concatenations. Here, the text loses its narrative function, becoming a mere sound source. As can be seen from the score (fig. 17, 18), the vocal parts fit together like a puzzle, creating a powerful theatrical effect, akin to a verbal battle. The 'click' track is essential for maintaining timing and ensuring precise vocal interlocks.

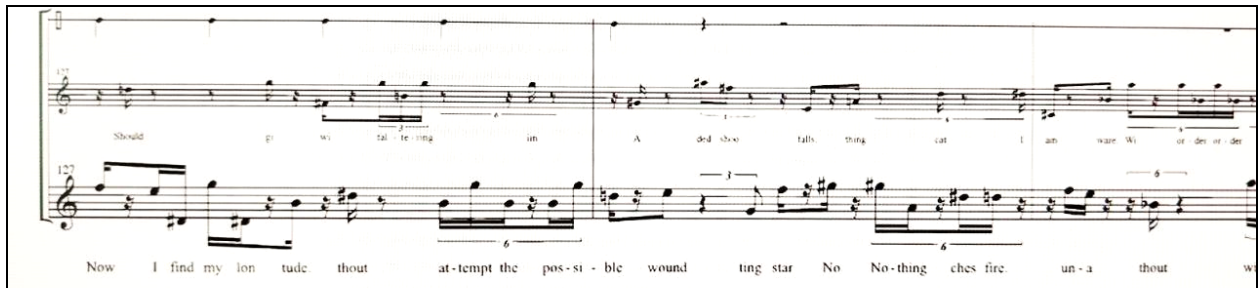


Fig. 17 - Vocal 'puzzle' interaction.³⁵



Fig. 18 - Asynchronicity between stage and digital singer (from *One* opera film).³⁶

³⁵ Aa, *One*, Chamber opera for soprano, video and soundtrack, page 17, bars 127-128.

³⁶ Aa, [One](#).

3.1.5 Interventions / practical application

As a result of this first research cycle, I wanted to rework a scene from my multimedia opera *Promenade*. It is a section for solo soprano that is part of the first act. The scene narrates the moment immediately after the protagonist's spacetime journey. She finds herself in a place that does not reflect the concepts of time and space that we are accustomed to experiencing on planet Earth. "This is not a place" is the title of this scene, which originally, in the first draft of the score, was a moment for a solo speaking soprano, without the use of electronic music, video, or sound. I already intended to expand this scene, so I decided to use the analysis and the data collection of van der Aa's operas to develop this scene while maintaining my style and the original idea. It is especially *One* opera that provided the inspiration for the idea of synchronism and asynchronism between the actor on stage and the actor in the film.

Originally, the scene was supposed to be performed by the singer with whom the opera debuted, while I would have managed the audio-video recording, staging, editing, and mixing. Unfortunately, it wasn't possible to schedule a recording session³⁷, so I had to personally perform the scene and simultaneously handle the audio-video recording. Naturally, all of this made the creative and execution process of the scene even more complex. In fact, both the score and the staging underwent several changes to make it feasible for me to perform. Moreover, since I'm neither a singer nor an actor, the result falls significantly short of what was originally planned, but it still remains a valid effort where I put into practice some of the new discoveries.

As mentioned earlier, the scene depicts a central moment of the opera, even though it occurs in the early stages of the story. The protagonist, a young woman who was playing at home with her friends, gets sucked into a space-time vortex, and her friends get pulled in along with her. Following the events through her eyes, we understand that she finds herself in a beam of light and colors, time is distorted, she's confused, intrigued, dazed. After being transported by this flow of energies, portrayed on stage through a video created with chaotic and strobe-like digital graphic visuals (fig. 19), the protagonist finds herself in an alien dimension, alone. She quickly realizes that the place she's in is not her home, and a sense of disorientation mixed with fear fills her thoughts. Shortly after, she realizes that she can no longer sing. It's as if the atmosphere of this 'non-place' lacks the physical characteristics that allow the propagation of sound vibrations. In the initial version of the opera, all of this was represented with a moment where everything came to a halt; there were no more video projections, no music, no singing. The protagonist, alone on stage, recited brief phrases - "This place is not my home / This place is not a kitchen / This place is not a living room," and so on (fig. 20) - before continuing with the next musical piece.

³⁷ A recording session has been scheduled for September 2023 and will replace the current intervention.

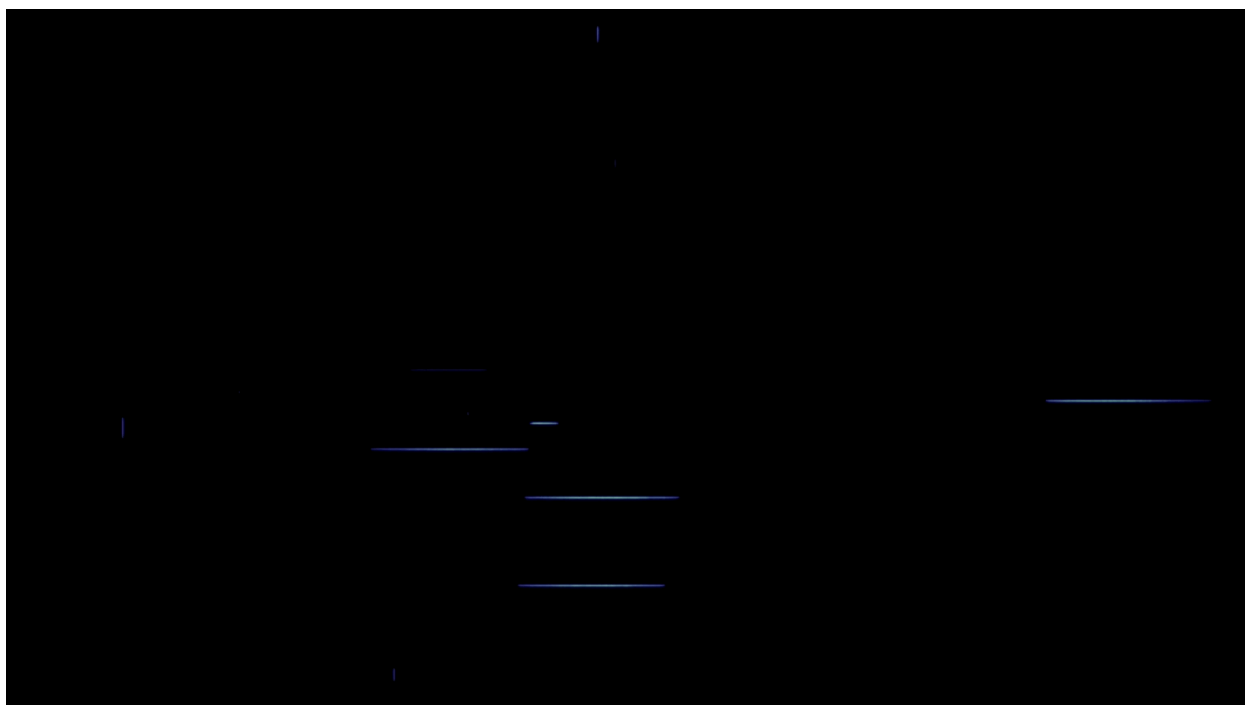


Fig. 19 - Visual fragment of the 'wormhole' from *Promenade over the Universe*.³⁸

VI. This is not a place

Voice 139 silence Hanna looking for her voice

This place is not my home

Voice 143

This place is not a kitchen This place is not a living room

Voice 147

This place is not a bedroom This place is not a garden

Fig. 20 - First version of the "This is not a Place" score.³⁹

³⁸ [02 Reference Recording 1 SCORE \(Massimiliano Vizzini\) - *Promenade over the Universe*](#), page 14, bars 139-150.

³⁹ [02 Reference Recording 1 SCORE \(Massimiliano Vizzini\) - *Promenade over the Universe*](#), page 14, bars 139-150.

Starting from the premise that I had already wanted to develop this scene, first and foremost, I questioned myself about how I would want to reshape the scene and the narrative reasons for doing so. First of all, the idea of interaction between the real actor and the digital actor had already been put into practice during the song “Birds <3” (Act II, scene iv), in which the singer creates a canon with her filmic counterpart, as you can see in a fragment recorded during the diploma recital of the singer Hanna Aïlane, where some of the songs from *Promenade* were performed ([03 Reference Recording 2 \(Massimiliano Vizzini\) - Promenade over the Universe \(Birds Song\)](#)). Yet, this was an isolated event, as the act of singing with one's own mirror image did not recur throughout the course of the opera, except in brief sporadic moments. Therefore, the idea of developing and enhancing this technique, and moreover, creating new parts of the opera where this reoccurs, can only bring narrative and aesthetic coherence to the performance. Since in the initial version the scene unfolded too quickly, not allowing the audience to acclimate and imagine the new dimension in which the protagonist now finds herself. One of the primary dramaturgical needs was to somehow extend the scene by enriching it with new meanings.

Therefore, drawing on and taking inspiration from van der Aa's work, I envisioned a digital mirror of the character, a counterpart that intervenes in the form of a film, representing the emotional and muscular memory of the character. Indeed, the video begins with deep breaths (fig. 21) - which continue until the end of the scene - conveying a sense of alienation and meditation that the character experiences on stage, but also expressing an unconscious need to be back home, breathing the air we are so accustomed to. The film brings on stage the memory, the past on Earth, and the desire to relive simple, silly, and insignificant acts, yet powerful when feeling lost. In fact, the theme of journey and estrangement is one of the main themes of the opera. A sort of otherworldly migration in which the character must confront solitude, discovery, and the relationship with alien animals and environments, the longing to relive simple things, friendship, playing together, and being able to dance with carefree abandon.



Fig. 21 - The “Breath” shoot from *This is not a Place* film.⁴⁰

⁴⁰ [04 Reference Recording 3 \(Massimiliano Vizzini\) - This is not a Place](#), 00:08 - 00:18.

The short phrases from the initial version remain but are now enriched by a new sonic and multimedia context. Beyond the film, novelty comes from the electronic track and the protagonist's pre-recorded voices. The electronic track, fixed in tempo and timbre, evokes an airy, breath-like rhythm—distorted yet cyclic and constant. A key challenge was ensuring intuitive synchronization between multimedia and singer without a click track or conductor. Inspired by Van der Aa's use of imperceptible electronic cues, I introduced a secondary electronic layer: a digital synth providing subtle cue points through shifts in notes and chords. This gives the singer a structured sense of time while maintaining the scene's suspended temporal flow. Crucially, the scene explores the dynamic interaction between the on-stage singer, their digital counterpart, and the electronic elements.

There are indeed numerous points at which the on-stage performer interacts with their mirror, both synchronously and asynchronously, a technique studied and derived from the analysis of *One*. While in the initial part (0:00 - 3:14) the relationship between video and singer is somewhat disconnected, in the central part (3:15 - 5:25) the timeline between the film and the singer becomes narrower, sometimes even finding points of synchronization. The live voice on stage becomes an extension of the prerecorded voice (fig. 22, 23), which brings the memory of simple needs and desires onto the stage, causing the character to remember and suffer from these deficiencies. This creates a counterpoint of three pre recorded voices – the breath, the singer, and the three recorded voices – intertwining to convey the essence of the scene.

In the last part of the piece, however, the synchronization between the film and the performer is reversed; in fact, the short phrases that were initially recited by the on-stage singer are now spoken by the character in the film, as if it were a distorted memory. To these phrases, a delay effect is added to further emphasize the sense of memory. This exchange of script between the live actor and the digital character creates an asynchronous interaction between them, highlighting their connection once again. Finally, right in the last measure of the piece, there is one last synchronous interaction between the two characters. As indicated in the score through a textual instruction (fig. 24), the on-stage actor is suggested to inhale the last breath in sync with their digital counterpart, which will then disappear before exhaling, leaving the on-stage actor to conclude the breathing cycle on their own. This seamless interaction between the live singer and the digital singer has been implemented after studying the works of Van der Aa, where both in *Upload* and *One*, there are indeed various phases in which the interaction of the on-stage singer is complemented by the singer in the film, and vice versa.



Fig. 22 - Stage performer interaction with the film.⁴¹

Lastly, there are moments when the actor on stage also reacts to the electronic track; for example, at the end of the central section, where all the voices are in counterpoint, sudden bursts of sound occur (fig. 25). The singer is then prompted to react to these bursts by modifying the intensity of their singing and the musical figure they were singing before.

Fig. 23 - Stage voice Interaction with the pre-recorded one.⁴²

⁴¹ [04 Reference Recording 3 \(Massimiliano Vizzini\) - *This is not a Place*, 03:22 - 03:33.](#)

⁴² [05 Reference Recording 3 SCORE \(Massimiliano Vizzini\) - *This is not a Place*, pag. 23, bar 82.](#)

inhale one last time together with your mirror,
then exhale on your own

Fig. 24 - Textual notation indicating the synchronous action to be performed.⁴³

55

always reacting to the electronica explosions

f

ba ba

staccatissimo

electronic burst

Fig. 25 - Voice Interaction with the pre-recorded electronica.⁴⁴

The staging centers the protagonist with a large projection of their digital mirror behind them. Due to space and resource constraints, I couldn't realize the scene in a theater, so this intervention serves as a preview. Without a singer, I filmed everything myself, first listing necessary shots, recording them with audio, and editing in DaVinci Resolve. After cleaning and mixing the audio, I exported the film for live performance.

For the performance, I projected the film on a TV screen and stood beside it, facing away. A challenge in *Promenade's* debut was the singer's inability to sense the atmosphere while facing away from the screen. I solved this by placing a small mirror in front of me, improving synchronization and immersion. This method will be applied in future performances by positioning a discreet mirror for the singer to view the screen without obstruction.

⁴³ [05 Reference Recording 3 SCORE \(Massimiliano Vizzini\) - This is not a Place](#), pag. 8, bars 39-40.

⁴⁴ [05 Reference Recording 3 SCORE \(Massimiliano Vizzini\) - This is not a Place](#), pag 17, bar 55.

3.1.6 Outcomes

[04 Reference Recording 3 \(Massimiliano Vizzini\) - *This is not a Place*](#)

[05 Reference Recording 3 SCORE \(Massimiliano Vizzini\) - *This is not a Place*](#)

This is not a Place (2023)

(From *This is not my U*****E*, I act scene VI)

This is not a Place is an audio-video performance for electronica, video and solo singer, who, lost in an alien dimension, questions what is happening to him/her.

Performed and recorded in Rotterdam, NL

Date of composition: August 2023

Duration: 7'35"

Performer: Massimiliano Vizzini

Music, text and video: Massimiliano Vizzini

[06 Reference Recording 4 \(Massimiliano Vizzini\) - *Not my place* \(Updated\)](#)

[07 Reference Recording 4 SCORE \(Massimiliano Vizzini\) - *Not my place* \(Updated\)](#)

Not my place - UPDATED (2023)

Not my place is an audio-video performance for soprano, bass clarinet, cello, electronica and film.

Performed and recorded in Rotterdam, NL

Date of performance: November 29th 2023

Duration: 7'59"

Performers: Hanna Ailane, Lina Gronemeyer, Lluïsa Paredes.

Music, text and video: Massimiliano Vizzini

3.1.7 Feedback, reflection and conclusion

If I were to compare the first version of *This is not a Place* with its current version, *Not my place*, it would be quite easy to see how there has been a significant development and consequent improvement of the scene. Furthermore, the thorough analysis and study of van der Aa's works have led me to reflect on the importance of providing a clear musical structure by implementing effective synchronization techniques for a better performance and interpretation of the work. This approach allows for the conception of a multimedia theatrical act that can effectively function with actors and musicians on stage.

Even the way of shaping the electronic music and the score has, in my opinion, seen significant improvement. During the composition of the electronic elements, I always kept in mind how the on-stage actor would later interact with it, pushing me to find artistic strategies that would work both musically and in terms of execution. The score, while maintaining a classical structure with measures in a predetermined timeline, leaves ample room for the interpretive freedom of the singer. The way the notes are written suggests a sense of free interpretation of the part, while still setting certain boundaries that cannot be crossed, such as the text or specific moments where the text must be sung. Additionally, there are melodic cells that can be altered rhythmically but not in terms of melodic intervals.

If I were to summarize the improvements in light of this first phase of research, I would say:

Improvements:

1. Improved structure of the piece, with a clear beginning, development, and ending.
2. Enhanced efficiency in the composition of the score, with clear indications for the electronic music, including textual cues, and effective vocal writing that allows for interpretation.
3. The composition of the electronic track and the pre recorded vocals creates sonic cohesion and divides the scene into clear sections that the performer can intuitively follow.
4. The composition of the video effectively portrays a digital mirror of the protagonist.
5. The scene's narrative has been expanded, creating a focused moment in an important part of the opera from a dramaturgical perspective.

On the other hand, there are areas that could be improved, for example:

Self-critique:

1. The narrative is still somewhat abstract; perhaps the text or emotions of the protagonist could be clearer, without compromising the abstract and psychedelic atmosphere of the opera.
2. The vocal part could be further developed and enriched, incorporating more melodic sung sections that could also convey narrative text, in line with the first point.
3. The video quality could be improved by collaborating with videographers or directors to shoot proper film scenes with appropriate set construction, lighting, makeup, costumes, and professional cameras.
4. The music mixing could be enhanced by making it surround, dividing the sound components among multiple acoustic sources, such as 5.1 or 7.1 systems.

3.2 Second research cycle

3.2.1 Overview of second research cycle

Building upon the understanding established in the first research cycle, which delved into the intricate interplay between performers and multimedia environments in works by composer Michel van der Aa, the second research cycle aims to deepen my comprehension of vocal practices and their integration within the broader context of multimedia opera production.

This cycle seeks to explore the diverse array of approaches utilized by composers and performers to achieve the expressive power of the human voice in service of storytelling. I will begin by analyzing the multidisciplinary solo singer oratorio *No. 50 (The Garden)* of British composer Richard Ayres (1965 -) due to my fascination with the aesthetics of the grotesque, which this work embodies with captivating intensity. Ayres' work also showcases how contemporary multimedia music can incorporate various techniques and solutions to create new forms of storytelling.

I will further examine Ayres' approach by comparing it to the work of Sivan Eldar (1985 -), particularly her latest opera *Like Flesh*, developed between 2018 and 2022 at IRCAM⁴⁵. This is a more traditional-modern opera in terms of vocality and serves as a counterpoint to Ayres' approach, broadening my view of this field.

Additionally, the research will include an analysis of embodied music gestures in singer-performers' practice, with a focus on notable figures such as Franziska Baumann (1965 -).

As a result, my outcome consisted of the Solo-Singer Multi-Characters Experiment, a compositional study in which I explored the expressive and narrative potential of a single performer embodying multiple characters through vocal modulation and electronic processing.

3.2.2 Reference recordings

[06 Reference Recording 4 \(Massimiliano Vizzini\) - *Not my place* \(Updated\)](#)

[07 Reference Recording 4 SCORE \(Massimiliano Vizzini\) - *Not my place* \(Updated\)](#)

Not my place - UPDATED (2023)

Not my place is an audio-video performance for soprano, bass clarinet, cello, electronica and film.

Performed and recorded in Rotterdam, NL

Date of performance: November 29th 2023

Duration: 7'59"

Performers: Hanna Aïlane, Lina Gronemeyer, Lluïsa Paredes.

Music, text and video: Massimiliano Vizzini

⁴⁵ IRCAM (Institut de recherche et coordination acoustique/musique) is a French institute dedicated to the research of music and sound, especially in the fields of avant garde and electro-acoustical art music.

[08 Reference Recording 5 \(Massimiliano Vizzini\) - *Promenade over the Universe* \(Space-Warp\)](#)

[09 Reference Recording 5 SCORE \(Massimiliano Vizzini\) - *Promenade over the Universe* \(Space-Warp\)](#)

Massimiliano Vizzini - Music, libretto, visuals

Hanna Ailane - Soprano

Lina Gronemeyer - Bass Clarinet

Lluïsa Paredes - Cello

Giuliano Comoglio - Piano

Performed and recorded at Codarts 6.41 (Rotterdam, NL)

Date of Recording: November 2023

Duration: 12'44"

The reference recordings for this research cycle feature two scenes from *Promenade over the Universe*, a chamber opera composed and conceptualized during the 2023, for which I also created the libretto and visuals. These scenes were recorded at Codarts 6.41 in Rotterdam in November 2023.

The scenes immerse listeners in the surreal space journey of four foreign music students prey to a retired mad lift operator, who, in his spare time, was able to create a space lift capable of transporting people from Earth to the Universe. The chosen scenes for reference recordings highlight the protagonist's traversal through space-warps, reacting to visuals and electronic music, culminating in a poignant exploration of past, present, and future memories in the scene VII, *Not my place*.

They weave together vocal techniques, visuals, and electronic music to convey the protagonist's space travel and inner psychological journey in the quest to reunite with her friends amid alien dimensions and surreal landscapes.

3.2.3 Feedback and reflection

In this cycle, I had the opportunity to interview my composition teacher and opera composer Robin de Raaff (1968 -), who closely followed the evolution of *This is not my U*****E*. His insights, alongside my own reflections, have helped refine my approach to vocal writing and the balance between multimedia and acoustic elements.

The recordings revealed both strengths and limitations within the storytelling and character development, particularly in how vocal writing integrates with the multimedia framework. One major challenge has been maintaining coherence in a project that inherently embraces heterogeneity. While I have made strides in blending acoustic and electronic elements, I recognize that my approach to vocal writing remains constrained by familiar habits. This limits the expressive potential of the voice, especially when compared to the extended techniques explored by other composers.

De Raaff also highlights my adept use of microphones and production techniques, drawing parallels with concept albums from popular music such as Pink Floyd or Radiohead. According to De Raaff, this approach enhances the overall sensory experience for the audience. The visuals integrated into the opera complement the regie component seamlessly, contributing to a truly complete sensual experience. However, there are areas in this part of the opera that can be improved.

For example, in the opening of scene of the “Space-Warp” moment, the character should be overwhelmed by chaotic visuals, but instead, she seems vocally pushed away due to the complexity of the sounds. De Raaff suggests softening the sounds to allow the visuals to shine without interference. Additionally, he recommends longer values in the soprano vocal lines to contrast with the crackling and spectacular sounds of the electronic layer.

Regarding the scene of *Not my Place*, De Raaff considers one of the most striking moments to be when the soprano starts doubling the spoken voice, timed superbly to create a culmination of events. He sees this as the emotional climax and a very powerful moment. The visual work is also praised, particularly the close-up of the soprano's face becoming gradually less visible towards the end, which is executed effectively.

Therefore, my focal points for this research cycle will be:

1. Expanding vocal techniques and electronic integration
2. Balancing vocal and multimedia elements

3.2.4 Data collection & data analysis: my findings

3.2.4.1 Case Study 1: Richard Ayres and Sivan Eldar - Two different approaches to vocality in contemporary electroacoustic opera.

In this initial phase of desk research, I will analyze two contemporary works that employ extensive multimedia systems, each with distinct approaches to the vocal aspect.

The first case, *N.50 The Garden* (2018), is an opera-oratorio featuring a solo singer with a distinctive, sometimes psychedelic style, where electronic music plays a predominant role, greatly shaping the vocal lines.

On the contrary, *Like Flesh* (2022) is more akin to a classical opera with subtle electronic and visual components, characterized by a somewhat more traditional approach. Here, electronic sounds are carefully integrated and balanced with the acoustic elements, while vocal performances remain unaltered by electronic manipulation.

By comparing these two examples, I aim to enrich my understanding of the electroacoustic opera field and develop my own aesthetic idea based on my compositional needs.

3.2.4.1.1 Richard Ayres' *N. 50 (The Garden)* - The use of manipulation of the voice in a solo singer oratorio-opera.

Richard Ayres is a British composer known for blending humor, drama, and surrealism in his work. One of his most notable compositions, *N. 50 (The Garden)*, combines animated illustrations, a large ensemble, and electronic music, creating a grotesque fable that draws inspiration from Baroque operas but with a modern style. The work is a cyclical tale about a dissatisfied man who embarks on a bizarre journey from his garden to the heavens and back, encountering eccentric characters along the way. The solo bass singer voices various characters, guided by intermittent text projections on stage.

Ayres' music is a collage of styles, ranging from Baroque and neoclassical to grunge, progressive rock, and electronic dance music. He integrates electronic and acoustic music, treating the orchestra like a synthesizer. The accompanying video production, by Martha Colburn⁴⁶ (1972 -), features childlike drawings, collages, and stop-motion animation.

The opera unfolds in three parts: the man digging into the earth, ascending into the sky, and eventually having an interview with an ancient bacterium. Central to the work is the solo singer who transitions between characters using a system of buttons that trigger electronic effects on their voice, blending operatic singing, narration, whistling, and onomatopoeic sounds. These effects are activated by switches integrated into the scenography, enhancing the whimsical and surreal atmosphere.

Central to my exploration of new artistic approaches is the solo singer on stage, who embodies various characters (all of them) of the story. Using a system of buttons that activate electronic effects applied to the voice, amplified via a lavalier microphone, the singer transitions between roles seamlessly. In addition to traditional operatic singing, the performer incorporates spoken narration, whistling, and onomatopoeic sounds, blurring the boundaries between classical opera and comic theater. These buttons are integrated into the scenography as poisonous mushroom-shaped switches, corresponding to the collective cartoon imagery.

These five mushroom buttons in front of the performer, each represent a character. The first button deactivates all effects, restoring the singer's voice to its natural state corresponding to the protagonist of the story, the "man", meanwhile the others apply effects to the voice. The singer's voice undergoes timbral changes including pitch alteration, filters, reverberations and other modifications tailored to different characters or narrative elements.

⁴⁶ Martha Colburn is an American filmmaker and artist. She is best known for her animation films, which are created through puppetry, collage, and paint on glass techniques. She also makes installations and performs her films with live musical performance.



Fig. 26 - Mushrooms switch buttons in front of the singer.⁴⁷

The libretto presents nine characters, each with their own psychological depths and complexities. They follow one another throughout the story. Four of them are actually represented using added vocal effects, these are: the Soldier, the Worm, the Basilisk, and the Wangee. All the others, instead, are interpreted through the use of only the acoustic voice, which however takes on different interpretative and sound nuances depending on the character.

1. The Man

Button number 1 (0 on score): Remove all effects from the voice. Natural sound.

Initially portrayed as introspective and somewhat detached from his surroundings, the man finds solace in the act of digging in his garden. His actions suggest a desire for escape and renewal, as he delves deeper into the earth to find a sense of peace and identity.

2. The Worm

Button number 2 (1 on score): Pitch shifting effect.

The worm serves as a symbol of decay and inevitability, embodying the cycle of life and death. Its dialogue with the man reflects themes of mortality, futility, and the transient nature of existence.

⁴⁷ London Sinfonietta. [No. 50 \(The Garden\) by Richard Ayres with animations by Martha Colburn.](#)

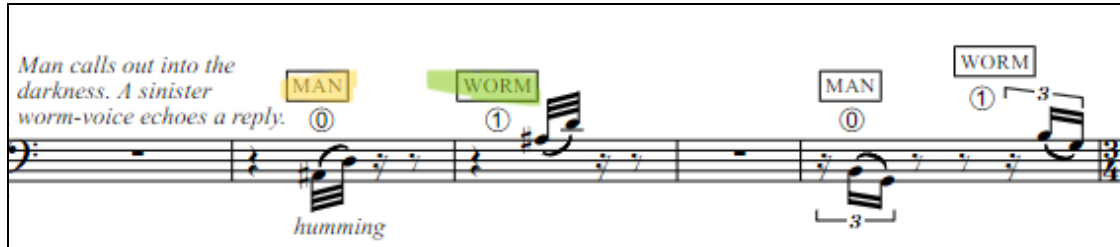


Fig. 27 - The singer's staff with the characters' changes indicated by the numbers 0 and 1.⁴⁸

3. The Soldier

Button number 3 (2 on score): Pitch shifting and filter effects.

The ghostly soldier represents the echoes of past conflicts and the enduring trauma of war. His presence evokes themes of memory, loss, and the haunting specter of violence.

4. The Basilisk

Button number 4 (3 on score): Shimmer reverb and filter that enhance the sibilant sound.

He represents primal fears and lurking dangers that the characters face in their journey. Its stealthy and predatory nature evokes feelings of anxiety and paranoia, adding to the sense of unease and uncertainty that permeates the narrative.

5 & 6. Francesca and Paolo

Button number 1 (0 on score): Remove all effects from the voice. Natural sound.

Their presence introduces themes of love, longing, and the transient nature of human relationships. Their repeated exchanges reflect a sense of yearning and nostalgia, as they search for meaning and connection in a world overshadowed by decay and uncertainty.

7. The Wangee

Button number 5 (4 on score): Pitch shifting and filter effects.

He is a mysterious and enigmatic character who embodies the unknown and the unfamiliar.

The Wangee's presence evokes feelings of curiosity, and wonder, disrupting the characters' sense of certainty and stability.

8. Inyur-Endo the Goblin Troubadour

Button number 1 (0 on score): Remove all effects from the voice. Very rough, rustic accent.

Inyur-Endo injects a note of surrealism and absurdity into the narrative, offering a whimsical counterpoint to the existential angst of the other characters. His nonsensical lyrics and irreverent demeanor provide moments of levity amidst the darker themes of the opera.

9 & 10 The Interviewer and the Ancient Bacterium

Button number 1 (0 on score): Remove all effects from the voice. Falsetto (The interviewer). Gravely (Ancient Bacterium).

⁴⁸ Ayres, Richard. No. 50 (The Garden). London: Schott Music, 2017-18. Accessed April 2024.

<https://www.schott-music.com/en/preview/viewer/index/?idx=Mzg1MDk1&idy=385095&dl=0>.

Page 15, bars 118-124.

These characters represent the cyclical nature of existence and the resilience of life in the face of adversity. The ancient bacterium's stoic acceptance of the past and disinterest in the future underscore the ephemeral nature of human concerns against the backdrop of geological time.

As we can notice, every character has a very distinctive vocal sound and interpretation of it. For example, the soldier is an elderly character, and to distinguish him from the man, his vocal pitch is slightly lowered and filtered in the high frequencies to indicate a rough male baritone voice, like that of an old soldier. This way, two distinct male voices are achieved. Similarly, the voice of the worm is drastically raised in pitch in an exaggerated manner to obtain a comically grotesque effect, although it is already quite grotesque that a worm can sing. The basilisk has a "shimmer" reverb that amplifies the sibilant "s"; naturally, the librettist is careful to write almost all the text so that the basilisk pronounces words containing the letter "s". From the libretto⁴⁹, the extensive use of letter "s" to emphasize the effect :

Basilisks
Sibilant sisters
Seeking searching
Sifting, snooping
Surreptitiously stalking
Soundless
Pursuit
Basilisks
Sibilant sisters
Sotto voce scavengers
Scheming conspiring deceptive desiring
Serial oppressors

Paolo and Francesca, on the other hand, are well distinguished at the interpretative level: the former is written on a very high range for a baritone performer, reaching up to the A-flat on the violin key, giving the falsetto effect and with a "slightly nervous" vocal charge. The latter, instead, is perfectly within the baritone range, with a warm and sensual vocal quality (Fig. 28).

FRANCESCA *slightly nervous*

Pao-lo what a rough heart, filled with de-light and sweet-ness.

PAOLO *warm, sensual, loving*

You gen-tle nymph, the beau-ty of all

Fig. 28 - Franscesca and Paolo vocal registers.⁵⁰

Something very similar happens between the characters of the Ancient Bacterium and the Interviewer. The former always maintains an extremely low vocal range, while the latter once again uses falsetto to reach the middle register of the violin key (Fig. 29).

⁴⁹ London Sinfonietta. [Richard Ayres: No 50 \(The Garden\)](#).

⁵⁰ Ayres, Richard. No. 50 (The Garden), page 76, bars 695-698.

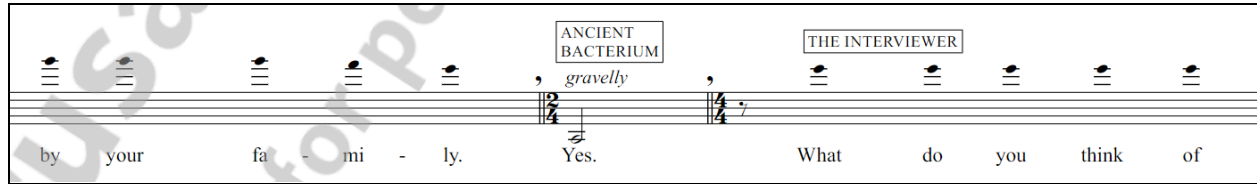


Fig. 29 - Ancient Bacterium and Interviewer vocal registers.⁵¹

One of the most interesting techniques used in the opera is precisely the ease and speed with which the singer is able to modify their voice and the interpretation of the character. This is certainly a strength of the opera, as it allows the singer to bring to life a variety of characters with just one voice (Fig. 30).

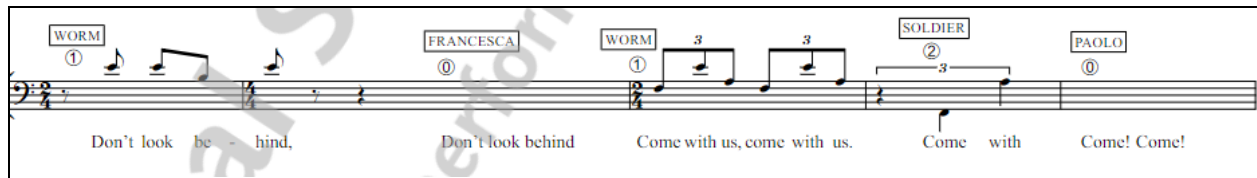


Fig 30 - Fast voice switches example.⁵²

The electronic music Integration plays a significant role as well in the frame of this work, serving as fixed media and providing sound environments, acoustic recordings, and pre-recorded electroacoustic elements. It also facilitates timbral changes in the singer's voice through effects like pitch alteration.

Electronic music employs concrete sound techniques to evoke imagery and atmosphere. For example, it uses concrete recordings of cicadas and other insects and nature sounds to depict scenes of nature and everyday life in the garden, or the digging sound (Fig. 31) that helps the listener understand the evolution of the depth the character achieves from time to time.

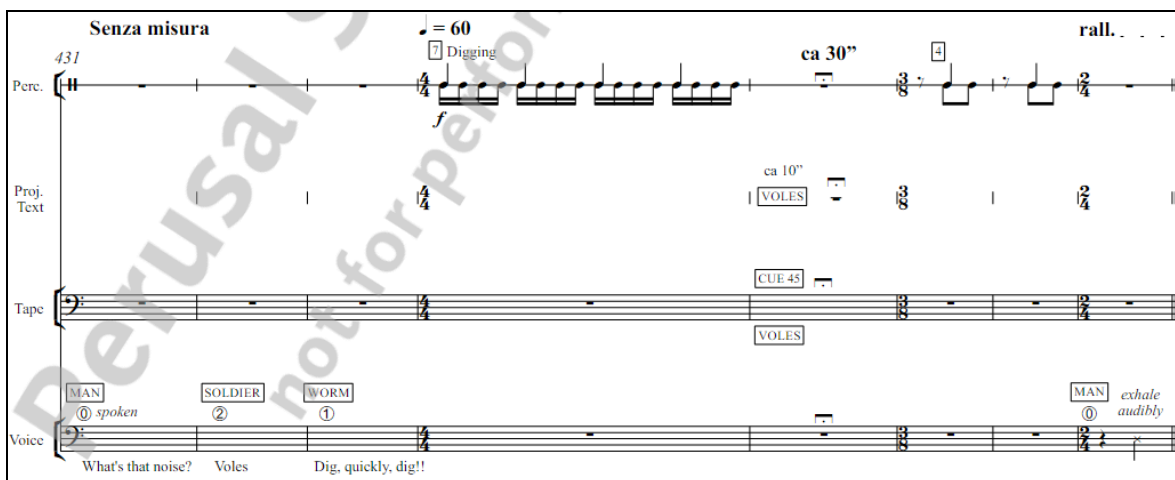


Fig. 31 - The digging sound as a musical material on the score.⁵³

⁵¹ Ayres, Richard. No. 50 (The Garden), page 119, bars 32-34.

⁵² Ayres, Richard. No. 50 (The Garden), page 88, bars 799-803.

⁵³ Ayres, Richard. No. 50 (The Garden), page 33, bars 434-435.

The balance between electronic and acoustic sounds also helps to shape the form of the three parts of which the opera is composed, through the emergence of one over the other, each featuring a different balance between acoustic and electronic components. The first part combines both elements to create abstract and ethereal dimensions, while the second part leans more towards electronic music, with occasional interventions from the orchestra. The third part predominantly features orchestral music. With multimedia storytelling Ayres incorporates multimedia elements such as spoken text and video alongside the music to create a cohesive surreal and fantasy narrative. The music interacts closely with spoken text, enhancing the storytelling and creating a seamless fusion of sound and narrative.

3.2.4.1.2 Sivan Eldar - *Like Flesh*, An electroacoustic opera at IRCAM

Sivan Eldar is composer with a PhD from UC Berkeley and Coursus in Composition and Computer Music from IRCAM, explores human reaction to the unknown in her opera *Like Flesh*. The story follows a woman suffering in an unhappy marriage who, after a transformative encounter with a lover, becomes a tree. The opera addresses themes of transformation, human-environment connection, and environmental destruction. Inspired by Ovid's *Metamorphoses*, it integrates modern environmental science to critique our fractured relationship with nature. The cast includes an older couple, a young student, and a choir sextet representing the forest, with a 13-instrument ensemble, including accordion and synthesizer.



Fig. 32 - The scene of the transformation of the woman into a tree.⁵⁴

The opera is made up of three main characters, each of which has a very different voxel quality from the others, designed to best describe the psychological depth of each role.

⁵⁴ Medici TV. [Sivan Eldar's Like flesh](#).

1. La Femme (The Woman/Tree): Alto role with a mid-register tessitura, embodying the mythological transformation of women into trees, inspired by Ovid's *Metamorphoses*. Her voice blends vulnerability and strength, evoking nature and metamorphosis with ethereal, poetic sounds.
1. Le Forestier (The Forester): Baritone role with a low, earthy, resonant voice. As the woman's husband, he represents the ruggedness of the forest and the mysteries within.
2. L'Étudiante (The Student): Soprano role, dynamic and curious, bridging the human and transformed worlds with a voice full of wonder.

While the orchestra and electronic apparatus work in harmony, the vocal components—three solo voices and the chorus—follow traditional operatic writing, without electronic manipulation, aside from amplification. This choice ensures clarity and maintains a connection to opera's traditional roots. The voices, as Augustine Muller of IRCAM states, are central to the opera, with all other elements serving the dramaturgy, text, and singing.

The decision to use both amplified acoustic instruments and electronics in *Like Flesh* stems from the composer's research at IRCAM, aiming to create a sound world that combines both real and imaginary elements. The electronics serve as a "second orchestra," expanding the soundscape and enhancing the libretto's dramaturgy. The composer began by creating the electronic material first, developing harmonies and then assembling a library of pre-recorded sound samples. These sounds are categorized into concrete sounds from natural elements (e.g., fruits, vegetables, skins), organized like an orchestra into sections such as winds, strings, and percussion. The electronic component functions as an augmented hybrid orchestra, sometimes blending with or expanding upon the acoustic instruments.

The partnership between the artist and Augustin Muller, the computer music designer at IRCAM, has been essential in developing the electronic aspects of the opera, especially in the development of the audio spatialization of the electronics. In fact, one of the most important theme that the composer wanted to share with the audience is the concept of the "invisible"⁵⁵, which is actually created by the electronics realm with its sounds and atmospheres in a space. The sound space in *Like Flesh* is divided into several worlds that must coexist and communicate, including the world of the singers' stage, the orchestra, the room, and the electronics. The distribution of speakers, including under seats, allows for a transformation from a frontal stage space to a more intimate, localized sound. The distributed sound system also allows for a unique perception for each listener and the ability to address individual listeners⁵⁶.

⁵⁵ IRCAM. [Transformer #3 : comment renouveler l'expérience du spectateur à l'opéra?](#)

⁵⁶ IRCAM. [Transformer #3 : comment renouveler l'expérience du spectateur à l'opéra?](#)



Fig. 33 - The speakers configuration in Opera Lille.⁵⁷

Augustin explains⁵⁸ that their approach resembled granular synthesis but used longer samples, similar to musical cells. These were diffused throughout the performance space, creating complex textures. The concept of spatialization, or the idea that the audience is immersed in the sound, has been in development since 2018, so about four years before the premiere. The collaboration involved a lot of editing to integrate these textures into the score. The setup included an 8x8 loudspeaker array, spatially arranged around the hall, although the actual number of speakers was slightly less than 64. Placing loudspeakers under the audience's seats created a private sound world for each listener, blending personal and collective experiences of the natural environment. This choice also allowed the expansion of the stage, immersing the audience in sound and ensuring that no single place in the hall was acoustically superior to another. Achieving coherence in this immersive sound experience was a crucial goal for the composer.

3.2.4.3 Case Study 2: Vocal gestural systems.

In the second part of the data collection of this cycle, I will dive into the embodied and mediated voice gestural system in music. This musical performative practice involves the integration of technology and physical movement to manipulate and shape vocal sound in real-time performance. This approach to vocal performance not only expands the expressive possibilities of the voice but also creates a symbiotic relationship between the performer and the technological tools at their disposal.

⁵⁷ IRCAM. [Transformer #3 : comment renouveler l'expérience du spectateur à l'opéra?](#).

⁵⁸ Durand Salabert Eschig. [Sivan Eldar - « Like flesh »](#).

3.2.4.3.1 Franziska Baumann exploring the convergence of the embodied and mediated voice through her gestural system.

In September 2023, I had the opportunity to attend a workshop⁵⁹ in the Instrument Inventor association in Den Haag, led by Franziska Baumann. She is a composer, vocal performer, and researcher in the field of electroacoustic voice and performances related to the use of embodied instruments that modify the voice in real time through gestures.

This workshop focused on the exploration of contemporary vocal practices within mediated contexts, emphasizing the integration of technology and sensor technologies in music performance.

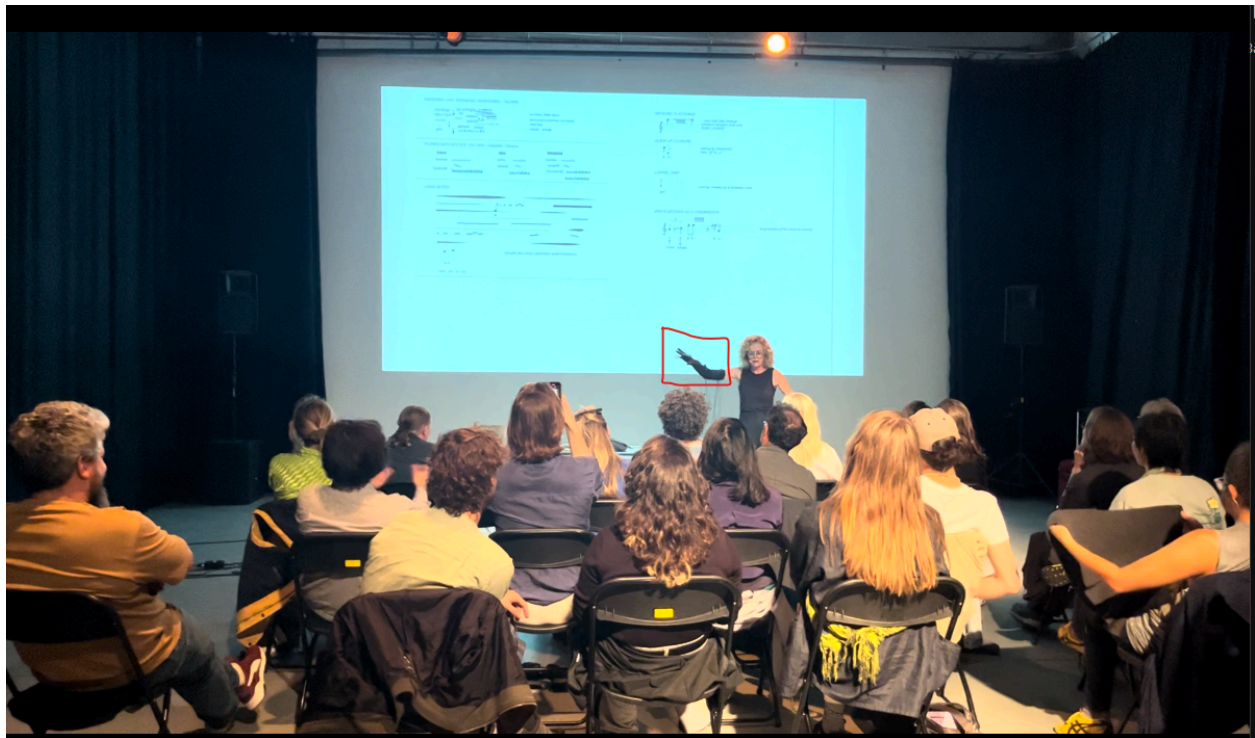


Fig. 34 - The custom sensor glove used during the masterclass.⁶⁰

She explores spatialized sound, gestural interfaces, and interdisciplinary audiovisual projects. Through this gestural system, Baumann can manipulate parameters such as pitch, timbre, dynamics, and spatialization, transforming her vocal expressions into dynamic sonic textures. The physical gestures she employs become an integral part of the musical performance, blending the body, voice, and technology realms.

Baumann discussed her innovative approach to extended vocal techniques and live electronic processing using her custom SensorGlove (Fig. 34). She delved into the underlying principles and sensor technologies that enable creativity in embodied human-computer interaction, highlighting the role of mapping and its deliberate use to provoke a loss of control and heighten awareness.

⁵⁹ iii Instrumentinventors. [Vocal Gestures and Space – Artist talk with Franziska Baumann](#). iii workspace, Den Haag.

⁶⁰ iii Instrumentinventors. [Vocal Gestures and Space – Artist talk with Franziska Baumann](#).

The embodied nature of the gestural system means that Baumann's movements directly influence the sonic output, creating a sense of immediacy and intimacy in her performances. Among the techniques employed by Baumann during her performances are a multitude of sounds and vocal gestures that the researcher has collected over years of study and travel around the world. In fact, many of these techniques belong to cultures in very specific geographical contexts, which nonetheless serve as vehicles for universal emotional information through their symbolic transformation via the use of electronics and gestural expression. According to Baumann's thinking, live electronic modifications can alter the cues upon which emotional decoding relies. They can change or even emphasize the emotional content. Listeners across cultures and languages can recognize emotions from speech that lacks content with relatively high accuracy, indicating that universal principles are involved in inferring emotions and affects from voice.

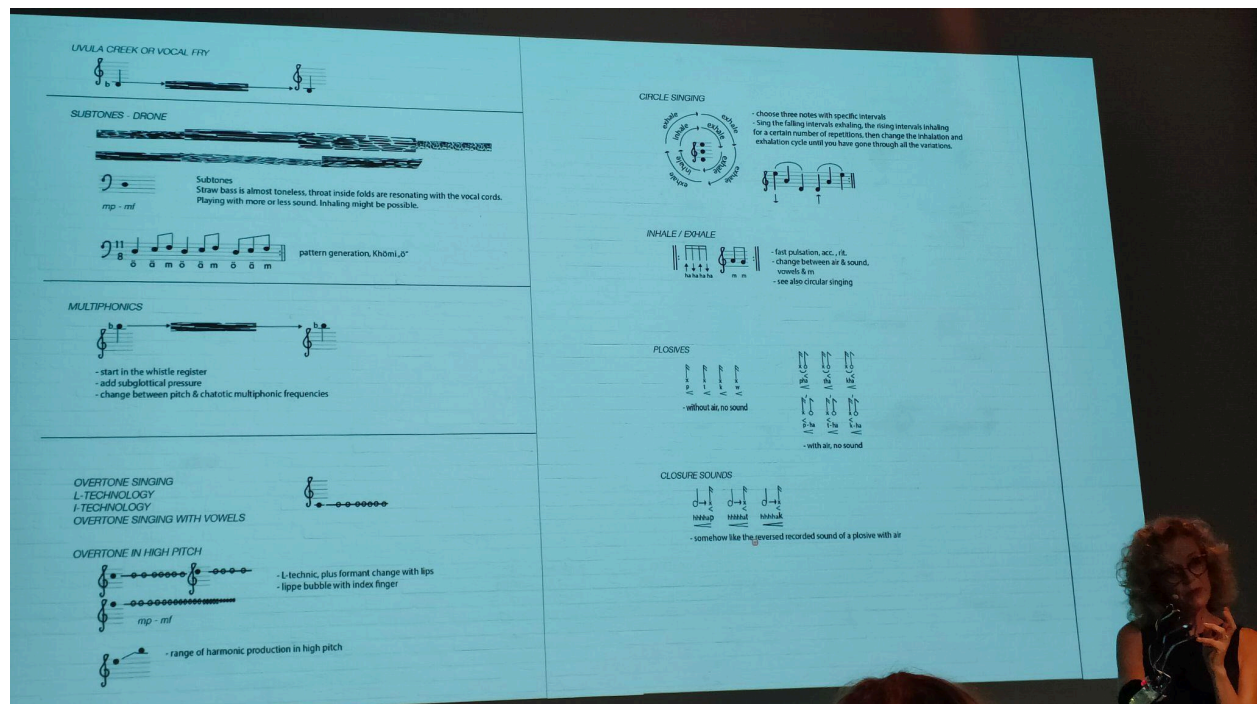


Fig. 35 - Baumann demonstrated an array of vocal techniques during the workshop.⁶¹

During the workshop, Baumann provided practical demonstrations of various vocal techniques that are part of her sound repertoire and are enhanced by the use of sensor gloves. One of these techniques, for example, is the overlaying of multiple intervals created from an initial sound generated by the singer's voice ([Franziska Baumann - Reference recording of Multiphonics intervals](#)). This is subsequently recorded in real-time using Ableton Live, audio production software, processed, and then stored until triggered by the movement of the hand, activating the glove sensors and thus giving life to polyphony.

Baumann after the masterclass gave the attendants a document with some of the vocal techniques discussed and demonstrated during the workshop that she uses in her practice. It is very interesting not only to note the different types of musical notation, but the rich and varied acoustic/sonic possibility of the voice which is disconnected from classical/contemporary canons.


⁶¹ iii Instrumentinventors. [Vocal Gestures and Space – Artist talk with Franziska Baumann](#)

In fact, Baumann starts from a search for the voice in its most primordial state, with the sounds that everyone produces or can produce throughout their lives. In fact, many techniques are connected to sounds that perhaps we make when we are children to play or to imitate nature, or that we produce to joke or make funny sounds in our daily or social life. A complete list of the techniques can be found in this document ([Vocal Techniques Library by Franziska Baumann](#)). These are some of them:



Fig. 36 - Uvula Creek or Vocal Fry


It refers to a vocal sound characterized by a low, creaky, and rough quality. It is produced by engaging the vocal folds in a way that creates a popping or rattling sound.



Subtones

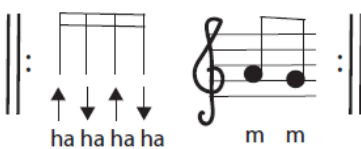
Straw bass is almost toneless, throat inside folds are resonating with the vocal cords. Playing with more or less sound. Inhaling might be possible.

Fig. 37 - Subtones / Drone



- start in the whistle register
- add subglottical pressure
- change between pitch & chatotic multiphonic frequencies

Fig. 38 - Multiphonics



↑ ↓ ↑ ↓

ha ha ha ha

m m

- fast pulsation, acc. , rit.
- change between air & sound, vowels & m
- see also circular singing

Fig. 39 - Inhale / Exhale

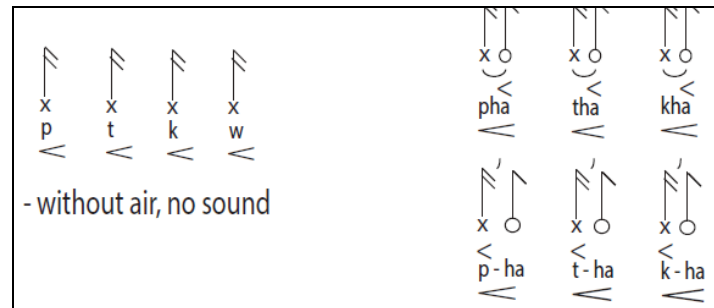


Fig. 40 - Plosives

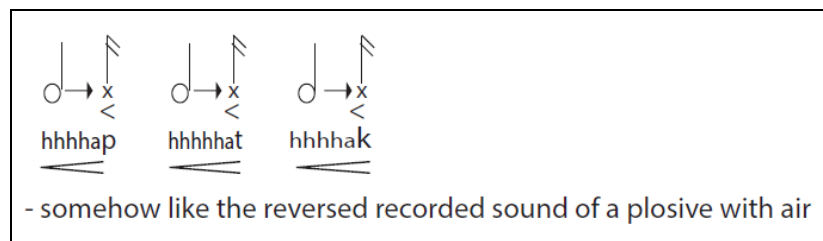


Fig. 41 - Closure sounds

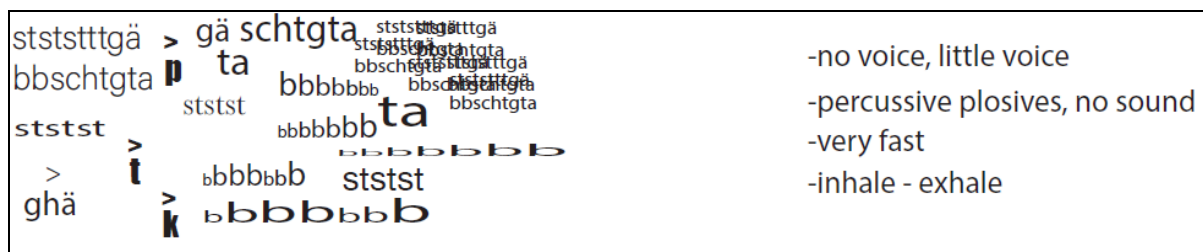


Fig. 42 - Gibberish: Fast Nonsense Whispering / Talking

As we can observe by listening to this video recorded during the masterclass ([Franziska Baumann - Reference recording of Gibberish: Fast Nonsense Whispering / Talking](#)), the aforementioned vocal technique becomes a generator of a wonderful musical effect in combination with the sensors connected to the glove. The latter is indeed capable of recording what the performer sings and playing it back the moment Baumann moves her arm away from her body along the x-axis in space. This not only creates a surprising and virtuosic sonic representation but also establishes space and dialogue between the singer and her echo transposed in the electronics, in a fast and effective counterpoint.

Moreover, all this takes place within a gestural performance, as Baumann, by moving her arm away from her chest outward and rapidly moving the fingers of her hand, precisely conveys the idea of projecting sound outward, creating a perfectly effective synchrony between what the listener hears and

observes. This greatly enhances the expressive charge of the performance, which in this case tends to convey emotions of confusion and disorientation.

hama	taba	habataba
hamma hammamamà	tabba tabbatabà	tamma habbatabà
hamamà hama	tabadà taba	tamadà haba
hammamamma	tabatabba	hammadà tamahamma
		habatamma

Fig. 43 - Specific Syllabs

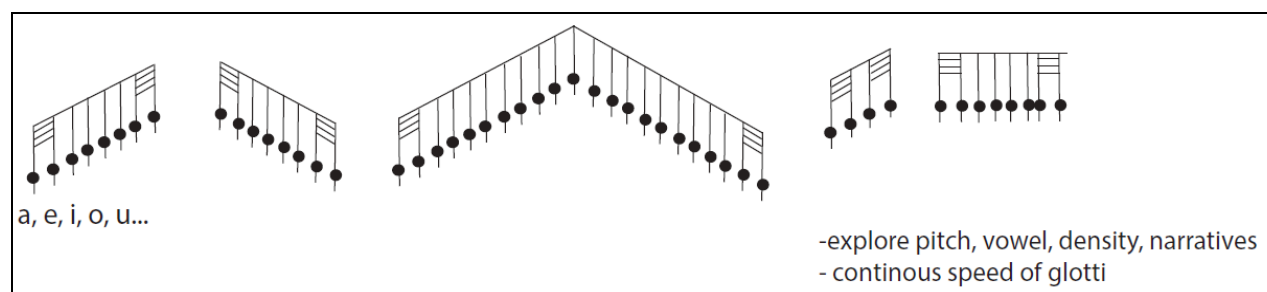


Fig. 44 - Hulation or Nervous laughing

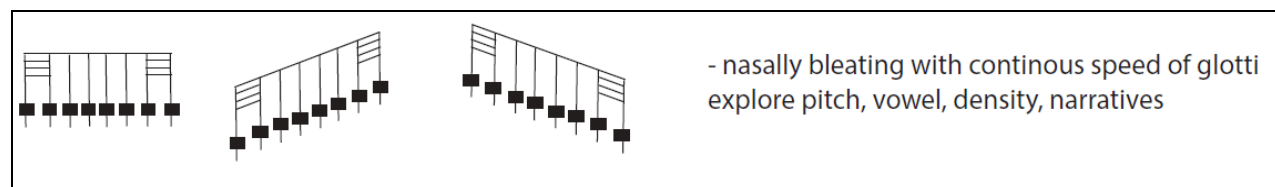


Fig. 45 - Bleating like a goat

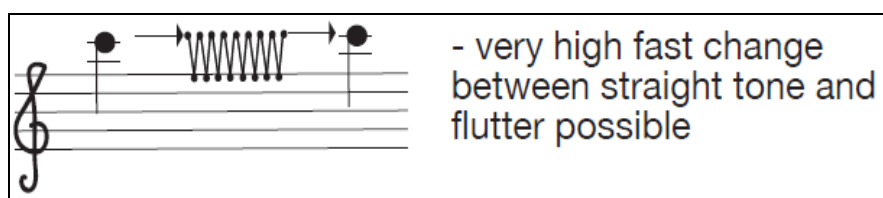


Fig. 46 - Diphonic Flattering

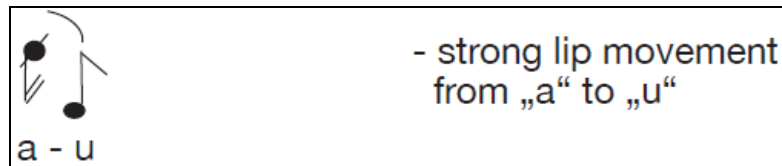


Fig. 47 - Quick Lip Closure

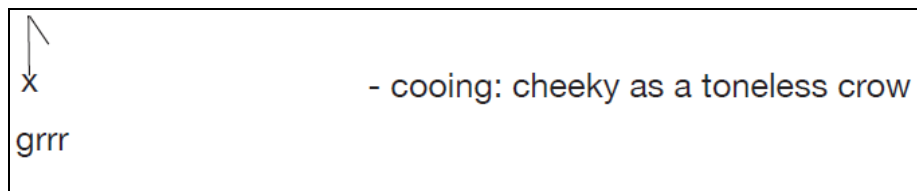


Fig. 48 - Larynx “rrr”

All these techniques are eventually elaborated through the use of sound mediation through the sensors applied to the glove. The mediated aspect of the voice refers to the use of technology as a mediator or intermediary between the performer and the audience. The electronic processing and manipulation of the voice introduce new layers of complexity and depth to the sonic palette, enhancing the overall artistic expression.

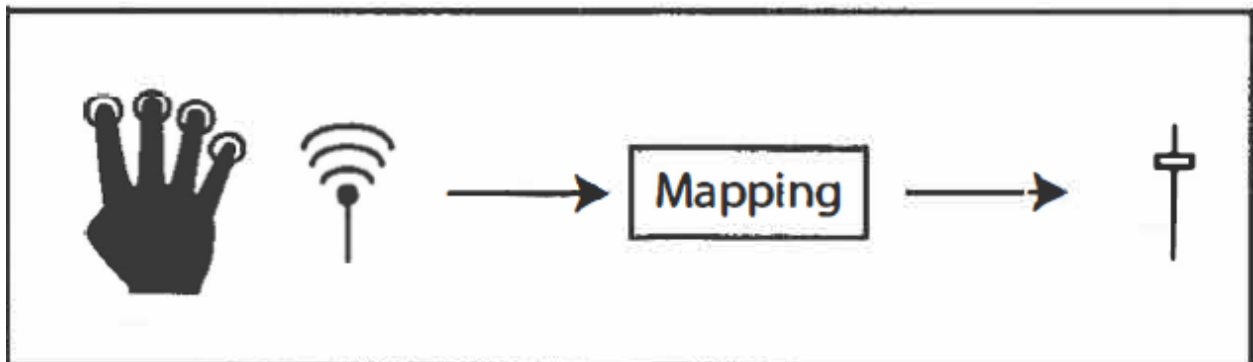


Fig. 49 - Sensor glove mapping scheme.⁶²

As the complexity of embodied interaction relationships increases, the predictability of the resulting sound diminishes. Composing and performing in the digital realm differs significantly from traditional instruments, as digital instruments translate sound and movement into numerical data.

Traditional musical instruments operate similarly to the sensor glove mapping possibilities, where multidimensional gestures control numerous output parameters. Consider the volume control on a violin, it's governed by a combination of factors like bow pressure, speed, string choice, and finger position. The

⁶² Baumann, *Embodied Human-Computer Interaction in Vocal Music Performance*, 68.

coordinated actions of the body allow for sophisticated control over multidimensional parameters, creating a dilemma for gestural systems.

These systems face challenges due to the intricate combinations of parameter assignments. The greater the diversity of controllable parameters, the more vulnerable the systems become in terms of embodied musical engagement. Our visual sense lacks the immediacy and intuitiveness required to shape screen information gesturally and musically. Mastering the simultaneous manipulation of multiple parameters demands extensive practice and ongoing refinement, as they may exhibit unexpected behaviors.

3.2.4.4 Data analysis and cross-reference

Richard Ayres and Sivan Eldar's works share similarities in their use of multimedia to enhance vocal qualities, but their approaches to music differ significantly. Ayres incorporates a wide range of vocal techniques, including spoken narration, whistling, and onomatopoeia, combined with electronic effects to enhance vocal versatility and character portrayal. His use of a button system for activating effects demonstrates technical innovation and blurs the line between classical opera and comic theater. In contrast, Eldar employs traditional vocal techniques to reflect the psychological depth of characters, using minimal electronic manipulation and focusing on spatialization for immersive sound experiences. Eldar's approach emphasizes vocal clarity and operatic tradition while integrating contemporary themes.

Franziska Baumann's work provides another perspective, especially in embodied vocal performance. Her use of the SensorGlove to manipulate pitch, timbre, and spatialization through gestures offers valuable insights. I could adapt this by developing systems where the singer's movements directly alter vocal texture, which could enhance character transformation in *This is not my U*****E*. Additionally, Baumann's use of non-traditional vocal techniques, like multiphonics and vocal fry, could deepen emotional expressivity in my characters, particularly in exploring psychological conflict through technology.

3.2.5 Interventions / practical application

In this research cycle, I explored vocal techniques inspired by Richard Ayres' multi-character approach, adapting it to my opera *Promenade over the Universe*. Given limited resources, using a single singer for multiple roles offered both narrative depth and practical feasibility. I applied this to the Elevator Keeper character, a retired man with senile dementia, whose shifting personalities, ranging from a bitter old man to a wealthy woman and an ambitious entrepreneur, stem from his past as a luxury hotel operator.

To enhance these transformations, I developed vocal electronic effects and tonal variations, deepening the exploration of identity and psychological instability.

1. Base Personality (Elevator Keeper)

Tone quality: Sings solemnly, reflecting past experiences with a gravelly, melancholic tone.

Electronic FX: Harmonics and pitch shift..

2. Wealthy and Indolent Woman

Tone quality: Sings elegantly, always in lyrical soprano tessitura, with a smooth, rich voice reflecting privilege.

Electronic FX: Smooth Reverb: This reflects her affluent lifestyle, giving it a polished and luxurious quality reminiscent of high-class environments.

Pitch Shift: To obtain a fake female voice sung by the baritone.

3. Ambitious Entrepreneur

Tone quality: Sings with a powerful and charming tone.

Electronic FX: Dynamic Compression: To reflect his assertiveness and determination, evening out the volume levels and adding a sense of intensity to his speech.

Subtle pitch modulation: Adding subtle pitch modulation effects can convey his manipulative tendencies.

Then I proceeded to write the libretto for a hypothetical scene in which the Elevator keeper was the protagonist.

Libretto:

Elevator Keeper:

I'm the elevator keeper, and you have to talk with me if you want to change the floor.

I remember when I was working in a luxury hotel in Paris. Most people were kind to me, but there was this woman, wonderful...quite indolent. I have even fallen in love.

Wealthy Woman:

*I spent my time going to operas around Europe
Verdi, Puccini.*

Elevator Keeper:

*And then I started building an elevator at my place.
You ask why? (Laughing)*

Ambitious Entrepreneur:

*I would have rather preferred to be a successful man like most of the customers of my hotel.
I chase success all day,*

Mixed personalities:

*In your chase for gold,
do you find a hand to hold?*

*In your sadness, you stay,
But life's still got away.*

Elevator Keeper:

I'm the elevator keeper, and you have to talk with me if you want to change the floor.

Now that I finished the libretto of the scene, the personalities and the vocal effects connected to them have been established, I can proceed with the actual creation of the project and the switching system in Cubase, which is the audio production software I use for my projects. I created four tracks, one for each vocal role. Each track is connected to the buttons on the MIDI keyboard (Fig. 52, 53, 54), which serve the same function as the mushrooms in Ayres' opera.



Fig. 52 - The button configuration used for the project.

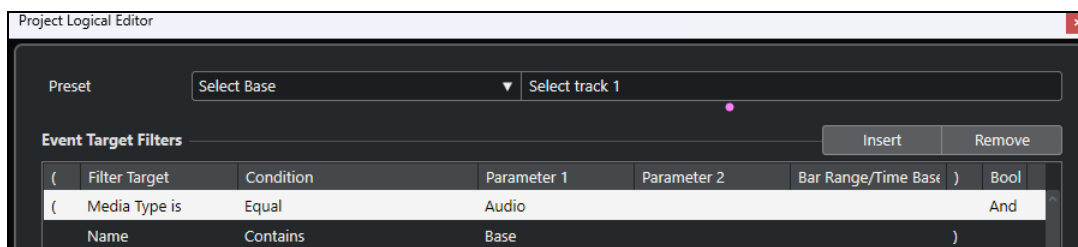


Fig. 53 - The logical editor setup configuration to assign the software tracks to the MIDI muttons.

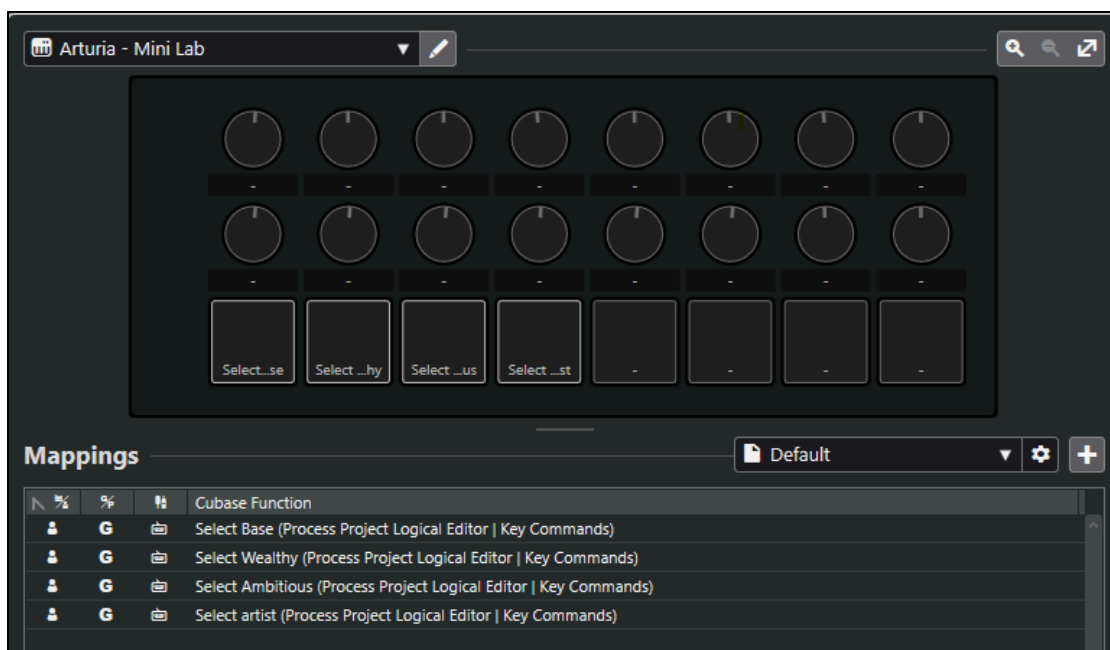


Fig. 54 - The MIDI keyboard configuration.

3.2.6 Outcomes

[10 Reference Recording 6 \(Massimiliano Vizzini\) - The Man Song](#)

Solo-singer multi characters. Study on electroacoustic voice (2024)

Date: April 2024

Duration: 3'16"

Performer: Massimiliano Vizzini

Music, text and video: Massimiliano Vizzini

3.2.7 Feedback, reflection and conclusion

This study on electroacoustic vocal effects has allowed me to explore a technique that enhances the artistic potential of my opera. By adopting Ayres' concept of a multi-character singer, I've addressed practical challenges posed by limited resources, adding depth and complexity to the narrative and performance. This innovation opens new avenues for character development and expression. I've focused on developing the Elevator Keeper's multiple personas, each with unique traits, and paid careful attention to the vocal effects and tone quality that differentiate them. Moving forward, I aim to integrate these characters seamlessly into the narrative, exploring creative ways to visually depict their transformations and deepen thematic layers. Through rehearsals and performance workshops, I will refine the portrayals to ensure that the artistic vision is effectively realized on stage.

Areas for improvement:

1. Focus on integrating characters into the narrative to enhance the story's flow.
2. Refine transitions between characters for clarity and smooth progression.
3. Experiment with visual techniques to portray character transformations alongside vocal changes.
4. Collaborate with stage directors and costume designers to complement narrative and transformations visually.
5. Deepen the narrative layers and thematic exploration to add emotional complexity.
6. Explore avenues for thematic resonance that align with the opera's core concept.
7. Prioritize rehearsals and performance workshops to refine character portrayals and vocal precision.
8. Ensure the artistic vision is effectively translated to create a cohesive, impactful performance.

3.3 Third research cycle

3.3.1 Overview of third research cycle

For the final research cycle, I focused on the role of film in the development of the music in my opera *This is not my U*****E*. My approach was rooted in the integration of film as a central dramaturgical element, using it not only as a narrative device but also as a crucial tool in shaping the musical direction of the work. This approach was inspired by the works of Michel van der Aa, whose innovative use of multimedia and film in his compositions has inspired my own process.

This research cycle was conducted through a problem-based approach. Moreover, to structure this phase of my research, I have adopted a method in which data collection, analysis, and compositional intervention occur in parallel rather than as consecutive stages. This approach allows for a continuous dialogue between musical composition, cinematic experimentation, and performance practice. Rather than waiting for a completed film before composing the music, or vice versa, I developed both elements simultaneously, allowing discoveries in one medium to inform the other in real time. I started this cycle by analyzing how film can drive the pacing, mood, and character development within an operatic context, and how music can respond dynamically to visual elements. My aim was to create a seamless relationship between the live performance, electronic components, and the cinematic aspects of the opera, ensuring that all elements support and enhance each other.

3.3.2 Reference recordings

As reference recordings for this final research cycle, I have selected two moments from the opera. First, I decided to go back to the recording that I had already used as the starting point for the first cycle; it is a scene in which the protagonist experiences a moment of hallucination and detachment from reality. The second recording, on the other hand, comes from the intervention in the second cycle and focuses on the man's character, whose psychological connotation is reflected in his voice.

These recordings will serve to establish the initial state of these sections of the opera and to understand what I might need to further develop them effectively.

3.3.2.1 This is Not my U*****E (Space-Warp)

[08 Reference Recording 5 \(Massimiliano Vizzini\) - This is not my U*****E \(Space-Warp\)](#)

[09 Reference Recording 5 SCORE \(Massimiliano Vizzini\) - This is not my U*****E \(Space-Warp\)](#)

Massimiliano Vizzini - Music, visuals

Hanna Aïlane - Soprano

Lina Gronemeyer - Bass Clarinet

Lluïsa Paredes - Cello

Giuliano Comoglio - Piano

Performed and recorded at Codarts 6.41 (Rotterdam, NL)

Date of Recording: November 2023

Duration: 4'43"

3.3.2.2 This is Not my U*****E (The Man Song)

[10 Reference Recording 6 \(Massimiliano Vizzini\) - The Man Song](#)

Date: April 2024

Duration: 3'16"

Performer: Massimiliano Vizzini

Music, text and video: Massimiliano Vizzini

3.3.3 Feedback and reflection

The first recording, which represents a primordial version of this section of the opera, depicted the protagonist undergoing an interdimensional journey. In the first draft of the opera, the reason for this event was unclear and served merely as a pretext to place the protagonist in an alien environment where absurd situations would unfold. As a result, the narrative was rather weak, and the events lacked a clear purpose. While the interaction between the singer on stage and the media elements, namely, the visual and electronic music components representing this interdimensional journey, proved to be quite effective and received positive feedback from the audience, the vocal techniques employed did not fully explore the potential of the voice. I was encouraged to delve deeper into this aspect by teacher Hans Koolmees. Additionally, the electronic music was overly dominant, creating a contrast that clashed with the singer's voice.

The second recording, which emerged from the second research cycle, resulted in a fragment of recitative for the character of "the man," who, through the use of sound processing applied to his voice, was able to alter his vocal quality and, consequently, his personality, effectively creating a character with a fragmented and highly unsettling psyche. During my discussions in lessons with Maestro Klaas de Vries, it became apparent that this character bore too close a resemblance to the stereotypical "Joker", a cinematic figure often portrayed as a deranged man with a baritone voice. This resemblance risked flattening the character's dramatic impact, reducing him to a mere Hollywood caricature.

This critique also arose in conversations with the scenographer of the production, Lea Thomas, a student at the Amsterdam School of the Arts. She pointed out that the man, who in the opera would go on to kidnap and abuse the young girl, would lose narrative power if portrayed simply as a "madman." A more realistic approach, one that underscores how anyone, especially those who seem ordinary and least expected, can be capable of such actions, would make the character far more compelling and disturbing. Agreeing with these critiques, I decided to reassess not only the dramaturgical construction of the character but, more importantly, his vocal and musical role.

From my perspective, I believe that a more extensive use of the cinematic medium would have significantly contributed to the accurate dramaturgical representation of the characters, granting me greater expressive freedom. By working with recorded footage, I could use editing to precisely shape the portrayal of each character, essentially placing a magnifying glass over them, bringing out details, glimpses of skin, and microexpressions that would serve to convey the emotions I intended to share with the audience.

Therefore, my focal points for this cycle will be:

1. Integrating the cinematic medium more consistently as an expressive and dramaturgical tool.
2. Enhancing the effectiveness of musical integration and achieving a better balance between electronic and acoustic music.

3.3.4 Data collection & data analysis and Intervention/ practical application

Since the composition of the opera took place alongside its data collection process, I will focus on the issues that, based on both my own perspective and the feedback I received, emerged as the most significant challenges. I will analyze the technical and artistic obstacles I encountered and the strategies I employed to overcome my limitations.

Additionally, I will reflect on how these challenges shaped my creative decisions, particularly in terms of the dramaturgical role of film within the opera.

3.3.4.1 Evolution and development of my opera narrativity: Before and After

I will begin by briefly describing how the opera initially took shape and how it ultimately evolved over time. This retrospective analysis will help contextualize the artistic and musical choices that were made throughout the creative process.

At its beginning, the opera was titled *Promenade over the Universe*, as it revolved around an intergalactic journey undertaken by the protagonist and her musician friends. This voyage was forced upon them by a mysterious figure known as the *Elevator Keeper*, a sorcerer-like character who, for a series of undisclosed reasons, had managed to construct a machine capable of abducting people from Earth and sending them into the unknown depths of space. The title *Promenade* was meant to evoke the idea of a fantastical journey, where the protagonist, through a series of surreal encounters and challenges, would strive to reunite with her friends in the hope of finding a way back home.

However, as the project developed, the opera underwent significant transformations both in narrative and artistic direction. The initial premise, while rich in imaginative potential, lacked a strong dramaturgical foundation, which led me to rethink the structure, the role of the characters, and, most importantly, the relationship between the music, the visuals, and the storytelling.

This was made possible thanks to the feedback and reflections that emerged during my lessons with Robin de Raaff and Klaas de Vries. Additionally, my conversations with the opera's scenographer, Lea Thomas, who was also involved in the film shooting and the development of the two characters, particularly the Man, played a crucial role. I also received valuable feedback from the soprano performing the main role, Buse Çelik, as well as from the musicians in the orchestra. Although I did not consult external experts due to the challenges of reaching them and the fast-paced nature of the creative process, I was continuously surrounded by a strong feedback network.

I found the first dramaturgical draft of *Promenade* somewhat superficial, lacking depth and serving merely as a pretext to create bizarre situations in which to experiment with musical, visual, and sound elements. While these experiments were valuable in their own right, they did not contribute to a coherent and meaningful artistic statement. After realizing that this approach was not the right path, especially for an

opera that aimed to be more extensive and artistically complex, I began reconsidering the narrative. I wanted to explore a theme that was more relevant to contemporary society, something that carried social significance while still allowing me to retain many of the songs and scenes that had already been composed in the initial version. The second cycle data collection, especially Ayres' character development in his opera, helped me reflect on how to reshape the narrative aspect of my characters.

This led to the transformation of the opera into what is now *This is not my U*****E*. While keeping the number of singers and vocal roles unchanged, a soprano for the young woman and a baritone for the man, I completely redefined their meaning and function within the narrative. The story now revolves around a young singing student who is drugged, kidnapped, and abused by a man whose identity remains unknown. The events unfold over 24 hours, beginning the night before the abduction. In his home, the man prepares a water bottle, dissolving a powder-based substance into it, the date-rape drug. The next day, under mysterious circumstances, the bottle ends up in the possession of the young woman as she sits in the conservatory cafeteria. She unknowingly drinks from it (fig. 55, 56), unaware that the very object she now holds was previously handled by her future captor. An ambiguous connection between the two characters emerges, though it is never explicitly revealed. This leaves room for unsettling speculation: could the man be a friend, a relative, or someone associated with the conservatory? Someone the girl trusts enough to accept the bottle without question? The uncertainty surrounding his identity amplifies the horror of the situation, emphasizing how such acts of violence are often perpetrated by familiar faces rather than faceless strangers.



Fig. 55 - The Girl drinking the poisoned water⁶³

This shift in the opera's dramaturgy significantly deepens its psychological and social impact. Instead of a fantastical adventure, the work now explores the terrifying reality of power dynamics, manipulation, and abuse within seemingly safe environments. The film element plays a crucial role in highlighting the subtle,

⁶³ Footage from the *Prémère* happened at Codarts Main Hall (Theatre 6.41), on the 6th of February 2025

often unnoticed gestures that foreshadow the tragedy, small details that, in hindsight, reveal the invisible threads binding the predator and his victim.



Fig. 56 - The Girl drinking the poisoned water

3.3.4.2 Overall integration of the film in the pre-existing Promenade music context

The integration of film allows in my practice for a multilayered storytelling approach, where visual imagery, close-ups, and editing techniques provide insights that go beyond what can be conveyed through live performance alone. Through film, characters are not only seen in the present moment on stage but also in fragmented memories, internal monologues, or symbolic representations of their psyche. Close-ups, for instance, reveal microexpressions, subtle shifts in emotion, and psychological turmoil that might be lost in a traditional operatic setting.

Film can also expand the concept of scenography beyond the physical stage. In *This is not my U*****E*, film sequences help construct surreal, shifting environments that reflect the opera's themes of instability and transformation after a trauma. It allows for rapid changes in setting without the constraints of physical stage design, transporting the audience between reality, memory, and distorted perceptions of space. The interplay between live performance and projected imagery creates a dynamic tension, reinforcing the dreamlike and disorienting quality of the narrative.

The opera, divided into two acts, consists of 15 scenes, 8 of which are built around the use of film as a core dramaturgical means. One of the first, is the sequence referenced in the first recording from this research cycle, titled "Space-Warp". This is how I called it at first, when the opera was still named *Promenade over the Universe*. In the final result of *This is not my U*****E* opera, this section is now composed of two scenes: *The Fall* (Scene 3) and *Creatures* (Scene 4). The dramaturgical transformation method I adopted in this section, and later applied to other parts of the opera, was to retain musical themes and sequences that remained relevant in the new narrative context, adapting them as needed. Film played a decisive role in this process, providing a structural framework on which to build the musical and vocal form. In truth, this was a continuous exchange: at times, the music dictated the film's rhythm,

editing pace, and scene transitions, while at other times, the film set the tempo, guiding my composition as if scoring an actual film sequence.

I used [recordings from the opera's first version](#) as a self-experiments material and source for self-reflection. As mentioned earlier, the "Space-Warp" sequence was narratively weak and ineffective. So, I looked for a narrative way to keep the audio-video sequence but giving it a logical sense within the new story.

Film, therefore, became essential in reshaping it. Initially, the scene was dominated solely by abstract digital visuals connected to a purely electronic music composition, representing the interdimensional journey the characters were experiencing. In the revised version, these visuals are interwoven with cinematic footage depicting real scenes (Fig. 57). While both the electronic music and visuals have remained mostly the same, they now serve as a representation of the protagonist's drug-induced confusion, an effect unknowingly triggered by a substance she had previously consumed.

The scene is divided into three main phases:

1. The young woman's arrival at her home: The sequence opens with the young woman returning to her home. Outside the entrance, a man lurks in the shadows of the night, whistling. He is the one who secretly laced her water with the drug.
2. The elevator sequence where she loses consciousness: As she enters the building and steps into the elevator, the drug begins to take effect, overwhelming her mind with hallucinations and sending her into a state of panic. The film serves to create an immediate and impactful narrative environment, allowing for the development of a story that would otherwise be difficult to stage effectively.
3. And finally, the *Creatures* section, in which the singer reappears on stage, completely overtaken by hallucinations.

The scene ends with the protagonist collapsing on stage, unconscious both mentally and physically. In conclusion, the film will depict the actual abduction of the victim by the man.



Fig. 57 - Example of layering of digital and cinematic footage

In this section, the film not only externalizes internal conflicts by juxtaposing the singer's live performance with pre-recorded or manipulated footage but also creates a narrative environment that extends beyond the stage, driving the story forward. This is a dramaturgical principle studied through data collection in the first cycle, specifically examining the analysis of *One*, the opera by Michel van der Aa.

This approach allows me to illustrate the fragmentation of identity and the multiplicity of perspectives that define the opera. In my work, this is particularly crucial, as the protagonist undergoes radical psychological shifts, film sequences can visually represent their mental state, making abstract emotions more tangible to the audience. Furthermore, editing techniques such as sudden cuts, slow motion, and layered imagery can evoke anxiety, obsession, or detachment, deepening the characters' emotional complexity.

Initial problems:

1. Originally, the scene lacked a clear dramatic function within the opera's storyline.
2. It consisted solely of abstract digital visuals and electronic music, meant to represent an interdimensional journey, but it did not integrate well with the characters' experiences.
3. The abstract nature of the visuals and music made it difficult for the audience to connect with the protagonist's state of mind.
4. The lack of real-life imagery reduced the effectiveness of the scene in building tension and advancing the story.

Looking back at my first cycle data collection, van der Aa's *Upload* analysis played a central role in the improvement of this scene:

1. Integration of film for clearer narrative structure.
2. The revised scene now serves a concrete purpose in the opera: illustrating the protagonist's drug-induced confusion.
3. The abstract visuals were retained but interwoven with cinematic footage, providing a logical connection between the character's reality and her hallucinations.
4. Reorganization into three defined phases: Arrival home (the young woman returns home, unaware that a man has secretly laced her water with a drug). Elevator sequence (as the drug takes effect, she experiences intense hallucinations, depicted through film). Creatures section (the protagonist, overtaken by the hallucinations, reappears on stage before collapsing, leading to her abduction, shown via film).
5. Film externalizes the protagonist's mental turmoil, making abstract emotions tangible through visual storytelling.

Therefore, this is the intervention of this section of the opera:

[11 Reference Recording 7 SCORE \(Massimiliano Vizzini\) - This is not my U*****E](#) (pag. 22-31)

[12 Reference Recording 8 \(Massimiliano Vizzini\) - This is not my U*****E. Scene 3 and 4](#)

Among the musical elements I retained from the initial experimental version of *Promenade over the Universe*, is the "creatures theme" (Fig. 58), a melodic motif first introduced by the cello. This theme serves as the gateway to the abstract world of those illusionary creatures, which mesmerize the protagonist. This motif will later become a connective thread leading to another section of the opera, scene 13, *Weird Fishes*, which appears near the end of the work.

Pinkeltje op het kastanjeblad,
heel hoog in de lucht.⁶⁵

But what is very important is that Pinkeltje also becomes part of the cinematic medium, as its presence in the opera appears in the form of an audiobook. The man, in the monotony of his daily routine, often listens to the radio while doing household chores. It is during this time, as he switches between radio stations, that he stumbles upon the story of Pinkeltje. This creates a strong connection between the book and the filmic narrative (Fig. 59).

All of the Pinkeltje texts now implemented in the film sections of the opera were initially standalone pieces in the experimental version of *Promenade*. These were purely acoustic works, completely detached from any audiovisual involvement. This is one of the first recordings of the Pinkeltje song, I now used as a self-experiment: [14 Experiment 02 - Pinkeltje song No.1 \(Promenade version\)](#)

Wat waren het allemaal,
reusachtige grote bomen.
Pinkeltje dacht:
Zou ik daar nog een huisje kunnen vinden om te wonen?
Het hoeft maar een heel, heel klein holletje te wezen.⁶⁶



Fig. 59 - The Man changing radio station (frame from the film)

Originally, this was just a simple song narrating the misadventures of poor Pinkeltje. However, once integrated into the new filmic narrative of *U*****E*, it takes on an entirely different meaning. Now, the song appears within the film, just before the man commits the assault. The juxtaposition of the simple, singable melody with a children's book, symbolizing innocence, acquires a bitter and painful undertone. It is as if the victim is trying to escape into this childlike world, free of suffering, as an act of psychological retreat from the trauma. Therefore, this is the final result of the development and integration of film in that scene: [15 Reference Recording 9 \(Massimiliano Vizzini\) - This is not my U*****E, Scene 8](#)

⁶⁵ Translation: ("Help! - help! - help!" cried poor Pinkeltje, but no one heard his tiny voice, and on, on, on he flew, high in the air on the chestnut leaf.)

⁶⁶ Translation: (Oh! Oh! What enormous trees they all were. Pinkeltje thought: Could I still find a little house to live in there? It only needs to be a very, very small hole.)

The two other sections in scene 10, as an introduction to the "birds sequence" (scenes 10, 11 and 12), and indeed, in scene 13, *Weird Fishes*.

Returning to the latter, the integration of Pinkeltje's text makes this musical passage even more expressive and capable of conveying emotional depth to the audience, helping them grasp what is truly happening. In my opinion, one of the weaknesses of the initial experiment was that the scene lacked a clear reference point. While it was effective from an audiovisual perspective, the missing element was a strong narrative structure. In its original version, this was again a separate, standalone scene:

[16 Experiment 03 - Pinkeltje song No.2 \(Promenade version\)](#)

En Pinkeltje was bang, vreselijk bang. Toen begon het opeens heel hard te regenen en al die waterdruppels maakten dat het kastanjeblad heel nat en zwaar werd, en het viel al lager en lager en kwam al dicht bij de grond en toen... toen zag Pinkeltje opeens een heel breed water en toen..., o, wat werd die Pinkeltje toen bang! Hij kneep zijn ogen helemaal stijf dicht en... plof!... daar viel het kastanjeblad in het water!⁶⁷

Another crucial detail is that the *Weird Fishes* scene no longer happens randomly but is instead a dream the protagonist has in response to the sounds around her. She is lying unconscious in her captor's bed, sedated. Meanwhile, the man washes dishes in the kitchen, listening to the radio. She is in the adjacent room, passively absorbing the sounds. Thus, the magical lake, filled with creatures resembling jellyfish and deep-sea fish, is nothing more than a dream triggered by the sound of water and the gurgling of the drain. Therefore, this is the final scene result with the integration of the book:

[17 Reference Recording 10 \(Massimiliano Vizzini\) - This is not my U*****E. Scene 13](#)

3.3.4.3 The development of "The Man" character

In the reference recording of the second research cycle, the character of the man had no narrative framework: he was simply a sort of abstract sorcerer who, in some way, had managed to turn the elevator into a space-dimensional portal to kidnap people and throw them into interspace (fig. 60). He was a completely mad and grotesque character. He lacked any real narrative background meaning in the context of the original story.

Now, however, thanks to feedback from my teachers and composers Klaas de Vries and Robin de Raaf, the role of this character within the new story has changed completely. During my lessons with de Vries, he had the opportunity to listen to and review the early versions of the segments in which the male character appeared. Among the many suggestions, ranging from orchestration and harmony to the development of the libretto, we also discussed his characterization. One of the most significant recommendations was to adopt a simpler and more concise vocal style for him, in order to move away from the stereotype of the "madman."

We then worked together on the recitativo section that serves as introduction to the aria. Initially, this part was purely spoken. De Vries saw this as a missed opportunity. He suggested introducing a simple melodic idea into the text, accompanied by a repetitive chord progression, symbolizing the character's banality (fig. 61).

⁶⁷ Translation: (And Pinkeltje was scared, terribly scared. Then it suddenly began to rain very hard, and all those raindrops made the chestnut leaf very wet and heavy, and it sank lower and lower, getting closer to the ground, and then... then Pinkeltje suddenly saw a very wide body of water, and then... oh, how scared Pinkeltje became! He squeezed his eyes shut tightly and... plof!... the chestnut leaf fell into the water!)



Fig. 60 - First representation the the Elevator Keeper in the *Promenade* version.

Electronic music also plays a key role: it is highly repetitive, making the whole experience feel flat and hypnotic. Ultimately, the character has changed radically: before, he was fragmented and chaotic, now, he is not. Initially, his voice shifted in many ways, but this made him too similar to the Joker stereotype, so I opted for a more monotonous and simple vocality while maintaining an unsettling aspect through the video. The text has also been modified to integrate better with the film and enhance the effectiveness of the music.

Fig. 61 - The recitativo chord progression

Looking back at my early experiments with the male character, when he was still called the Elevator Keeper and portrayed as a sort of sorcerer, he was a stage character, physically present within the theatrical space.

[18 Experiment 04 - Elevator Keeper \(*Promenade* version Character introduction\)](#)

[19 Experiment 05 - Elevator Keeper 2 \(*Promenade* version Recitativo + Aria\)](#)

After studying Michel van der Aa's compositional approach during my first cycle, I explored how a character can exist on different material planes. In his opera *Upload*, for example, which also features two characters, a man and a woman, in this case, a father and daughter, the father initially appears as a physical presence on stage. However, in the second half of the opera, he becomes purely a filmic character, appearing only in projections.

Similarly, I decided to transpose the male character in my opera, confining him exclusively to the filmic plane. This choice allowed me to make him more mysterious while embedding him within a setting of everyday life, specifically, the kitchen of his apartment (Fig. 62). At the same time, he materializes as a manifestation of the young woman's fears within her dreams. This can be seen in the final result, for example, in the opening scene of the opera, where the Man is in his kitchen, about to prepare the poisoned water bottle.

[20 Reference Recording 11 \(Massimiliano Vizzini\) - This is not my U*****E, Scene 0](#)

While he remains somewhat eccentric and playful, his actions now make sense in relation to what happens beforehand. He is in control of what happens to the girl before abducting her: he knows that, somehow, she will faint and feel unwell inside the elevator, and so he waits for her outside the building. In this sense, the character becomes the "guardian of the elevator" in a somewhat grimly playful way: he is the one who decides what happens inside, who can enter or leave. This takes on even more meaning thanks to the recitative that precedes the aria, in which he himself explains: "I am the Elevator Keeper—but no, I'm just kidding, I like saying nonsense sometimes. It's just me... but who am I? Who knows." He then continues: "You're exactly where you're supposed to be. I hope you didn't get hurt. You fell into my arms".

So, even though the character still has a strange aura, he now fits within a narrative framework that follows its own logic. Moreover, his vocality has changed as well. The recitative, for example, is very simple: though not explicitly written in the score, it is based on a repetitive and minimalistic interval



Fig. 62 - The Man chopping a carrot (footage from the film)

pattern, precisely because the character is meant to be a simple, ordinary figure, just an average person. The aria, too, is repetitive: all the notes follow a monotonous rhythm, just like the orchestral music, making it deliberately ordinary and dull to emphasize that, at his core, he is just an ordinary man. However, the most important element is the role of the film and how it has amplified the effectiveness of the character. Cinema allows for close-ups on details of his face and mouth, making everything more ambiguous. This could be achieved on stage as well, but to me the film heightens the effect even further, turning the character into something elusive. There are moments where he appears with four giant mouths, making it difficult to clearly identify him (fig. 63). Additionally, his silhouette distorts, reinforcing the mysterious and eerie atmosphere that the character conveys.



Fig. 63 - The Man's four mouths distortion

Another critique from Klaas de Vries was that the male character had only one sung moment in the entire opera and never even a duet with the girl. To him, this was another missed opportunity to create interaction between the characters. From my perspective, even though the man had only one sung piece, he frequently appeared in the film, establishing himself as a significant figure within the story. However, I agreed that this alone was not enough and that I needed to find moments where the man could interact and duet with the girl. By that point, though, the opera was already at an advanced stage of completion. Since I couldn't drastically alter its form and structure, I opted for a solution in which the man would appear in the girl's dreams, singing brief phrases in response to her thoughts or emotions (fig. 64). This happens particularly in the "birds" section of the opera (scenes 10, 11, and 12), where the woman envisions the man in her dreams as a sort of owl-man (fig. 65).



Fig. 64 - One of the duet in the Fugue section (scene 12)



Fig. 65 - The “Man-Owl”

Thus, after processing all the feedback and gathered data, this is the final result as it appeared during the opera's premiere concert:

[21 Reference Recording 12 \(Massimiliano Vizzini\) - This is not my U*****E, Scene 5](#)

3.3.5 Outcomes

[11 Reference Recording 7 SCORE \(Massimiliano Vizzini\) - This is not my U*****E](#)

[12 Reference Recording 8 \(Massimiliano Vizzini\) - This is not my U*****E, Scene 3 and 4](#)

[15 Reference Recording 9 \(Massimiliano Vizzini\) - This is not my U*****E, Scene 8](#)

[17 Reference Recording 10 \(Massimiliano Vizzini\) - This is not my U*****E, Scene 13](#)

[20 Reference Recording 11 \(Massimiliano Vizzini\) - This is not my U*****E, Scene 0](#)

[21 Reference Recording 12 \(Massimiliano Vizzini\) - This is not my U*****E, Scene 5](#)

*This is not my U*****E* (2024-2025)

For 2 singers, Sinfonietta, film and electronics

1(picc).0.1(bcl).0 / 1.1.1.1 sax / 0.0.1.1 / sop.ten. / electronics, film / 3perc / pn.cel. / 1.1.1.1.1

Duration: ~ 1.15h

Performed on the 6th of February 2025.

Premiered during my Master's graduation concert. Codarts, University of Music. Rotterdam (NL).

Massimiliano Vizzini - Music, Libretto and Film production.

Léa Thomas - Scenography and light design

Bruno Vicente - Conductor
Buse Çelik - Soprano
Michela di Mento - Flute
Simon Redshaw - Clarinet
Jem Bartlett - Soprano Saxophone
Martina Madini - Alto Saxophone
Adrià Marqués - Tenor Saxophone
Sean Thompson - Baritone Saxophone
Katie Blackburn - Trombone
Steven Le Maître - Tuba
Alisa Birula - Piano and Celesta
Jacob Shaldov - Percussion I
Simao Torres - Percussion II
Roman Machado - Percussion III
Inês Pinhão - Violin I
Ana Enriqueta - Violin II
Stéphane Schmalen - Viola
Lluïsa Paredes - Cello
Eva Veiga - Double Bass

*This is not my U*****E* is a film-opera about a man who kidnaps and abuses a young opera student, exploring captivity, manipulation, and psychological trauma. The narrative delves into the girl's emotional struggle and the man's conflicted control, revealing complex power dynamics. Integrating live music, film and electronic compositions, the opera blurs reality and dreams, immersing the audience in the protagonist's transformation. Through shifting perspectives and experimental vocal techniques, it examines self-perception and psychological depth, confronting the horrors of abduction and its aftermath.

3.3.6 Feedback, reflection and conclusion

As I reflect on the journey of the third research cycle for *This is not my U*****E*, the process of refining both the narrative and the integration of multimedia elements has been transformative. The feedback I received from my mentors, including Klaas de Vries and Robin de Raaff, was instrumental in guiding my development of both the music and the characters. Their insights on the reorganization of scenes, and the integration of filmic techniques have contributed significantly to the refinement of the opera's emotional depth and overall coherence.

One of the pieces of feedback came from de Vries, who advised me to focus on a more consistent and minimalist approach for the male character's vocal performance. By introducing a repetitive vocal style, I was able to make him more grounded and unsettling. This shift not only enhanced the narrative but also deepened the psychological tension between the protagonist and the antagonist. The decision to confine the male character's physical presence to the film medium further strengthened his role as a manipulative and elusive figure, increasing his ominous effect on both the protagonist and the audience.

The integration of cinematic techniques to externalize the protagonist's inner turmoil, particularly during her drug-induced hallucinations and emotional fragmentation, has been another significant aspect of my work. Initially, the abstract visuals were effective in creating an emotional atmosphere but lacked clarity in terms of narrative. By reworking the scene structure, I was able to clarify the progression of events and better reflect the protagonist's mental state. The *Weird Fishes* scene, where she drowns in the lake and experiences her last hallucinations, is now a more coherent and emotionally charged moment. The interplay between the "creatures" theme and the visuals, featuring underwater creatures born of her asphyxiation, evokes a sense of tragic beauty, underscoring the protagonist's inevitable fate.

Another crucial aspect of the cycle was the incorporation of *Pinkeltje*, a Dutch children's book, into the opera's film narrative. Initially a standalone acoustic piece, the text of *Pinkeltje* became an important symbol within the protagonist's psyche. As she faces trauma, she retreats into the innocent world of *Pinkeltje*, which contrasts starkly with her horrific experiences. The inclusion of *Pinkeltje* in both the musical and filmic narrative was a crucial decision that provided emotional resonance to the protagonist's suffering. The juxtaposition of this childlike story with the violence of her situation creates a powerful commentary on the way trauma can force an individual to seek refuge in childhood fantasies.

The feedback I received during this cycle also prompted me to reflect on the balance between abstraction and narrative clarity. My initial experimental version, though rich in atmosphere, lacked the narrative structure to allow the audience to fully engage with the protagonist's journey. By reworking the scenes into distinct phases, such as the "Arrival Home" sequence, the "Elevator Sequence," and the "Creatures Section", I was able to provide the audience with a clearer sense of progression and emotional weight. This reorganization also allowed for a more effective use of the multimedia elements, particularly the integration of film with live performance. The tension between the internal (psychological) and external (narrative) realms is now more palpable, making the protagonist's struggle not only comprehensible but also deeply affecting.

The inclusion of a duet between the male character and the protagonist, despite being a late addition to the opera, has proved to be an important narrative choice. Initially, the male character had no opportunities to directly interact with the protagonist through song. The decision to include brief moments where he sings in response to her thoughts or dreams, allowed for a deeper exploration of their relationship.

In conclusion, the third research cycle has marked a significant evolution in both the artistic and narrative development of *This is not my U*****E*. The revisions I made, particularly in terms of the integration of film and the development of characters, have resulted in a more cohesive and emotionally impactful opera.

4 Research findings and outcomes

4.1 Documentation and explanation of the research outcomes

First outcome (1st Research Cycle)

[06 Reference Recording 4 \(Massimiliano Vizzini\) - Not my place \(Updated\)](#)

[07 Reference Recording 4 SCORE \(Massimiliano Vizzini\) - Not my place \(Updated\)](#)

The first outcome is probably one of the most important for understanding the direction I was taking at that time. Through the integration of film, electronic music, and live performance, I have honed my approach to structuring the work, balancing interpretive freedom with clear musical boundaries, and creating a cohesive sonic experience. The lessons learned from studying the works of composers like Michel van der Aa have shaped my understanding of synchronization techniques and the role of multimedia in contemporary opera. Among the most important improvements of this cycle are:

Integration of multimedia: Learned how to combine film, electronic music, and live performance effectively within an operatic context.

Interpretive freedom with structure: Gained insight into creating a clear musical structure while leaving space for the performer's interpretive freedom.

Synchronization techniques: Deepened understanding of the importance of synchronization between music and multimedia elements, inspired by composers like Michel van der Aa.

Expanded dramaturgy: Improved the dramaturgical elements by integrating film as a key component of narrative development in the opera.

Interaction between actors and music: Gained insight into how live performers interact with electronic elements and film during a performance.

Final Outcome (1st, 2nd and 3rd Research Cycles)

[11 Reference Recording 7 SCORE \(Massimiliano Vizzini\) - This is not my U*****E](#)

[12 Reference Recording 8 \(Massimiliano Vizzini\) - This is not my U*****E. Scene 3 and 4](#)

[15 Reference Recording 9 \(Massimiliano Vizzini\) - This is not my U*****E. Scene 8](#)

[17 Reference Recording 10 \(Massimiliano Vizzini\) - This is not my U*****E. Scene 13](#)

[20 Reference Recording 11 \(Massimiliano Vizzini\) - This is not my U*****E. Scene 0](#)

[21 Reference Recording 12 \(Massimiliano Vizzini\) - This is not my U*****E. Scene 5](#)

The final outcome of the research has led to several significant interventions that have shaped my operatic work, *This is not my U*****E*. One of the key aspects, among others, was deepening my understanding of how film and other kinds of audio-video media operates within an opera, not as an additional layer but as an integral dramaturgical tool that actively shapes the narrative and emotional landscape. It has strengthened my ability to integrate multimedia in a way that is both musically and dramaturgically coherent. The insights gained from this phase have not only refined the opera itself but have also expanded my broader compositional approach, particularly in how I conceive the relationship between music, technology, and performance.

These findings will serve as a foundation for further experimentation, particularly in exploring real-time interactions between performers and multimedia and experimentation of sensor-based vocal techniques. Among the most important improvements are:

Multimedia as a dramaturgical tool: The analysis of different composers and performers has deepened my understanding of how film, electronic music, and real-time processing can shape an opera's narrative, influencing audience perception and character depth through digital alter egos and pre-recorded material..

New models for opera composition and performance: My research has redefined my horizons in the operatic structures possibilities, exploring cue-based synchronization, multimedia asynchrony, and electronic manipulation as dramaturgical devices. I'm developing new ways to integrate technology into live performance, creating modes of storytelling that aim to push the boundaries of traditional opera staging.

4.2 Self-assessment of the research outcomes and expert feedback

At the outset of my research, my approach to opera composition was rooted in conventional structures, with multimedia and technology serving more as embellishments than integral dramaturgical elements. Over time, my understanding of how film, electronics, and vocal gestural systems can actively shape narrative, character development, and audience perception has fundamentally evolved. Now, I feel I'm able to compose works where these elements interact dynamically, creating a cohesive and immersive storytelling experience. However, while I have successfully integrated multimedia and vocal processing into my opera, there is still room to refine the real-time interaction between performers and technology, particularly in achieving a seamless balance between them.

Moving forward, I aim to further develop cue-based synchronization techniques and refine the gestural control of vocal manipulation. Additionally, incorporating more direct feedback from experts, performers and audiences will help me assess the emotional and dramaturgical impact of my methods. By continuing to explore these areas, I can push my artistic practice even further, expanding the possibilities of contemporary opera and its relationship with multimedia and live performance.

I was also able to gather an extensive feedback from my main teacher Robin de Raaff:

What I believe to be fundamental in the development of Massimiliano's voice as a composer during the creation of his AR (and how this impacted him) is the constant cross-fertilization and cross-contamination between the various multimedia sources he integrates into his operas. What is particularly unique about Massimiliano's talent is that, while he masterfully weaves together different media into a cohesive and impactful whole, the individual components themselves already exhibit an exceptionally high level of technical and artistic refinement.

He has a highly developed 'eye' for cinematographic craftsmanship and timing, effortlessly controlling advanced camera techniques, angles, and editing processes. His expertise extends to post-production and even the creation of the storyboard for the film segments. Similarly, when considering his integration of electronic music into his operas, his technical command as a composer in this field is just as sophisticated. He has an exceptional ability to manipulate all parameters of electronic sound with precision and intent. In his most recent opera, *This is not my U*****E*, he conceived the dramaturgy, the libretto, and the entire artistic vision in his distinct and unmistakable voice.

Looking at his compositional development specifically, I have observed his evolution from a more intuitive composer to one who exercises full control over his artistic and stylistic decisions in purely musical terms. A striking example of this is his recent chamber orchestra piece *Rotterzand*, which demonstrates remarkable compositional and orchestrational virtuosity. Yet, despite its complexity, the work remains idiomatic and entirely feasible for classically trained musicians.

Having established how advanced and personal these aspects of Massimiliano's voice already were, I have witnessed how, in *This is not my U*****E*, the various multimedia elements—acoustic music, electronic music, character development and vocal identity, audiovisual components, and the physical stage presence—were developed in parallel. The simultaneous creation of these layers gave him a directorial overview, allowing him to discern when to focus on broad conceptual ideas and when to refine microtiming in specific scenes, musical passages, vocal sections, or electronic textures. This overarching vision, akin to that of an opera director, enabled him to ensure that all elements interacted dynamically in real time. The inevitable result was a continuous cross and mutual influence between the different layers, a process in which Massimiliano's control and mastery grew immensely throughout his MA/AR.

One quality that I have seen become even more powerful is his ability to create impactful moments. This is undoubtedly one of Massimiliano's greatest gifts as a composer: the capacity to synthesize all these multimedia elements into a singular, cohesive, and unique expressive force. His work exemplifies the literal integration of multiple artistic media into something entirely new.

Looking ahead, one area that could be explored further is vocal writing—not in terms of the inventive vocal effects or the connection between vocality and character behavior (which he already executes with great power and idiomatic sensitivity), but rather in the realm of melodic writing. At times, I sense that he gravitates towards conventional melodic shapes and phrasing. There is potential for an even more personal and distinctive approach to melody, particularly in relation to the broader multimedia context in which his work unfolds.

Given his deep expertise in integrating multiple elements into a powerful whole, I would also encourage him to continue composing autonomous works—whether for electronics alone, for acoustic instruments (as in *Rotterzand*), or for voices outside an operatic and theatrical setting. This would allow for a parallel artistic development beyond multimedia integration, fostering new influences and perspectives. That said, given the organic nature of artistic growth, I am confident that these opportunities will arise naturally in his musical journey.

During the feedback session that took place immediately after the opera's premiere, the jury, composed of professors Robin de Raaff, Hans Koolmees, and Friso Wijck, along with external chairman Mayke Nas, professor of composition at the Royal Conservatoire of The Hague, reported that the opera was very well received. They highlighted not only my ability to create a cohesive and structured musical fabric but also praised my multitasking skills in video production, orchestra coordination, rehearsal organization, and the overall management and production of the project.

I also believe that this is one of my strengths, as it allowed me to stage such a project without any budget or external support. Furthermore, Mayke Nas noted that the opera was composed in a relatively short time and emphasized my ability to rework pre-existing material (some parts of the opera were originally songs or audio-media compositions from the previous year) and successfully integrate them into a new narrative. She commended my capacity to connect seemingly unrelated elements to form a new structure. The professors agreed with me in stating that I had reached a professional level, making me ready for composition in a professional setting.

Lastly, one of my research tutors, Adrian Crespo, highlighted the clarity and relevance of my research question, noting that I successfully articulated the urgency of this topic within my own artistic practice. He acknowledged my detailed case studies on composers like Michel van der Aa and Richard Ayres, emphasizing how they strengthened the depth of my investigation. Additionally, he pointed out that my ability to translate research into artistic output was evident, recognizing both my creativity and compositional skills in the materials I presented.

4.3 Conclusion

This research has been an exploration of how contemporary opera can evolve through the integration of film and multimedia elements. It has proven that opera is not a static form but a living, breathing art that can adapt to new technologies and storytelling techniques. My journey has not only led me to refine my artistic approach but has also opened new questions for future research.

My hope is that this research contributes to the ongoing conversation about the future of opera, inspiring further exploration of its possibilities in an ever-changing artistic landscape.

One of the most significant challenges throughout this process was maintaining the operatic essence while expanding the role of film. The risk of over-reliance on visual storytelling was always present, but through iterative experimentation, I found ways to merge cinematic techniques with live performance without compromising the musical and theatrical integrity of the work.

This research has opened up new pathways for future exploration. The role of film in opera remains a vast and evolving field, with potential for further investigation.

This research explores film as a dramaturgical tool in opera, not merely as a visual supplement but as an integral narrative component. Across three research cycles, I examined how film shapes audience perception of characters, space, and psychological depth. Each cycle provided critical insights into different aspects of this integration.

The first cycle focused on film as a means of creating immersive environments, using visual elements to transport the audience into interdimensional space. While effective in establishing atmosphere, this approach revealed a gap in dramaturgical coherence, as the visual material functioned more as a backdrop than as an active storytelling device.

The second cycle shifted the focus toward character development and psychological depth, using film to highlight micro-expressions, fragmented perspectives, and inner conflicts. By experimenting with close-ups, distorted imagery, and layered visual textures, I was able to explore how film could enhance vocal performance and contribute to the dramatic evolution of the characters. This approach made it clear that film could do more than simply accompany the music; it could shape the audience's perception of the narrative itself.

Finally, the third cycle concentrated on refining the balance between film, live performance, and electronic sound processing. The challenge here was ensuring that the cinematic elements did not overshadow the musical and theatrical dimensions but rather complemented them in a way that strengthened the overall dramaturgical structure. Through careful synchronization, editing techniques, and real-time interaction between film and performers, I was able to achieve a more cohesive integration of these elements.

To conclude, I'd like to add just a few personal considerations. I believe this research has been extremely complex for me. Given my hyperactive personality and constant motion, I faced several difficulties documenting everything and managing the topics I wanted to discuss. At times, I feel like my thoughts run faster than my intentions. Additionally, the topic I chose added another layer of complexity due to its vastness. I also realize that the methodology I used, especially in the second cycle, focused primarily on analyzing other composers, sidelining my own music. However, this is not entirely true, as I have always worked in parallel on my opera *U*****E*, though I found it challenging to incorporate specific and narrow topics within the very tight framework of the research methodology. Looking at my character and personality, I'm more of a practical person, someone who learns by doing, without looking back too much.

Despite all this, I still believe this research journey has taught me a great deal. For instance, it helped me truly understand what interests me, continuously challenging myself, and looking at the world around me with a more critical and conscious eye, focusing on what I truly want to learn without getting lost in everything that, even minimally, sparks my curiosity. I'm very proud to have managed to create a complex and lengthy opera that required connecting many different factors. Even more so, I'm thrilled that this adventure has pushed me to learn even more and motivated me to dive into another multimedia operatic project as soon as possible.

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6 Network

Aïlane, Hanna - She studies and graduates in classical singing at Codarts, Rotterdam. We began to collaborate in the realization of my chamber opera, *Promenade over the Universe*.

Brugge, Paul M. van - (Rotterdam, b.1959) is a Dutch composer, as well as my main subject teacher of Master's Screen Scoring at Codarts. Since 1997 he has been teaching composition and arranging at the jazz department of Codarts. He is active as a composer for films, documentaries, music theatre and concerts. He studied composition with Bob Brookmeyer and Klaas de Vries at the Rotterdam Conservatory.

Çelik, Buse - Master's classical voice student at Codarts, Rotterdam. She played the main role in the *This is not my U*****E* opera.

Cheung, Viola - Soprano, part of the vocal ensemble of the *Goldilocks in Amsterdam* opera.

Cornwell, Christine - composer, violinist and producer based in Rotterdam. She organizes the Sounding Here festival, where *Promenade over the Universe* had its first premiere.

Raaff, Robin de - (Breda , b. 1968) is a Dutch composer. He's my main classical composition teacher. He's an active and prolific opera composer.

McGowan, Ned - (Philadelphia, b.1970) is a flutist and contemporary classical music composer, born in the United States, and living in the Netherlands. He has been one of my artistic research coaches.

Thomas, Léa - Scenography student at the Amsterdam Art School. We collaborated on my first opera, *Goldilocks in Amsterdam*, and later on *This is not my U*****E*.

Uijlenhoet, René: (b.1961) is a Dutch composer as well as my main subject teacher of electronic music at Codarts. He studied composition with Ton Bruynèl and organ and improvisation with Theo Teunissen and Jan Welmers. His music style focused on music for tape and/or live electronics, sometimes combined with traditional instruments. Since 1997 he has been a teacher of electronic composition at the composition department of the Rotterdam Conservatory (Codarts).

Vries, Klaas de - Klaas de Vries (Terneuzen , b. 1944) is a Dutch composer. He studied composition with Otto Ketting in The Hague and was a teacher at the Rotterdam Conservatory until 2009.

7 Appendices

Appendix 1: List of all self-produced AV media included in report

First Cycle:

[01 Reference Recording 1 \(Massimiliano Vizzini\) - *Promenade over the Universe*](#)

[02 Reference Recording 1 SCORE \(Massimiliano Vizzini\) - *Promenade over the Universe*](#)

[03 Reference Recording 2 \(Massimiliano Vizzini\) - *Promenade over the Universe* \(Birds Song\)](#)

[04 Reference Recording 3 \(Massimiliano Vizzini\) - *This is not a Place*](#)

[05 Reference Recording 3 SCORE \(Massimiliano Vizzini\) - *This is not aPlace*](#)

[06 Reference Recording 4 \(Massimiliano Vizzini\) - *Not my place* \(Updated\)](#)

[07 Reference Recording 4 SCORE \(Massimiliano Vizzini\) - *Not my place* \(Updated\)](#)

Second Cycle:

[08 Reference Recording 5 \(Massimiliano Vizzini\) - *This is not my U*****E* \(Space-Warp\)](#)

[09 Reference Recording 5 SCORE \(Massimiliano Vizzini\) - *This is not my U*****E* \(Space-Warp\)](#)

[10 Reference Recording 6 \(Massimiliano Vizzini\) - *The Man Song*](#)

Third Cycle:

[11 Reference Recording 7 SCORE \(Massimiliano Vizzini\) - *This is not my U*****E*](#)

[12 Reference Recording 8 \(Massimiliano Vizzini\) - *This is not my U*****E*, Scene 3 and 4](#)

[13 Experiment 01 - *Weird Fishes* \(Promenade version\)](#)

[14 Experiment 02 - *Pinkeltje song No.1* \(Promenade version\)](#)

[15 Reference Recording 9 \(Massimiliano Vizzini\) - *This is not my U*****E*, Scene 8](#)

[16 Experiment 03 - *Pinkeltje song No.2* \(Promenade version\)](#)

[17 Reference Recording 10 \(Massimiliano Vizzini\) - This is not my U*****E, Scene 13](#)

[18 Experiment 04 - Elevator Keeper \(*Promenade* version Character introduction\)](#)

[19 Experiment 05 - Elevator Keeper 2 \(*Promenade* version Recitativo + Aria\)](#)

[20 Reference Recording 11 \(Massimiliano Vizzini\) - This is not my U*****E, Scene 0](#)

[21 Reference Recording 12 \(Massimiliano Vizzini\) - This is not my U*****E, Scene 5](#)

Appendix 2: Critical media review

- Nationale Opera & Ballet. [The making of Upload](#), published on March 21, 2021.
- Michel van der Aa. [The making of Sunken Garden](#), published on March 29, 2017.

Within these two small documentaries, made for the respective debuts of *Sunken Garden* in 2013 and *Upload* in 2020, we can spy through the peephole at some fragments of Aa's life in relation to the production phases of these two major works of his. From writing the librettos to rehearsals, staging, relationships with singers and actors, producers, designers and the difficulties and stresses associated with all of this. In fact, we see a man who is no longer just a simple composer, but an all-around artist, who is sometimes referred to as a 'control freak', and who himself claims to be a perfectionist and eager to have control over all aspects of the Opera. I, therefore, found these two contents extremely interesting, which also show the artistic development that took place over 7 years, comparing two similar productions in terms of complexity and means, with the same composer but obviously evolved in terms of experience. However fascinated one may be by Van der Aa's Works, it is still complex to understand how he manages to make everything work in such a smooth and oiled way. Within these small documentaries, we have the possibility of entering a little more into Aa's world, through his stories, and interviews with his collaborators (musicians, artists, directors, and producers). It is possible to enter Michel's house and see an insight into his studio and how he interfaces with his team members during the development of projects. Within the "making of Sunken Garden", we see some interactions between Van der Aa and novelist and author David Mitchell (b. 1969), who was involved in the development of this project. We also see some scenes inside the animation and 3D modeling studio that created animations for the film part of the work. They were made by a company in Amsterdam called [Hectic Electric](#). They've been working on a 3D mosquito and on water that runs out of the film screen.⁶⁸

Then we also see some scenes from the filming of the film made in London. Michel is at the forefront as director of the film. We also see some scenes filmed in Cornwall, in the south of England. The great productive effort that revolves around Van der Aa's works is evident, in which a real film is shot before being able to put even one foot on a theater stage. Within the documentary, quoting the composer's words, he shares with us his reflections on the beginning of the creation of one of his works: "every time I start on a new opera or a new project, I think: What do I want to convey and how do I put it across? And do I really need film, or can I work with a string quartet and two singers? That's always a major question for me. The film layer adds something that I can't achieve with my music, that I can't achieve on a stage."

⁶⁹ It is then in London that the first rehearsals for the actual opera are staged. Here, John Berry, artistic director of English National Opera, introduces Michel to the actors. During the rehearsals we see how complex it is to create a work of this kind, which has 2D and 3D projections and which encounters continuous technical problems during the rehearsals.

"The making of Upload" begins with rehearsals for the show at the Nationale Opera & Ballet in Amsterdam. The theme of this film Opera is treated by the composer and the two singers on stage. In fact, through them we learn about the questions on which their interpretations were based. Indeed, Upload deals with a very specific and somewhat topical theme, namely that of the transfer of human consciousness within a computerized system, in fact making human life eternal.

⁶⁸ Michel van der Aa. [The making of Sunken Garden](#), published on March 29, 2017. Accessed July 2023. 03:25 - 03:44.

⁶⁹ Michel van der Aa. [The making of Sunken Garden](#), 04:41 - 05:05.

Subsequently, Aa tells us that the libretto was the first step of the project. Libretto which was created together with two excellent playwrights, Madeln Kooijman and Niels Nuijten.

As for the graphic part of the work, Aa comes into contact with the designer Theun Mosk right from the first production steps. With the latter, Aa conceptualizes and reflects on possible artistic solutions in transposing the upload visually, and what they need to do this. The visual and graphic part is one of the most present aspects in Upload, in fact it is not based only on video projection on a motionless screen, as often happens, instead it is a set of many different video contents, scene changes of the screens, as they moving via rails, she put scenes into the characters on stage and how they interact with the screens. Furthermore, there are the lights, the music, the cue points, and everything has to happen together with a lot of computers and layers, which obviously makes everything extremely complex.

Furthermore, Van der Aa talks to us about Darien Brito, another collaborator who is instead working on the functionality of the avatar, the digital version of the father's character. It's indeed a super complex patch, where multiple cameras filmed the singer from all sides to create a digital model of him in real time. Subsequently, we have the opportunity to see some scenes of the *Upload* film set, in which Aa is at the forefront this time too. On this occasion he declared: "I always work on three levels: I compose the music, I think about what is happening on stage during a certain moment in the music, and if there is a film, what is happening in the film in that moment. So these three levels are developed in parallel." ⁷⁰

- Boosey & Hawkes. [Van de Aa on van der Aa](#), published in January 2011.

This is a small documentary filmed by the music publishing house Boosey & Hawkes, music publisher of Van der Aa, in which the latter tells some artistic, literary and technical anecdotes of his latest works.

"First I consider myself a composer. Everything starts with music. I'm a composer who doesn't stop with the music, with what you hear and continues with what you see. I refuse to stop with what you hear." Van der Aa tells us how after studying sound engineering at the Den Hague conservatory, he decided to continue with music composition, even though he already composed. In 2022 he then decided to study cinema at the New York film academy, and it is here that he works on his first chamber opera, *One*, for solo soprano and film. Van der Aa tells us about his approach to film studies: "I found there was a lot of similarities between filmmaking and composing, in the way you deal with the time, in the way you edit your film, and for me it was really natural extension to my music and a very natural extension to my vocabulary, stretching y vocabulary in a way that I could cope with more ideas." It is also told how screens were used for projections in the production of *After Life*: "What we did, we used glass screens that can switch between glass and milky white transparent projections material, so with one push on the button we can move transparent to video. They extend the physical space on stage, it gives me the opportunity as a director to dive into the head of the protagonist and to look at an internal dialogue or internal discussion. The composer also talks to us about the role that music plays in his works, and how above all in music there is a strong interconnection between the world of electronic music and that of musicians on stage: "In many of my pieces there is an electronic soundtrack, and the sounds you hear in the soundtrack are usually an extension of the sounds that you hear live on stage. I need the soundtrack to be quite close enough to the sound of the orchestra, sometimes I even don't know who is doing what. The way I use the electronics always comes from within the sound of the orchestra, of the ensemble or of the instruments.

⁷⁰ Nationale Opera & Ballet. [The making of Upload](#)

Appendix 3: Full feedback on reference recordings

Robin de Raaff

Goldilocks in Amsterdam

1. What are your thoughts on the vocal techniques employed in the Goldilocks opera?

I recall our previous conversation regarding my naturalistic way of writing the vocal parts and the use of glissando in the Goldilocks character. Could you maybe elaborate more?

Yes, indeed, the glissandi are of course one of the many features that people will take home after experiencing your opera in the complete way, “full” as in fully staged. What I noticed in this live experience is that the singer who performed the character of Goldilocks, was not able to keep on renewing/reinterpreting the glissando which meant that it wore out a little with her because of the lack of vocal stamina and vocal flexibility. The glissando effect became more an effect than part of the natural expression of the character and therefore the singer. And I know it is possible to do this ‘well’ even if I hear the vocal version of Massimiliano himself, he would pre-record the vocal parts with his own voice, Massimiliano keeps them interesting and natural. I think this is a unique quality of Massimiliano’s composing manner, and it brings the creator very close to the resulting work. And he also shows exactly how he wants the curves of certain glissandi -or more general- gestures to be, which is always reflected in the precision of the notation of the vocal part.

2. Also, do you have any general suggestions for areas where I should focus my attention to enhance the vocal aspect?

Sometimes, one could consider writing an ossia part, where one anticipates the role being done by another singer with a different vocal instrument or a slightly different range or passaggio’s. But these kinds of works tend to be created with very specific singers in mind.

This is not my U*****E

3a. Considering the vocal writing in my first chamber opera, "This is not my U*****E," I'd appreciate your feedback on specific scenes.

The first video (scenes IV, V, VI) portrays the main character encountering a space warp travel, represented with chaotic visuals and electronic sounds.

Yes, the opening part feels like the character (not the singer) should be overwhelmed with the chaotic visuals, but what I experience and hear is more that she is vocally pushed away because of the sheer complexity of the sounds. The sounds and the visuals are one here, maybe softening the sounds, as the visuals are ‘loud’ as well and never interfere with her. The sounds occupy the complete range of registers in micro-moments and her singing tempo is not a good match, I would suggest longer values in her vocal lines as a counterpoint to the crackling and spectacular sounds of the electronic layer.

3b. The character is depicted as confused and unable to react. She, facing the screen, interacts with the multimedia part of the stage.

I'm not very satisfied with this part and I'm seeking advice on how to improve the vocal effectiveness in this scene. What strategies or approaches would you suggest?

What I find really intriguing is your use of microphone techniques and production techniques, and certainly also the visuals which are stunning with the regie component.

Production techniques stemming from the world of concept albums from popular music, from the Beatles, Pink Floyd, to Radiohead. Soft things are made loud and loud things are made soft. This all gives the work a very striking edge and makes it a truly complete sensual experience. No matter how abstract the source material is, Massimiliano is always able to make magic with it. And I think his ability to see beyond the score, beyond the notation, makes the simplest of things work so deeply beautiful, like the moment where only the creatures are left with Hanna, and the spell binding role of the cello. The components work so well together, and when it does, it adds up to musical magic.

4. The second scene (This is not a P**CE) depicts the main character in a void after traveling through space, experiencing a blend of past, present, and future memories and sensations.

This was also the outcome of my previous cycle after the analysis of van der Aa operas.

Do you have any advice on how I can enhance the vocal performance to convey the emotional depth and complexity of this inner experience?

Counterpoint of talking to herself from different time perspectives. That it becomes a more tightly articulated quasi conversation? But maybe this takes away from what I experience as the most important moment a few sentences ahead.

Make sure there is enough variety in showing the text that you hear in terms of sometimes letting the voice be ahead of the written text and vice versa. A few too many times the text was fully shown when she still had to say it.

I really like that you see her in black and white singing but you don't hear anything.

For me one of the most striking moments is when Hanna starts doubling the spoken voice, it is a known technique we talked about in our lessons in rap but also Pink Floyd and Radiohead, but it is timed superbly by Massimiliano. And creates a culmination of events towards this moment. It is to me the emotional climax, and a very powerful one. Your work with visuals is also really stunning, at the almost end you see a close up of her face getting less and less visible, it works so well.

5. Lastly, feel free to suggest music, composers or anything you think could be useful for this scope.

Maybe a composer that studied with us, for the electronic and visuals, not that you need anymore influence, but he is the cutting edge of trying out the possibilities of new sound and visual softwares.

Patrick Hartono is his name. The world of Michel van der Aa you know clearly already, but perhaps try to figure out what inspired him.

Simon Steen-Anderson perhaps, and someone I know personally very well, Thierry de Mey (who is also a composer with different disciplines and a filmmaker).

Viola Cheung

This is not my U*****E

1. Electronics

- a. I think the main reason the voice is not effective here is that it is out of the context of the Soundscape. For example, the distortions are so loud the track became a competition to the voice instead of setting the atmosphere for it. It sounds like the voice is accompanying the track instead of the other way around. It results in the text and articulation you wrote on the vocal line can't be clearly heard, so the laugh/cry section was like a sudden jump out, without a connection or set up from the story that can contribute to the scene.
- b. Find the balance of volumes with regard to your priority. Do you want electronics to be the main thing? Or is it a layer behind the singer? Do they have the same importance? Or do they alternate throughout the piece?
- c. Consider a sound engineer to do the mixing live.
- d. Feel free to put effects on the singer as well so the "two worlds" can blend more in one space and that suggests the singer is actually surrounded by the soundscape instead of sticking out. Indeed, there are so many more possibilities you can do with voice and electronics that you can create a sound world in between nature and technology.

2. Vocal effectiveness

You can also help by writing mostly in the singer's tessitura so she can project a little more especially in the climax. If most of the time, she is singing in her mid low range, it is very difficult (with such a loud noise behind) for her to lead the narrative.

In any form of vocal music, it is important the singer knows where to grasp the essence of your writing. You can help by putting emphasis on a certain word/ phrase/ expression, showing her a focal point/ climax of the scene. Because these are the unique contributions of singers from other instrumentalists.

3. Scoring

- a. The use of the notation with a cross can also indicate the range if you put them higher or lower on the staff, so there is no need to add word descriptions while you can tell that with your notation -> cleaner and more precise score.
- b. Putting the singer/ player names on the score does not look very professional. It may serve the purpose of your exam for now, but I think it is a smarter choice to have your score universal and reader-friendly enough for other musicians/ teachers/ conductors/ sponsors/ anyone who may be interested in your music in the future, to pick it up and understand your ideas and references as much as it may benefit you.
- c. The myth of terminology in modern music: Though nowadays we can defy a lot of musical definitions in the past, but if you call it an opera, I think the theatrical elements need to be more prominent - at least a strong suggestion of it like a simple set, some sense of staging and minimal use of lighting are not to be missed to be considered theatrical. The headset you used in some parts is a better choice than a standing mic in that sense. If the singer can suggest some more physical and dramatic presentations, it can help lead your piece into that direction.

Not my Place

How to convey the emotional depth and complexity of this inner experience?

Probably you worked with the singer on what you want to convey at certain points.

But the more repetitive/ minimalistic the music is, probably the harder it is to achieve the depth and complexity of the emotions. Because the performer then has very limited materials to express a range of emotions in different depths. It takes a very experienced performer (and also an experienced human) to recreate the same material into different meanings.

You can help by providing more build ups and musical elements which the performer can react to. Your personal explanations also help as well, eg. What would you describe the 2 pages of “bababa...” is about? Is it a build up to a climax? What is the emotions/ intention/ motivation/ subtext (thoughts that are not in the texts) from the character? Is there a shift or change of energy throughout? Or a hidden arch in the phrase to be observed? These all can make the vocal performance more convincing.

You can also alternate “real-singing” vs spoken words more. If you use heavily spoken words in a section which is supposed to be specially emotional, you are putting a singer in the box of an actor. Though a good classical singer is often a good actor as well, you are still in some sense limiting her assets and her best skills while giving big responsibilities to her. It’s possible, but it’s not the most effective. The easiest way for a singer to express heightened emotions is to sing in the top half of the tessitura or slightly above tessitura.

This piece may be interesting for you to listen to:

<https://www.gramophone.co.uk/review/saariaho-from-the-grammar-of-dreams>

This Finnish composer wrote quite a lot for the voice. One of her operas, “Innocent”, is a great example of effective implementation of unconventional classical singing (in this case folk singing) in an official operatic setting. You can check that out if you are into that as well!

In this interview I had with Viola, she engaged in a detailed discussion regarding the intricacies of composing music for singers, particularly focusing on the challenges posed by vocal diversity and the need for composers to adapt their compositions to suit individual voices. They explored various aspects such as voice types, vocal ranges, and the significance of understanding the characteristics of each singer’s voice. The conversation delved into the concept of FACH, highlighting its relevance in categorizing voice types and aiding composers in selecting appropriate singers for their compositions.

Furthermore, Viola emphasized the importance of considering practical factors when writing music for specific singers, such as vocal range, tessitura, and the ability to blend voices effectively within an ensemble. She also discussed the necessity of collaboration with directors and lyricists to ensure that compositions align with the overall vision of a performance.

In conclusion, we can say that the main points covered during the interview were the understanding of voice types and ranges, choosing appropriate singers for specific roles, considering vocal comfort and dramatic requirements, and ensuring clarity and flexibility in the score. She emphasizes the importance of researching voice types, collaborating with singers, providing clear cues in the score, and avoiding overloading the music with too many ideas.

Hanna Aïlane

Promenade over the Universe

With Hanna we discussed the influence of visuals on her singing style and how it impacted her studying and practicing of the music in the opera. She mentioned that the aesthetics of the visuals, including onirism, psychedelic, and futuristic elements, influenced her understanding of the opera and inspired her performance. She particularly appreciated the experience of singing in harmony with a video projection of herself, creating a powerful presence of a second character and enhancing the antagonistic power of the performance. In terms of advantages and disadvantages of singing with audio-visual recordings, Hanna mentioned that visuals could help prevent performers from getting lost in time when synchronized properly. However, singing with a fixed tape can be limiting, and the challenge lies in maintaining synchronization without compromising interpretation freedom.

Regarding specific moments in the opera, Hanna found "The Matter Around Us" challenging due to synchronization issues between the piano and audio-visual recording when she couldn't see the screen. However, when the screen was visible, she felt more freedom in time and interpretation.

About "Floating Around," where she incorporated acting and singing while reacting to the video on the screen she said that this experience was well-received by the audience, and Hanna believes that future performances could further explore interpretation freedom provided by visuals.

Overall, Hanna praised the opera's creativity but suggested that future compositions should consider live performance necessities and logic from the beginning to avoid the need for additional landmarks for synchronization. She emphasized the importance of well-thought-out scores for singers to facilitate memorization, practice, rehearsal, and performance, especially in chamber opera settings without a conductor. She provided some helpful tips for enhancing the vocal composition's execution, particularly focusing on creating clear entry points for singers and ensuring the music between sentences carries enough information about time, pitch, and tempo to aid in singing by heart without constant mental vigilance.

Irene de las Muelas

Promenade over the Universe

In this interview, the pianist Irene discusses the influence of visuals in the "Promenade" opera, on their piano playing. The visuals play a significant role in interpreting the music and help in recreating the required atmosphere. They act as a tool for identifying the character needed in different passages. Irene adapted their technique and expression based on the changing visuals and the development of the story. This experience with visuals and contemporary music provided her with new sources of inspiration and resources as a musician. Talking about *The Matter Around Us* scene, she said that while the score was effectively related the piano to the voice, on the other hand, she suggested removing bar lines or writing rhythms to align better with the visuals for a smoother performance. The text indications were deemed more helpful than traditional notation in conveying the required expression.

Performing with electronic music and the singer simultaneously was sometimes challenging. For multimedia passages that allowed more freedom, the pianist's earlier suggestions could apply. However, sections like the "Birds" part required strict rhythmic precision, making changes to the score unsuitable.

The most challenging performances were transitioning between "Water, water" and "The Garden" without a break and synchronizing with the singer in "The Matter Around Us" to achieve a sense of freedom in tempo without getting lost.

Paul M. van Brugge

R()T()E()D()M

During the interview I had with my main subject film music teacher Paul van Brugge, we discussed a lot about the meaning and the role of hybrid music in the film field, and what kind of relationship I want to create between these two sound sources. Also, we discussed how to use and transform a sound experiment in order to represent stories.

Paul paid special emphasis on the composer-audience relationship and the idea that any composer who is going to write music related to a multimedia product, has to be aware of how to balance what he calls "the question mark" and "the exclamation mark." By question mark, Paul means the representation of the composer question, the sonic and compositional quest that every musician must ask himself when writing music. So, It is a philosophical reflection related to the realm of experimentation, research and pure musical introspection. While the exclamation point is related to the sphere of entertainment and thus to the audience, who must be able to receive a clear musical narrative that can entertain them. Many good film music has found a balance between these two concepts.

We also spoke about more technical music aspects, like some of the techniques that I might implement in future compositions from the acoustic instruments themselves. For example, how could I make "prepared" versions of instruments such as the clarinet or electric guitar, exactly (or almost) as you would prepare a piano, where you have specific areas of the instrument that are intended to be twisted, and others that will instead retain their natural acoustic behavior?

In conclusion, we have dealt with perhaps one of the most important aspects concerning my musical research, which is the need to reflect any sound experimentation in a narrative context, which is therefore strengthened by a formal structure.

What good is an array of sounds, without any melodic, harmonic or rhythmic skeleton? So, we came up with the necessity to combine these elements, even in sound experimentation, or in any case to bring my electronic research into the modification not only of the pure timbre component, but precisely, in the modification of a melody, of a harmonic series, or a rhythm. To use an effect, such as a delay, not only to change the character of the sound but to create a rhythmic component that fits into a formal design. All this is capable of telling something, and that's what I want to do. Telling through the manipulation of hybrid sound, a series of images, emotions, or symbols that will be present in a future virtual reality application.

Ned McGowan

R()T()E()D()M

In the interview, I had with the composer, flutist, and research coach at Codarts Ned McGowan, we discussed from the beginning why it was so important to use electronic music for sound research. From his point of view, classical instruments in themselves are capable of producing a number of sonic possibilities that would only become extinct after years of research. So why make use of electronic

instruments? From my point of view, the use of electronics applied to acoustic instruments can make the search for sound not only more fun but also more varied. Also, having the goal of creating a soundtrack for a virtual reality application, the use of sound design and electronics is almost unavoidable to represent my idea at this moment.

We then discussed the relationship of man and machine, in a broader sense, and how hybrid music can be juxtaposed to a kind of cyborg that, although born a man, is now able to betray its own human nature by using bionic eyes, or mechanical body parts, capable of extending the biological capabilities of a human.

From a certain point of view, acoustic instruments are in themselves able to express human nature perfectly, through a tight, warm, vibrant note of a clarinet, or by simply rubbing the bow on a violin string. No computer would be able to represent this. At the same time, the idea of combining the two, transforming, for example, the percussion of the clarinet keys alone into a sound filtered by an effect, and thus endowing it with an electroacoustic guise, immediately becomes exciting. While maintaining a clear human characteristic, a rhythm and a kind of touch that only a musician would be able to achieve, it is now transposed into a reality distorted by computer mechanization.

So where will all this take me? What is the purpose of my research? What could my next steps be? Some proposals extrapolated from the conversation were, for example, the possibility of carrying out experiments, such as the possibility of thinking about an acoustic sound and trying to imitate it through electronic instruments, or creating an electronic sound and imitating it through orchestration. It is certainly an interesting idea, and moreover, there is a wonderful example of this, made by one of the composers on my reference list, Austin Wintory, who rearranged an old entirely electronic soundtrack of his for orchestra. The result is artistically admirable and is a great source of technical insights into the use of orchestration and the sound analysis of electronic music.

Appendix 4: Transcription of interviews

Promenade over the Universe

Interview with Hanna Aïlane, soprano of the opera.

Date: 28/07/2023

Place: Online

M. *How did the visuals influence your singing style? Did it impact your studying and practicing of music? For instance, in the song "Birds <3," you sang in harmony with a video projection of yourself. Did you find this method helpful?*

H. In the performances, there were moments where I was able to see the visuals and moments where I was not able to. Moreover, while I had seen some extracts before, there is still a great part of the visuals that I have never seen to this point. For this reason, there are different types of answers to this question. I was aware of the visuals. Their aesthetics influenced my understanding of the opera. For example, I felt onirism, psychedelic and futuristic aesthetics in general. At some moment, the visuals suggested structure, in some deconstruction of the frame. I tried to incorporate that into my singing and acting, while practicing and while performing.

I think that there were more poetic images that I missed out on, for example the moments using paintings that I never actually saw, so this inspired me less.

I was very aware of the visuals including my own image because I was filmed to shoot them. However I never saw most of the transformation of the image. For me singing with a Doppelgänger on screen was a very powerful experience as a performer. I really felt the presence of a second character. The mirroring effect accentuated in my opinion the antagonistic power of this figure. I felt that this completely different personality also showed in the sound. Indeed, I think that the "bird lady", as I call her, sang with a very different energy and color in the tape than the one I was performing on stage. The feedback I received from the audience in my exam was that our canon was therefore very impressive to attend.

I think that one of the reasons that this canon is powerful is also maybe that it seems like the prefixed tape is reacting to me and not the opposite. In general, I find that singing with a prefixed tape is very scary and limiting for live performers, especially in a song like *Where am I*. However in *Birds <3*, I would not say that it was too difficult because the canon is quite rhythmic and there are not too many pauses in between the sentences.

I think that visuals can help not to get lost in time with the fixed tape if the performer has the chance to look at the screen, like in *weird fishes*.

Practicing at home, I never had the chance to work with the visual and in the rehearsals, we barely had time to work on this. However, Massimiliano gave me interesting stage directions, especially in the moments where I face the screen, like for example in *Bu bu :0* where my character is both fascinated and scared by the light and tries to resist the unavoidable.

M. *During "The Matter Around Us," you had to synchronize your singing with the piano and an audio-visual recording. What were the advantages and disadvantages of this approach, from a musician's*

perspective?

H. The matter around us was one of the difficult parts of the opera to rehearse in a short time, not because of what I have to do specifically, but for synchronization. Indeed, the piano did not provide intuitively understandable and body memorable structure in my ear, while I was not seeing the screen. In the end, when I was seeing the screen, synchronization was not really necessary so freedom in time was welcome and enabled me to have more mental space for interpretation.

M. *In "Floating Around," you incorporated acting and singing while reacting to the video on the screen. How would you describe this experience? Was it effective?*

H. I received very positive feedback from the audience for this particular moment so I would say that it was effective. I think that in future performances I could even go further in interpretation in that moment because visuals do provide a safe frame for interpretation freedom, while with fixed sound I feel like I always have to be alert.

M. *Overall, the opera involves reacting to various musical and video materials. Were these materials well-constructed? And what suggestions do you have for improving the composition of these parts?*

H. I think that *Promenade* is a beautiful, inventive, surprising and sensational opera. I feel like from the beginning of the writing process, Massimiliano should anticipate live performance necessities and logic so that there is no need to add landmarks a posteriori for the performers to be able to synchronize.

Opera singers are actors, who sing by heart. In a chamber opera there is no conductor. So everything has to be well thought out in the score to facilitate memorization, practice, rehearsal and performance, especially in contexts of resource limitation. Acting is possible when the music flows from body memory and not by active mental vigilance and worry.

I am also curious about technical possibilities to have the audiovisual materials incorporate and react to the live performers actions. I think this would give more freedom to the performers but also create an incredible experience for the audience.

M. *Which songs that included audio-visual elements were the most challenging to perform, and what made them difficult?*

H. *Where am I* and *Welcome :))))* were difficult because of the absence of rhythm in the fixed electronica. There is sometimes rhythm in the tape (i.e. *Birds* and *The Garden*), but when everybody plays, I noticed it was difficult for the pianist to still hear it which sometimes led to slight mismatches.

Politics in Europe was difficult to rehearse without a microphone because acoustically, it is not balanced.

M. *In your opinion, which songs that featured audio-visual materials were the least effective during the show, and what was the reason for their lack of impact?*

H. I don't know, I was never in the audience. I think it might be useful to be able to still adjust the balance of the different elements within the audio tape to the acoustics of the actual performance, but I don't know how much possible this is.

M. *I have one final inquiry about the vocal aspect. While we were rehearsing, we collaborated on enhancing the vocal composition's execution. Can you provide any helpful tips to enhance my ability in creating similar vocal music in the future?*

H. Regarding writing for voice in general, without thinking about audiovisual material, I would say to pay attention to entrances : how does the singer know when to enter and on what pitch. Every time you put a pause between sentences, the question reappears. In an hour-long score, it's very difficult for a singer without a conductor to learn by heart the number of silence beats and bars in between each sentence. So the music in between should carry endogeneous landmarks about time, pitch (and tempo!) that can be internalized in the context of singing by heart, moving and acting. By the way, can you fix the beginning of *Water, water?* I need to know my note before I start and this prevented me from being safe enough to save the situation where Irene could not see you.

Interview with Irene de las Muelas, pianist of the opera ensemble.

Date: 01/08/2023

Place: Online

M. *How did the visuals of Promenade influence your way of playing the piano?*

I. The visuals of Promenade are a fundamental part when interpreting the piece, as they have a meaning in the story itself and help to recreate the atmosphere that the piece requires. When playing, they are a very useful tool for the musicians too, as they also serve to identify the character needed in each passage. In my case, they influenced my playing in the sense that I tried to adapt my technique and character depending on how the visuals varied and the development of the story. They were a different source of inspiration than what I usually use; it was the first time I played with visuals and I discovered that I could find there some elements that helped me with the expression, especially in this world of contemporary music. I tried to make big differences that could fit for each type of visual, for example: the aggressive flashes and "explosions" on "The Matter Around Us" could not be played the same way as the passage of the aquatic creatures, which required a softer, more rounded sound.

M. *Did it impact your studying and practicing of music?*

I. All the work done at Promenade has been a good experience in which I have been able to learn more about the interpretation of contemporary works: more extreme techniques (not only on the piano, but also for voice and acting, something that was very inspiring), knowing how to adapt to changes much faster, interacting with other elements that did not depend on me, such as the multimedia... I feel that now I do have

more resources as a musician and pianist that I can use in my practice.

M. *For instance, in "The matter around us" you played over the electronica and the video projection. Did you find effective the way the score was written or was it Difficult?*

I. I think the writing was effective in relating the piano to the voice (particularly in the moments when the voice is not singing, but speaking, where the pianist can clearly see how (s)he must interact with the phrases of the singer). If there is one thing I would change, because I think it would make the following of the visuals easier, it would be to remove the bar lines (or to write the rhythms in a way that gives the feeling of more freedom, making more reference to the visuals than to rhythmic precision per se). I don't know how to make that possible, I can come up with two ideas at this moment:

- Perhaps something more focused on how this note is long, or short, or very long, or very short, but without much more rhythmic precision.
- Maybe using lines/drawings that show the musician where he has to move more, be more static, directing the line to a certain reference point or where this note ends in a relative way.

This is because there is an indication at the beginning that I think fits very well with the character of the piece and with the visuals ("quasi senza tempo"), and for the musicians I think it would be a little more effective to have that feeling also when looking at the notes that are written. The character indications that change from contemplative to increasingly scared are extremely useful and very precise, sometimes more than whether a note has a dot or not.

M. *How did you experience sometimes having to follow electronic music and the singer at the same time? Do you think the score was written effectively or do you suggest improvements?*

I. I think my previous answer can be applied to those passages with multimedia that are, within what is possible, more free (although you always need to have a reference of the visuals and sounds, of course), such as "The matter around us " or the strange creatures. There are other parts, like the birds' part, that use also the multimedia with the singer and musicians and that require a lot of rhythmic precision. In those cases the suggestion I have made could not be applied because it is necessary to measure precisely and play in the exact tempo, so I would not change the way the score is written.

M. *Which songs that included audio-visual elements were the most challenging to perform, and what made them difficult?*

I. In the live version, the change from "Water, water" to "The garden" was more difficult than what we have thought. It was something that we didn't realize in rehearsals, that it could be complicated because there is no stop in between them, and there was some mismatch in the tempo that meant that the linking between pieces wasn't completely accurate. "The matter around us" was complicated at first because it meant working together with the singer to both get that feeling of freedom in the tempo without getting lost or falling behind. This is always complicated at first because, as different people we have different sensations and we live differently from the concept of tempo. I think that even if changes are made in the

way the score is written, the success of this song will still be a matter of rehearsing with the performers and working together to reach agreements in the interpretation.

M. *Do you have any advice or comments in general that you would like to make?*

I. Now, I can only come up with the idea of not writing the pitch sometimes in the voice that we have discussed, but if I have more suggestions I will tell you!