# Music and Dramaturgy: Opera and Beyond. A Composer/Singer Perspective

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# Abstract

This thesis discusses different approaches to the composition of opera and new music theatre that include the perspective of the performer-composer as an important element contributing to the creative process. Among these approaches are: collaborative composition; transdisciplinary approaches, acoustic composition with electronic elements including traditional instruments and found objects; the inclusion of the instrumental (as well as vocal) performers on stage; incorporating dancers as part of the score; approaches to composition that include certain degree of improvisation; writing for one's own voice; employing a multilingual libretto; staged concert music; and the relationship between music and dramaturgy among others. These different approaches to composition are discussed in relation to my own work included in the portfolio.

*To my parents María Susana Rosado Soto and Fernando Valdés Arroyo*

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Opera for soprano, mezzo-soprano, tenor, chamber ensemble and electronics


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Bild 5 – Scene 2: Bald
Bild 7: Jetzt


*The invention of sex* (2019 – 2021)                                     20'00"
Opera (Monodrama) for voice, chamber orchestra and electronics


*Géante rouge* (2020)                                                    7'39"
Work for symphonic orchestra


*Der Kiosk* (2020 – 2021)                                                37'50"
Opera for mezzo-soprano, clarinet, viola, percussion and electronics


*Mexico Aura: The Myth of Possession* (2021 –  2023)                     20'00"
Opera for two sopranos, baritone, chamber ensemble, native instruments of Mexico,
and electronics


Fragments of:
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Scene 11: The underworld (p. 113)


Total duration:                                                         107'32"

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Three scenes (written by Diana Syrse):

Bild 2 – Scene 2: Die Verschmelzung
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*The invention of sex*                    video recording                20'00"

Performed by Diana Syrse and the Secession Orchestra conducted by Clemént Mao-Takacs. Aleksi Barrière, stage director. Performed at the Museé du Quai Branly in Paris, April 2021

*Géante rouge*                    audio recording                7'39"

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*Der Kiosk*                    video recording                37'50"

Performed by Susan Maclean, soprano; Anna Neubert, viola; Robert Beck clarinet; Rie Watanabe, percussion. Ilaria Lanzino, stage director. Junge Oper am Rhein. Kulturinsel-Festival in Düsseldorf, June 2021

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Total duration:                                                            107'32"

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**Introduction: Re-imagining opera in our time**

In my work as a composer focusing on interdisciplinary works, I explore various perspectives as both a composer and a singer, using different characteristics and approaches to composition. These characteristics include numerous possibilities: expanding acoustic ensembles with non-conventional instruments and objects; fostering transdisciplinary approaches and the integration of extended vocal and instrumental techniques; employing technology; involving composers, librettists, and stage directors in a collaborative compositional process (as well as promoting composer-performer's integration); utilising a musical hybridization framework, free improvisation and/or controlled improvisation; employing non-traditional spaces; incorporation of a multilingual text; immersive theatre-experience; and emphasising inclusivity by integrating underrepresented voices, minorities, and artists from developing countries. These characteristics are carried out in this portfolio of compositions, which serves as an example of what I have worked on over the past years and which I documented in this commentary.

Below are some examples of works that exhibit these characteristics. These works served as an inspiration for me, because they showcase one or more of the aforementioned attributes.

In seeking inspiration for the expansion of acoustic ensembles or orchestras through the integration of unconventional or traditional instruments, found objects, or

proposing another type of instrumentation or sound source altogether, I drew upon works such as Anne Hege´s *The Furies*, a Laptopera performed by the Stanford Laptop Orchestra[1] (the orchestra made of laptops); *Unsere Fremden* by Mischa Tangian, performed by the transcultural group Babylon Orchestra Berlin (a project that combines theatre opera and film utilising traditional vocal techniques, traditional instruments from various cultures and music hybridization); as well as *Untold*[2] by composer Alex Ho, an immersive experience that combines classical music and fusion of Chinese and Western instruments.

The Stegreif Orchestra in Berlin[3] provides another example, incorporating improvisation and movement into their performances, which results in a distinctive and dynamic experience that actively involves the audience. Fostering such transdisciplinary approaches in the realm of music and performance opens up opportunities for instrumentalists to assume significant roles on the stage, extending beyond their traditional positions. They can become integral characters in the performance, contributing to a more diverse and dynamic artistic landscape. One should mention that Kagel, in this context, deserves special recognition for his groundbreaking contributions to the new music-theatre genre, notably his influential role in pioneering 'Instrumental Theatre.'[4] Kagel's work in this domain has been

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[1] Hege, A. (2019), "The Furies: A Laptopera," [Online] Available at:
https://www.annehege.com/the-furies-a-laptopera/ [Accessed online on August 7, 2022].
[2] Ho, A. (2019), "Untold," [Online] Available at:
https://www.alexhocomposer.com/untold-first-phase[Accessed online on August 22, 2023].
[3] Stegreif Orchestra (2022), [Online] Available at: https://www.stegreif.org/en/who-we-are [Accessed online on September 05, 2022].
[4] Mikawa, M. (1962). The theatricalisation of Mauricio Kagel's "Antithese" (Year) and its development in collaboration with Alfred Feussner. "The Musical Times," Vol. 156, No. 1932 (AUTUMN 2015), pp. 81-90. Published by: Musical Times Publications Ltd.

particularly defining, emphasising a musical genre where the actions of performers hold equal significance alongside their auditory output.

On the other hand, the singers could also assume various functions, including the integration of vocal extended techniques. In the opera *Arrasados* by Rogelio Sosa[5], for instance, singers go beyond their traditional roles as characters on stage, actively becoming part of the orchestra or instrumental ensemble while experimenting with their voices to expand their contributions to the musical performance. This approach not only enhances the opera's auditory experience but also blurs the boundaries between singers and instrumentalists. In such instances, singers become versatile artists who not only convey the plot through their vocal skills but also actively contribute to the instrumental landscape.

An example of unique incorporation of technology into operatic performance is provided by *Android Opera Mirror* by Keiichiro Shibuya, where a AI-equipped humanoid robot stands at the centre of the stage, improvising its own melodies on the spot by synchronising monks chanting. *Elevenplay* by Daito Manabe, on the other hand, is a production that explores virtual reality, augmented reality, mixed reality, and robotics in dance. It utilises motion capture to integrate omnidirectional video projections with the dancers' movements, creating a unique and dynamic artistic experience. New forms of art are born when technology is employed to translate gestures into sounds, which are then performed as songs by a computer program that responds to the displayed emotions - an artistic concept realised in the project

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[5] Sosa, Rogelio (2011). [Online] Available at: https://www.rogeliososa.com/arrasadoseng [Accessed online on August 20, 2023].

*Gesture Processes v.2* by artist Laura Anzola from Bogota, presented as an installation at the Banff Centre in Canada[6].

Replacing the individual compositional process with a collaborative one involving composers, librettists, and stage directors encourages artistic personalities to merge their styles, traditions, and resources. An example of this approach is the *Opera, no opera AH!*[7] staged at the REDCAT in Los Angeles, where ten composer-performers from around the world crafted compositions in various styles, incorporating robots, electronic interfaces, laptops, traditional instruments, and sound poetry.

The incorporation of a musical hybridization and cross-genres is exemplified by Pulitzer Prize-winning opera *Angel's Bone* composed by Du Yun[8]. This work delves into a diverse spectrum of musical genres, encompassing classical, punk, and venturing into the realm of cabaret. The expansion beyond the traditional approaches to opera could also include incorporating improvisation or opening up to other possibilities of multiple interpretations (incorporating elements of chance) such as John Cage *Europeras 1 & 2*[9], an opera that consists of two parts, separated by a looped film of chance-derived moments, all of which are created through chance operations employing high-speed computer technology and a specialised program called "IC" by Andrew Culver to simulate the I Ching´s coin oracle.

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[6] Anzola, L. (2012). [Online] Available at: https://www.lauraanzola.com/gestures [Accessed online on August 18, 2023].

[7] Rosenboom, D. (2010). [Online] Available at: https://centerfornewperformance.org/projects/ah/ [Accessed online on August 18, 2023].

[8] Yun, D. (2016). Retrieved from Pulitzer Prize website: https://www.pulitzer.org/winners/du-yun [Accessed online on August 20, 2023].

[9] Cage, J. (1987). https://johncage.org/pp/John-Cage-Work-Detail.cfm?work_ID=67 [Accessed online on October 3, 2021].

Performances of traditional works could be staged in unconventional locations (many productions of the Birmingham Opera Company[10] are excellent examples of such an approach. Over the past decade, Birmingham Opera Company has staged performances in more than 200 venues, including youth centres, homeless shelters, disused factories among others (one example is their 2008 production of *King Idomeneo*, which was performed in a rubber factory). Experimentation with space does not have to be limited to man-created surroundings, but could also take advantage of natural scenery. In *The Tree Opera* by composer Anna Kirse[11] from Latvia, an immersive musical experience takes place in a forest, where the forest itself becomes the protagonist. In radical opposition to this (and returning to man-made environments), *The Hopscotch Opera*[12], composed by a collective in Los Angeles, was presented inside twenty four cars in movement, turning the city itself into the stage.

The use of different languages or with a multi-language text can be seen on *Innocence*[13] by Kaija Saariaho. The main singing language is English and additional languages are Finnish, Czech, French, Romanian, Swedish, German, Spanish, Greek using an original Finnish libretto by Sofi Oksanen and a translation to a multilingual libretto by Aleksi Barrière. The concert stage productions of the French company La Chambre aux Échos also incorporate different languages and multicultural perspectives into their productions. While the native languages of

[10] Birmingham Opera Company. (2018). "Idomeneo." [Online] Available at: https://www.birminghamopera.org.uk/blog/found-spaces-idomeneo-2008 [Accessed on August 20, 2023].
[11] Kirse, A. (2019). Tree Opera 2019. [Accessed online on August 22, 2023].
[12] Hopscotch (2016). [Online] Available at: https://hopscotchopera.com/synopsis/ [Accessed online on August 20, 2023].
[13] Saariaho, K. (2021). [Online] Available at: https://fr.wikipedia.org/wiki/Innocence_(op%C3%A9ra) [Accessed online on August 20, 2023].

Western cultures have been long-established in opera, the expansion towards non-Western languages offers immense opportunities with regard to sound and sonority (*Xochicuicatl cuecuechtli*[14] by Gabriel Pareyón, for example, is an opera written in Nahuatl[15]).

In this portfolio of compositions, I aim to demonstrate my own contributions to the opera genre, as well as inspire future artists by showcasing creations that break away from entrenched traditions within the domains of interdisciplinarity, music, and dramaturgy. The compositions in this portfolio are just a few examples of endeavours that challenge the conventional definition of opera through their innovations. Those who embrace new opera are likely to be individuals inclined to explore innovative approaches to musical composition. These artists may come from diverse age groups, backgrounds, and social strata, willing to distance themselves from conventional operatic norms while simultaneously honouring the rich heritage of this art form. By incorporating my voice, my perspective, and the realisation of my creative ideas, I propose fresh approaches within the realm of operatic composition, fostering continued evolution and innovation. I consider this portfolio to be merely a beginning and a selection of what I could explore further, and I hope that it will encourage future artists to explore their unique paths in breaking free from established norms.

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[14] Pareyón G. (2013). "Xochicuicatl cuecuechtli." Available at: https://www.mtnow.org/archive/previous-editions/mtn-2015/xochicuicatl-cuecuechtli/#:~:text=Xochicuic atl%20cuecuechtli%20(Ribald%20Flowersong)%20is,and%20exclusively%20with%20Mexican%20inst ruments. [Accessed online on August 22, 2023].

[15] Nahuatl is a language or, by some definitions, a group of languages of the Aztecs. Varieties of Nahuatl are spoken by about 1.7 million Nahua people, most of whom live mainly in Central Mexico and have smaller populations in the USA. It is the second most spoken language in Mexico.

**Chapter 1: Collaborative approaches - *Nacht der Seeigel***

1.1 Introduction: The origins of the opera *Nacht der Seeigel* ("The night of the sea urchins")

In October 2016 I was selected to be a member of the "Akademie Musiktheater heute" of the Deutsche Bank Stiftung, DBS (German Bank Foundation) in Germany: a program that gathers selected young professionals of different areas related to the production of new musical theatre. One of the goals of the program was to create a new opera in collaboration with the artists participating in it. In each edition, the program selects 15 participants. The artists selected for the collaboration I was involved with were the following: conductors Ulrich Stöcker and Ingmar Beck; stage directors Martin Mutschler, Christina Pfrötschner and Luise Kautz; dramaturg Evarts Melnalksnis; stage designers Valentin Mattka, Rebekka Stange and Thilo Ulrich; cultural managers Martina Drechsler, Maria Sünjem and Mara Kaeser; and three composers: Huihui Cheng, Mischa Tangian and I. In a period of two years, we visited more than 40 different productions in theatres and opera houses of Europe, met some of the artists involved in the productions, observed their work, shared information and ideas, discussed the future of opera, and eventually jointly developed a project in collaboration with the Staatsoper Hamburg.

The collaboration resulted in the commissioning of the opera *"Die Nacht der Seeigel"* written for the Hamburg State Opera and funded by the German Bank Foundation.

1.2 Creation of the concept and the libretto

The 15 artists involved in the project devoted several meetings to choose the themes they wanted to represent in the opera. The main concepts included flood, sea urchins, family matters, philosophical questions about life and a notion of catharsis. All these concepts served as a basis for a libretto written jointly by the three stage directors and the dramaturg.

The libretto is written in an unusual way: three columns of text represent the three human characters in a story. All text included in the libretto is intended to be performed by live vocal parts.

Structurally, the libretto consists of six *Bilder* (Ger. *Build* = picture, image). In addition, *Bild* 2,3,4 and 5 are separated into two scenes each. There is also a prologue and an epilogue. Dividing the scenes between the three composers is related to the characters linked to each scene, as explained in section 2.3.

**Table 1.** Scene overview of *Nacht der Seeigel*

| Image (Bild) | Title | Composer | Instrumentation |
|---|---|---|---|
| Prologue | Prologue | Huihui Cheng | Fl, Tpt., Tbn, E.Git, Perc., Vln., Cb., Elec. |
| Bild 1 | Das namenlose Ding | Mischa Tangian | woman, man, sea urchins 1 and 2, Fl, Tpt., Tbn, E.Git, Perc., Vln., Cb. |
| Bild 2 – Scene 1 | Sü-sü-sü-ßes Herz | Mischa Tangian | woman, Fl, Tpt., Tbn, E.Git, Perc., Vln., Cb. |
| Bild 2 – Scene 2 | Die Verschmelzung | Diana Syrse | scientist, sea urchins 1 and 2, Tpt., E.Git, Perc., Vln., Cb. Elec. |

| Bild 3 | Kein Zurück | Mischa Tangian | intro/song: man, scientist/sea urchins 1 and 2, aria: woman, Fl, Tpt., Tbn, E.Git, Perc., Vln., Cb. |
|---|---|---|---|
| Bild 4 – Scene 1 | Das Herz schlägt | Huihui Cheng | scientist, man, Fl, Tpt., Tbn, E.Git, Perc., Vln., Cb. |
| Bild 4 – Scene 2 | Roter Badeanzug | Huihui Cheng | Man, Perc., Elec. |
| Bild 5 – Scene 1 | Wehen | Mischa Tangian | woman, scientist, sea urchins 1&2, Fl, Tpt., Tbn, E.Git, Perc., Vln., Cb. |
| Bild 5 – Scene 2 | Bald | Diana Syrse | woman, scientist, man, sea urchins 1&2, Fl, Tpt., Tbn, E.Git, Perc., Vln., Cb., Elec. |
| Bild 6 | Überschwemmung | Huihui Cheng | woman, scientist, man, sea urchins 1&2, Fl, Tpt., Tbn, E.Git, Perc., Vln., Cb., Elec. |
| Bild 7 | Jetzt | Diana Syrse | woman, man, sea urchins 1&2, Fl, Tpt., Tbn, E.Git, Perc. (crotales), Vln., Cb.,Elec. |
| Epilogue | Prologue | Huihui Cheng | Fl, Tpt., Tbn, E.Git, Perc., Vln., Cb., Elec. |

1.3 Characters: Collaboration involved in compositional process

There are five characters in this opera:

- Der Wissenschaftler (Scientist): a very old scientist. Although this is a male character, the part is intended to be sung by a woman, preferably an experienced soprano.[16]

- Frau (Woman): a pregnant woman who expects her child to be born soon (soprano).

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[16] The opera house and the stage directors decided what type of voices we should have for each character.

- Man: a young man running away from his family (his wife and future child) because he is afraid of the responsibility (tenor).

- Seeigel 1 and Seeigel 2 (Sea Urchin 1 and Sea Urchin 2): god-like characters (not present on stage) that influence the feelings and intentions of the human characters. Sea Urchin 1 should be performed by a soprano and Sea Urchin 2 by a baritone.

The musical portrayal of these characters and the mutual relationship between the text and music have been the matters of debate between composers and stage directors. We all felt compelled to represent important themes of the libretto, such as fear, love, connection, and discussed different ways of doing it - either by means of creating an appropriate soundscape, or using Leitmotifs, or simply by evoking a flow of energy that could support those intentions. Eventually, we decided that the most effective way to allow for individual expression while achieving some sense of coherence within the work as a whole, would be for each composer to focus on a specific character. This way, the composer would be able to create a coherent musical character, transmitting the essence of this character's words and actions into music, enhancing and representing it in a consistent way through the opera. This also allowed for effective work between each composer and the dramaturg and the directors, or the person responsible for writing the given character. My responsibility was to embrace and create the character of the scientist.[17] All three composers focused on the character of the sea urchins that appear in almost every scene.

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[17] Huihui Cheng worked with the character of the man and Mischa Tangian with the woman.

All three composers involved in this project worked from different places: Huihui Cheng in Aix-en-Provence, Mischa Tangian in Berlin and I in Munich. In order to coordinate our work, we communicated through email, messenger and Skype to discuss the cast and the structure of the opera. Some of the aspects that needed consideration were the approach to writing for voices, instrumentation, format of the score, etc. In addition, each of us had separate contact with the dramaturg and one of the stage directors to talk about the overall concept and the text.

At the start of the compositional process (in March 2018), I created a list of concepts related to all characters. It was my intention not to merely write music alongside my collaborators, hoping that it would somehow make sense together, but to create music that would be influenced by their work and achieve a sort of synthetic style as the result of the collaboration. In order to achieve that, I asked both of them to send me scores and recordings of their music and studied their approaches to composition. In Huihui's music, I noticed the influence of electronic music after her studies at IRCAM in Paris, while in Mischa Tangian's work I observed the influence of Armenian music. Understanding these influences helped me to create the fusion with my own compositional approach. The methodology underlying the integration of the compositional ideas from the other two composers into my own style and form involved a layering of diverse sound materials. To achieve this fusion, I employed a variety of approaches, such as incorporating short melodic fragments authored by Mischa Tangian into my score, subsequently developing them in a distinct harmonic context. Another approach was to incorporate electronics produced by Huihui Cheng, using sound recordings and modifications of pitch and granulation of my own voice to

create my own electronics. Throughout the creative process, I remained mindful of the resources that I had derived from Huihui and Mischa's styles of writing, while ensuring that I maintained the integrity of my own distinct musical style.

The character portrayal of the scientist in the introductory scene provides a notable example of musical fusion. I started the composition process by compiling a list of descriptive terms that embodied the character's persona, such as "nervous", "old", "anxious", and "surprised". Subsequently, I began to improvise with vocals and piano, followed by notation for all instruments. To integrate a progressive rock influence, I elected to use the electric guitar, as previously done by Mischa in his other works. To accomplish this, a guitar player assisted me with the desired effects, with the score undergoing a thorough review before finishing. For the scene in question, I asked Mischa Tangian to record his voice, including speech and various sounds, which were compiled in Logic and subsequently edited and mixed with acoustic instruments along with my own voice.

I requested Huihui Cheng to provide a sample of the electronics she was creating for another character, which was subsequently integrated into my own electronic part to ensure consistency throughout the various scenes. My approach to composing for the sea urchin voices in the scientist scene was influenced by Huihui Cheng's treatment of vocal expression in her other works. This unconventional style does not conform to the bel canto tradition, as it employs the use of chest voice and exhibits a broken quality between melodic lines, resulting in an almost spoken effect.

The initial arias of each character were presented at the "Festakt" of the "Akademie Musiktheater Heute" in October 2017 at the Opera Frankfurt. This gave us the opportunity to experience how the collaboration was working and to listen to the style of each composer.

Each one of us tried to approach the libretto in a very personal way and even though we were mutually inspired or influenced by each other's music and even shared musical ideas or motives, we did not force ourselves to write in one specific style or apply a uniform aesthetic approach. We were conscious though, that we needed to consider the smooth flow from one section of the piece to another. Therefore, we constantly shared the materials we were creating throughout the collaborative process. As a result, the gradually emerging opera was a result of the mutual influence and continuous exchange of ideas, which contributed to the sense of artistic coherence.

1.4. The emergence of additional characters: the Sea Urchins.

Sea urchins are a recurring presence throughout the opera and have been musically represented by all composers involved. These characters would not appear on stage, but only serve to support the dramaturgy and enrich the soundscape of the piece (they do not appear in the original libretto). The endeavour undertaken by the composers was to achieve uniformity in the musical portrayal of these characters. In the process of the opera creation, the sea urchins have become essential to the overall concept. Partially vocal, partially instrumental and electronic parts of the Sea

Urchins act as shadows of the singers. At the same time, it was our intention that the voices of the Sea Urchins should sound like creatures from another universe, who observe this world from a distance and try to speak like humans to become a part of their world. In these parts we used extended vocal techniques and unconventional sounds such as speech, whisper, scream and other effects that the other opera singers may not be comfortable with. To this end, extended vocal techniques were employed, and we avoided the use of text. In addition to using live singing and speaking, we recorded the voices and subjected them to electronic processing, deconstructing the melodies, as well as the sound itself. This allowed us to employ a wider array of  vocal techniques, as well as achieve and utilise sounds not available to us if we were to rely on traditionally trained singers alone.

I have a background in the field of contemporary vocal music both as a singer and a composer. This led me to the decision to write the part of the Sea Urchin 1 for myself, using  my own voice and singing style within our operatic framework. This initiative represented an optimal opportunity for me to incorporate the extended vocal techniques. I relied on voice samples, including noises and certain effects, which I performed live and recorded in my home studio. On occasion, I composed sections that integrated vocalisations such as growling and consonant-based free improvisation. I prioritised viewing the voice not only as the voice of a character but as an orchestral instrument.

1.5 Analysis (three scenes)

This section contains a brief analysis of the three images that I composed for *Nacht der Seeigel*: *Die Verschmelzung* (The Fusion), *Bald* (Almost) and *Jetzt* (Now).

*Die Verschmelzung*

In this fragment of the opera, the scientist relives the memory of an important event in his life, when he was much younger. The music for this scene is written for a mezzosoprano (the scientist), a soprano (Sea Urchin 1), a baritone (Sea Urchin 2), trumpet, electric guitar, two percussionists, violin, contrabass and electronics.

This image (scene) consists of four parts. In the first part, we see his memory of being close to the sea and hearing the voices of the sea urchins, calling him to follow them. The music for this part includes an electronic part throughout. I created the electronics using the recording of the soprano Gabriele Rossmanith (the voice of the scientist), Mischa Tangian´s (originally sea urchin 2) and mine (sea urchin 1). The recordings were processed using Logic software, which included changes of the tempo and using a granulation effect, as well as applying equaliser and a compressor to all the voices. I intended to leave the sound of the voices as pure as possible, without adding any other effects or filters, except in one case, where I used my voice to enhance the noise made by the electric guitar - this served as a "shadow" or support for the sea urchin voices.

The purpose of using the electronics was to amplify the vocal range of the sea urchins during the live performance, in order to transform their voices into those reminiscent of imaginary aquatic creatures rather than human voices. In order to achieve a uniform soundscape created by both the electronics and instruments, I used an array of extended techniques to produce various noise effects on accompanying instruments. One such effect is illustrated in Figure 1 below: the electric guitar is played with a square glass coaster sliding along specific parts on the neck, with added 40% distortion effect, to enhance the sonority of recorded voices and electronics.



**Figure 1.** The electric guitar effect in the fragment of the aria *Die Verschmelzung*

The second part of the scene (bars 25-121) features the sea urchins taking the scientist underwater to show him how all the sea urchins get combined into a single

big, floating ball, eventually engulfing and fusing with the scientist. In this section, I aimed to convey a sense of intense anxiety and urgency, evoked by the improvisational nature of the vocal parts of the sea urchins, the electric guitar's noisy quality, and the rapid chord repetitions on the guitar, all of which served to underscore the scientist's profound shock and desperation.



**Figure 2.** Fragment of *Die Verschmelzung*

From bar 145 on, the sea urchins repeat the word "Verschmelzung" (fusion). In this particular section, the scientist experienced a transformation from a state of despair and surprise to a distinctly different environment. As the sea urchins took him to the bottom of the sea, they slowly approached and merged with him. Remarkably, this fusion process was not accompanied by any sense of discomfort, but rather feelings of immense pleasure. To achieve this effect, I applied a different technique on a guitar, contrasting to former strumming and the use of the glass coaster: this time I

instructed the player to slide the drumstick along the neck of the instrument, which results in a sound similar to the singing of a whale under the water.  I also modified the tempo, rhythm, and vocal quality of the sea urchins, who now sing with a pure direct tone without any extended techniques. The scientist's vocal line (mezzosoprano) is written in a way to enable the character to sing in harmony with the sea urchins, repeating the same syllables. I composed the voices of these parts in a choral style, symbolising the merging of the scientist with the sea urchins. The percussion accompanies the voices on cymbals and bowed crotales, as they try to spell the word "Verschmelzung" (fusion) in different ways  - this illustrates the attempt on the parts of the sea urchins to speak the human language. Figure 3 shows the fragment of the score where the techniques described above are used. The utilisation of extended guitar techniques, in conjunction with other instruments and vocal parts, gives me the opportunity to craft enigmatic soundscapes that evoke a sense of otherworldliness.

**Figure 3.** Fragment of *Die Verschmelzung*

By bar 82, the vocal part of the sea urchin 1 changes into bel canto style, similar to that of the scientist; this symbolises the union between the two beings. My intention here was to create a peaceful and smooth ambience, appropriate for the words: "Wir schweben durch die hitze, durch die Algen, eins geworden" (we float through the heat, through the algae, becoming one). Yet, I decided to include another stylistic element here, intended as a sort of humorous accent - in bar 23, alongside the scientist's bel canto, the sea urchin 1 starts singing with a chest voice, in jazz style. There are other elements from jazz that I used here, such as the walking bass, in an attempt to combine the two styles.

I seeked the inspiration for these characters in pieces such as *Voices of the Killing Jar* by Kate Soper (2010-2012), which she performs herself as a singer, alongside a string quartet and electronics. In this work Soper experiments with her voice by using voice with vibrato, voice without vibrato, vocal fry[18] and spoken voice, either following a specific rhythm or written in a free manner. This is especially evident in the fifth movement entitled *V. Mad Scene: Emma Bovary.* In this fragment Soper uses a bright operatic voice followed by a vocal fry growling sound (bars 26-29).

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[18] The vocal fry register is the lowest vocal register and is produced through a loose glottal closure that permits air to bubble through slowly with a popping or rattling sound of a very low frequency.

**Figure 4.** Fragment of *V. Mad Scene: Emma Bovary* by Kate Soper

The music by Soper inspired me to combine an operatic voice with extended vocal techniques between the three voices singing together (bars 131-141).

**Figure 5.** Fragment of *Die Verschmelzung-* combination of extended vocal techniques

In the next section (bars 250-284), the scientist's melody changes character, as if he were floating in a kind of childish and light way (with indication "sweet, in ecstasy, no vibrato"). At the same time, the sea urchin 1 articulates for the first time its realisation of the fusion between the two. This text is set in a syllabic manner to an atonal melody, difficult to sing due to large leaps between the notes, intended to be funny and light.

In the end of this scene, instrumental players with the exception of the electric guitar join the singers in speaking the text, to further enhance the sense of the fusion and unity. To me, it has even a deeper meaning, however: by integrating their voices into the texture, I grant the instrumentalists a "human presence" in the piece. For this last fragment the only instrument I added was the electric guitar with an effect. The integration of the element of noise (the rock-like effect) in the electric guitar from bar 296 to the end helped me to unify the piece, as the same effect occurs at the

beginning of the song of the scientist. The musical intent behind this section is to achieve a seamless fusion between the vocalists and instrumentalists, culminating in the final lines where the listener perceives a single entity speaking, the timbre of which is the amalgamation of all the instruments and voices.



**Figure 6.** End of *Die Verschmelzung*

*Bald*

The first part of this scene (bars 1-33) is inspired by the phrase "Bald, lösen wir uns miteinander" (soon we will dissolve into each other). Initially I composed a melody,

which I decided to present in a defragmented fashion in all voices, to create a magical and surreal atmosphere. This melody is inspired by the style of baroque chorales in which the singers sing without vibrato in their voice. Another melody is presented in the violin and double bass parts, similarly defragmented and split between these two instruments. I also added the noise effects on the electric guitar to achieve a sound similar to what I did in *Die Verschmelzung*.



**Figure 7**. *Bald* melodic defragmentation on voices and instruments

Using similar noise effects on the electric guitar in all of the scenes I composed helped me not only to achieve a sense of unity between them, but also gave me a chance to create an association between the noise and the sound of the voice of the sea urchins. Writing a pattern in the violin and the contrabass helped me to give me a

movement that symbolises for me a wheel that never stops until the second part, starting at letter A (bar 34).

The second part (bar 34-131) starts with the Woman's words: "du wirst mich verlassen" (you are going to leave me), to which the Man answers: "ich bin zu weit gefahren" (I went too far). In this section I decided to write a love duet for these two characters, even though they are not supposed to be speaking directly to each other. In addition, the voices of the sea urchins bring these two characters together and speak about their destiny. At letter B (bar 57) each character begins to sing independently, as if each were performing a monologue. In this part, the music indicates a tension between the three characters. This musical fragment leads to a moment of catharsis when the woman says "Ich bin alleine" (I am alone), while the voices of the sea urchins are heard as echoes, symbolising the voice of her subconscious and her shadow. When the voice of the scientist joins them, the instruments create the atmosphere of tension, using noise and defragmented melodies, which helped me to construct a bridge between this section and the next one.

The next section (bar 131-142) begins with the words *kein schwarz, kein weiss* (no black, no white), with all characters singing together in order to show the unity between them, as if they were sharing the same space and time. In order to unify the characters, I employed a musical idea that required their collective singing in an a capella style, with a chorus-like military rhythm on a single note, which was meant to accentuate the significance of the lyrics. This approach aimed to project the last

phrase of the libretto in this scene more directly, to give it more importance. Consequently, the characters appeared to transcend their respective temporal and spatial boundaries, effectively transitioning from their prior state of monologues to one of shared thoughts and feelings. This musical fragment shows the resolution of the conflict between the characters.

In the next section of the piece (bar 142 until the end), I aimed to express the transformation of the human characters into sea urchins. The dramaturg suggested an end that evoked a sense of transformative transcendence, as if the characters had all become something otherworldly and a new realm was opening up before them. To achieve this sense of transformation, I removed the text and instead wrote all the vocal parts (including both the human characters and the sea urchins) in a choral texture, although involving non-lexical syllables (such as "ñañañaña"), as well as various vowels and sounds that were not written in the original libretto. In bar 171, I also employed nasal sounds and other voice effects to create a unified timbre.

**Figure 8**. Fragment of *Bald*

Additionally, I incorporated electronics in order to create a sort of "sound door to another dimension" that could serve as a transition or a bridge to the next scene. Cheng and I had previously agreed to compose the electronics together, as we intended to integrate them with the voices and create a seamless transition between this scene and the subsequent one, entitled "The Flood". To achieve this, I shared an audio recording of the sound of the sea and my voice, which I had transformed through the use of sound granulation. She subsequently incorporated these materials into the first section of "The Flood", which was composed by her.

*Jetzt*

The challenge posed by this scene was the very abstract nature of the libretto. Therefore, music became the main means to narrate the story or express the

characters' feelings. For this reason, I combined the words in such a way as to heighten the tension between the characters and help the audience to understand the course of action. I attempted to convey the inner conflict in the man's character and the connection with his mother (the woman), who speaks the final words.

The scientist begins the scene with a pre-recorded phrase. In the first section, I attempted to create a sound atmosphere that would portray the characters transferred into another dimension. The electronics are mixed with the spoken voices that are doubled by the voices of the sea urchins. I aimed for the text to be direct and clearly comprehensible by using the combination of the spoken and sung voice.

At letter A (bar 10) I intended the singers to communicate in a more direct and almost theatrical way with each other, without losing the surreal atmosphere. To achieve this, I directed the singers to speak naturally in a defined rhythm and tempo, accompanied by electronics and instruments. The standard metric notation and the precise rhythm of the words allowed the conductor to coordinate the musicians and the singers. The two main voices take the lead, while the voices of the sea urchins respond with added effects that give music a surreal touch. To further enhance this effect, I put the sea urchin voices to repeat what the main characters were saying together (Man and Woman) with effects and to repeat together (bar 23) some words like "Jetzt" (now). Using the repetition of the word "Jetzt" resulted in them losing their natural way of speaking and seeming to exist momentarily in another dimension. The electronics were produced using the voices of the sea urchins that had appeared earlier, along with an electronic drone, intended to give an impression that the characters were

inside of a reverberant cave. My objective was to ensure that the electronics were not perfectly coordinated with the singers, to enable them to speak freely, keeping in mind that the electronics were simply creating an atmosphere accompanying the musicians.



**Figure 9.** Fragment of *Jetzt*

In this last section I aimed to demonstrate the unconscious desperation experienced by the soprano in the face of the man's lack of decisiveness. To achieve this, I used

the voices of the sea urchins to reinforce the Woman's desperation repeating the same musical motif that the woman is singing, ultimately shifting to a free-form improvisation using noise and the word "nein" (no). My aim was to create the tension between the characters, which I achieved by repeating melodic motifs in the instruments, increasing their speed until the climax was reached. Following this climax, I opted to conclude the opera in a calm manner (following the previous discussion with the dramaturge), leaving the soprano alone, speaking the words "jetzt gehts du fort" (now you go). My musical intention for the conclusion of this piece was to achieve a peak of intensity and then release that energy through a final spoken sentence delivered by the female character. By doing so, I aimed to signal to the audience that the performance had concluded.

**Chapter 2: A composer-performer perspective: *The Invention of Sex***


2.1 Introduction: origins of the composition, influences, and inspirations


*The Invention of Sex* was commissioned by the conductor Joel Sachs of the *New Juilliard Ensemble* based in New York. The planned premiere in 2021, however, was cancelled due to the pandemic. Instead, the work was first performed at the M*usée du Quai Branly* in Paris on April 18, 2021, with the *Secession Orchestra* conducted by Clément Mao Takacs[19], in a production of the new musical theatre company *La Chambre aux échos* with a stage direction by Aleksi Barrière.


The original instrumentation of this piece was intended for the New Juilliard Ensemble. The work was initially intended as a second part to my previous composition, *Connected Identities* for voice, electronics and chamber orchestra, featuring myself as the performer. In the text of *Connected Identities*, I collaborated with the author Aleksi Barrière, for this work he wrote most of the text and I wrote the other part. I considered working with him again on this project. My purpose was to create a complete monodrama with a dramatic shape created by the same author.


The text Aleksi Barrière wrote for this work consists of an introduction written in prose, followed by three poems that focus on an idea expressed in the title: the invention of sex. Our artistic goal was to depict the idea in an abstract and poetic way, encompassing the topic from its very beginning, starting from eukaryotic cells to

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[19] For this performance, I adapted the original score intended for a sinfonietta-size ensemble, and rescored it for a larger orchestra.

plants, animals and ending with human beings. The concept of this work is based on the word "exist", the etymology of which comes from *ex* ("out") and *sistere* ("to take a stand"), which Barrière interprets as "to be outside oneself" (ex-ist), in order to emphasise the confrontation with the otherness, which in turn enables us to exist. While the first composition (aforementioned *Connected Identities*) portrayed a Latin-American woman in search of her identity, the second one was intended as a conclusion of the first premise: the woman finding herself through the connection with "the otherness." Rather than narrating a story, though, the text was conceived from the very beginning as *tableaux vivants*, scenes in which emotions or situations were presented in the form of imaginary paintings, shown to the public as magical windows.

*The Invention of Sex* was inspired on one hand by compositions of my fellow contemporaries, and on the other by literary works that gave me an impulse to talk about eroticism in music. One of the musical influences I drew upon, for example, was *Ballata Number 7* (2018) by Francesco Filidei, in which the composer integrated the sounds of objects such as rustling of the paper sheets when the instrumentalists turned the page. This inspired my idea to use the bottles as the wind sound in the first movement. Daria Kwiatkowska's *Concerto for piano and orchestra* and Melinda Wagner's *Concerto for trombone and orchestra* were, on the other hand, interesting sources to study orchestration, particularly from the point of view of the management of the energy among the parts of the instrumental groups.

I certainly took inspiration from other female singer-composers such as Meredith

Monk, Carmina Escobar, Joan Labarbera, Nina Simone, Ken Ueno and Kate Soper. Their style of singing is influenced by cultures beyond the Western tradition occasionally incorporating chest voice and vocal extended techniques with the use of amplification. In this composition my focus was directed towards extending the vocal capabilities beyond the bel canto technique, while preserving a melodic framework that allowed my voice the flexibility to explore diverse timbres. One example is singing with a softly spoken opening, aimed at evoking a childlike vocal quality at the beginning of the piece. This aligns with the singing style of other authors previously mentioned, which entails a vocal approach liberated from the constant use of the bel canto technique.

The poems written by Barrière gave me an impulse to seek a musical representation of an erotic act between the tree and the sun, another one between two deers and the last one experienced by a woman in the forest. An important source of inspiration to achieve this was a thesis on music and eroticism, written by Michaela Graf (University of Graz), who assembled a compilation of contemporary artists whose work embraced this theme in different ways, including in purely musical works, as well as in multimedia art, sound installations, and others forms of music-related arts.[20]

From the outset of our creative process, Barrière and I considered transdisciplinarity to be a crucial element of our creative process. In this context, transdisciplinarity

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[20] Graf, M. (2008), "Musik und Erotik. Eine Kategorisierung des erotischen Ausdrucksverhaltens in avantgardistischer Klangkunst," [Online] Available at: https://static.uni-graz.at/fileadmin/_Persoenliche_Webseite/jauk_werner/docs/Musik%20und%20Erotik.pdf [Accessed online on 21 August 2021].

refers to the collaboration between myself as a composer-performer and Barrière as an author, a set designer, and a stage director who worked from the beginning of the work's concept to its presentation, with each member actively performing in the final production. As the author, Barrière crafted the text with the awareness of these diverse contributions to the ultimate presentation, with my involvement in the development of the dramaturgical concept during the process of composition, and my active participation as a performer. Additionally, while composing the music, I anticipated Barrière's active involvement in the performance, overseeing the live video, lighting, and staging. Despite the highly collaborative nature of the project, we primarily worked remotely; I was situated in Germany, and Barrière was in France. We discussed the overall concept in advance, allowing us the autonomy to develop the theme independently.

2.2 Writing for my own voice - a composer-performer perspective

I studied voice and composition in Mexico and in the USA, specialising in the composition and performance of music of the 20th and 21st century including repertoire featuring extended vocal techniques. Throughout my years of study, I collaborated with composers premiering works written for voice and ensemble as well as voice and electronics.

As I intended *The Invention of Sex* to be the second part of the larger work and a follow-up to *Connected Identities*, it was evident that including myself as a performer of the entire monodrama was necessary (with the hope that it would provide an

opportunity to present the complete work as a whole). Having performed my own compositions in the past, I was able to draw on previous experiences as well as explore new vocal sounds to expand the possibilities of my voice to its fullest. Being aware of the limitations and strengths of my own voice proved to be an advantage in approaching this composition.

There were various significant aspects that I had to consider, particularly the constraints of my voice. As a non-dramatic soprano my voice is light; it is also not very agile in the coloraturas. Therefore, it seemed more advantageous to me to use different extended vocal techniques, while also including melodic parts written especially for my voice, in which it would sound versatile and virtuosic. Additionally, I have the ability to perform at least two different vocal techniques: bel canto and the belt voice technique[21] (the latter usually used in musicals or jazz). Furthermore, I possess the capacity to improvise and can perform complex rhythms with ease. In the course of employing various vocal techniques, particularly those involving belting and spoken voice with extended techniques, it was imperative that I amplify my voice so that it could effectively sound stronger than the orchestral accompaniment, thereby allowing for an appreciation of the vocal effects and the spoken word.

I believe that some of my contributions to the field of new music lie both in the process of collaborative creation, as well as my individual approach to composition

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[21] Belting is a distinct vocal technique used by singers, involving the projection of the chest voice beyond the natural break or passaggio and incorporating a proportion of head voice. Often characterised as "high chest voice" or "mixed voice" (which should not be mistaken for the mixing technique), belting is a form of singing that requires both strong breath control and vocal resonance.

as not only the composer, but also as the performer and co-creator of the piece's dramaturgy. In this sense, I have a certain control or authority as a composer, and also a certain amount of power as a performer, able to reproduce what I have written. The relationship between the authority of the composer and that of the performer is thus balanced. As a performer, actively involved in the reproduction (or interpretation) of a score, I have more freedom to take some risks while making decisions during the performance.

2.3. The dramatic aspects of the piece

This piece consists of four movements: *Cambrian Explosion, A Hundred Open Flowers, The Hunt,* and *Perpetual Spring*. The first movement is instrumental music that symbolises the beginnings of sexual reproduction, as imagined in the text written by Barrière. The following three movements are based on three poems describing the experience of love and sex from the perspective of a tree, a deer, and a woman. All the characters, represented by one performer, are set in a forest and tell their stories in different seasons of the year. Even though there is no sense of continuous narrative between the movements (they are independent scenes), there is a dramatic continuum that binds them together.

The dramatic and theatrical intention was crucial in the creation of this work from the very beginning. Some of the questions we posed at the start were: What theme would be uncommon in new music? What would be an appealing theme that would resonate with our generation? How could I, as a performing composer, integrate

myself into the work? How would this piece work as the second part of the cycle, following *Connected Identities*?

In the course of our collaboration, Barrière and I engaged in Skype meetings to discuss the composition of each movement. During these sessions, he would articulate his intended artistic vision for each movement, while I would send musical ideas to him and solicit his feedback to proceed with the creative process. Significantly, each movement was characterised by a set of thematic keywords, including "explosion," "forest," "deer," "cold," and "heat," which served as a creative catalyst for my musical composition. The process of collaboration was facilitated by continuous exchange of ideas between the two of us.

During the rehearsal phase in Paris, Barrière and I collaborated on the development of the electronic component of the piece. Following each rehearsal, he would provide me with guidance on the specific intention he had for each segment, after having observed my performance within the scene. I, in turn, would present him with musical ideas, featuring examples of electronic music. Ultimately, we gathered the most compelling ideas that resonated with both of us, to achieve an optimal result.

In each movement of the composition, the technique of word painting was employed. This approach involves a deliberate interplay between the musical elements and the semantic content of the lyrics. The music serves to enhance the meaning of the words, adding a layer of emotional depth and resonance to the overall artistic experience. It can also imbue the words with additional layers of meaning and

emotional impact, creating a more immersive and impactful experience for the listener.

2.4 Analysis and commentary

I. *Cambrian Explosion*

In this movement, I worked with a text written in prose, and it functions as the root and foundation for all the instrumental musical development, although it is not set to music itself. I initially intended to set it for my spoken voice (the first draft); changed it to the sung part in the second draft; at the end, however, Barrière and I decided it would work best to make this section purely instrumental, having the text implied in the music, so to speak. In the performance, the text was presented in the form of subtitles, giving the audience greater awareness of what the music was representing. This first movement was conceived both as a bridge between the two pieces (*Connected Identities* and *The Invention of Sex*) and an overture to the second part, in case of presentation of *The Invention of Sex* on its own. To make a clear connection between the two pieces, I started the first movement with the same sound effects that I used at the opening of *Connected Identities* (first movement: *Nahual*) - here, the electronics I used allude to going back in time. I borrowed a section of the electronics from *Nahual,* which I manipulated alongside the recording of my voice, by employing a filter and altering the audio length to generate an aural impression of backwards speech.

To illustrate the opening section of the text[22], I tried to create a sound similar to an explosion. I achieved that through a gradual process of adding instruments to the sound texture, coupled with an employment of progressively faster rhythmic figures. Afterward, a motif in contrabassoon emerges, which I labelled the "eukaryotic cell motif". This motif will be present throughout the entire piece, subjected to development and becoming increasingly complex.



**Figure 10**. Eukaryotic cell motif on contrabassoon

The following section of the text prompted me to create an atmosphere embodied in the words[23]: images of the primordial soup, elegant density, and solitary perfection. My objective was to evoke a mysterious and enigmatic atmosphere of a cave filled with water, with a sense of emptiness and calm, and the suggestion of something

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[22] "Until 1,5 billion years ago, life reproduced by cellular division only. A unicellular organism would divide into another similar cell, carrying out its DNA unchanged, and only slow and sparse mutations would allow evolution. But then some bacteria evolved forming eukaryotic cells. These cells could form tissues, combined into multicellular organisms. And some even acquired the ability to mix their genetic material with other organisms to create entirely new individuals. So they would go on a hunt for a mate, someone different, seek out the alterity without which they were incomplete." Aleksi Barrière

[23] "Nothing would be "the same" again after that: life grew into a perpetual quest, constant exploration, change, adaptation. Such was the invention of sex, and the beginning of the era of the Eukaryotes. Messy, chaotic, wasteful creatures, also ingenious and outwardly splendid. Just the opposite of the elegant density and efficiency of bacteria, a life form to which it seemed that nothing needed to be added, in its solitary perfection." Aleksi Barrière

stirring in the depths below. I used the sound of the blown bottles to symbolise a moment of stillness within the linear narrative framework provided by the text, creating an ambiance that evoked a primordial world, where the sounds one hears are somewhat indeterminate. I combined the sound of the bottles (performed by wind players) with the effect produced by the tam tam, the bass drum and violin harmonics, resulting in an evocative music that momentarily interrupted the energy flow of the piece.



**Figure 11**. Use of bottles and extended techniques

According to Niecks[24], programme music does not need to be verbal at all, it may also be pantomimic or pictorial. He recognizes three predominant types of programme: descriptive, symbolic and emotional. In the case of *Cambrian Explosion*, all three elements are present. It is descriptive in the sense that the music follows the text; symbolic, as I attempted to use musical symbols to portray some of Bárriere's concepts; and emotional, as the music has an inherent mysterious, anxiety-ridden

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[24] Niecks, F. (1969). "Programme music in the last four centuries." In Jones, P.J., Smith, R. & Watson, E.P. (Eds.), Artificial Intelligence Reconsidered (2nd edition), New York: Wiley, pp. 1-6.

character and constantly seeks to maintain the sense of tension by means of the changes of pulse, the variation of timbre colours and the combination of rhythmical figures.

The pictorial approach to this work appears in the last section.[25] In the final part of this movement, I developed the aforementioned "eukaryotic cell motif" by manipulating rhythmic figures to create an accelerating pulse. I wanted to depict the titular Cambrian explosion, in which the cells reproduce themselves into increasingly complex beings by means of their union and the confrontation with otherness. The drawing in Figure 10 illustrates the energetic plan for this section[26].



**Figure 12**. Drawing for "Cambrian Explosion"

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[25] "And oh, how we reproduced once we could! We were intoxicated with the possibility to ex-ist, i.e. "stand out of ourselves", unfold, communicate, mingle, transform. Sex led to the so-called Cambrian Explosion, during which the Earth was filled with plants and animals, the wild diversity of life as we know it today, millions of different shapes and forms and sizes and colours. Fabulous flowers, the peacock's train, scents and songs, all expressions of that primal extroversion. Hard-wired into all of us Eukaryotes, from an evolutionary standpoint, as the urge to reproduce, sex became much more than that in complex beings, and often dissociates from it entirely into pure pleasure. It fills all creatures as a force of creativity, of boldness, of sophisticated emotional development, and of bonding."
[26] The process was quite similar to Géante rouge, since the music is narrating the events that appear in the text. To achieve it, I made several drawings using colours that represented a defined harmony or mood.

The inspiration for this drawing emerged from Barrière's text. It enabled me to conceptualise the musical aspects of the composition and to view the entire piece in a graphical representation. This drawing served as my initial point of reference in the composition of this movement. It depicts my visual representation of the overall energetic process, as well as musical themes, indicated through the use of various colours. The inclusion of certain key words, such as "photosynthesis" and "chemical energy", signified a type of atmosphere in different sections and changes within the composition, whereas descriptors such as "tutti", "woodwinds", and "low bassoon" were included to indicate the specific instrumentation I had in mind. Each line within the drawing represents energy, with separate lines representing individual pitches, combinations of lines representing melodies, and similarities between lines in different sections indicating recurring musical motifs. This drawing proved invaluable as a guide during the process of the creation of the manuscript.

II. From a Hundred Flowers Open

The narrative of this song centres around a tree that emanates the sense of tranquillity and tenderness, and is in love with the sun. The tree is the primary character and the narrator. The instrumental accompaniment of this song serves to represent a forest wherein the tree experiences a collective vegetal orgasm brought about by the sun. To transport the audience into this imaginary setting, I incorporated both musical and poetic elements, seeking to imbue the piece with a sense of mystery and calmness that is evocative of a forest. I achieved this through the combination of specific timbres: vibraphone, crotales, windchimes, and piano, in

contrast with the percussion instruments I had used in the previous movement (bass drum, tam tam, bongos, marimba, floor tom). This group of percussion produces mainly high-pitched sounds with a great deal of reverberation, which, combined with the harmony of the strings, allowed me to express the "magical" aspect of the text. In order to evoke the ambiance of a forest during the sunset and to create a sense of contrast and profundity, I used occasional crotales and double basses.

I was also trying to create a sensation of time stopping. I achieved this by using complex rhythmic figures coming in and disappearing in waves of activity, without a specific pulse, and accompanied by sustained harmony in other instruments. Each part of the string section sustains a prolonged note that subsequently undergoes rhythmic variations before returning to its original duration in an non-synchronized manner. At the same time, the woodwinds perform fast rhythmic figures using different pitches, though without establishing a discernible pulse. In this case, the voice carries the work forward, written in a free, open manner (some passages are written in flexible, slightly irregular rhythms). This creates a sense of time being calm and fluctuating, in contrast to the previous movement which had a definite pulse. The image I wanted to convey was that of a person looking at the sky in a quiet place, while watching the leaves fall from a tree.

**Figure 13**. Percussions and voice, fragment of *From a hundred flowers open*

The voice is the principal part in this movement, providing narration and guidance for the other instruments. It represents the main character of the tree, which I intended to put in the centre of the story, whereas the instrumental parts represent a place and an atmosphere that provides a harmonic response to the melody. In several sections, the instruments create a sort of shadow that the melody leaves behind, gradually colouring the melody's implied harmony. It is a technique similar to one Boulez used in *Memoriale*[27], where ensemble instruments follow (or shadow) the solo flute, borrowing most of their pitch material from the solo part. Despite the fact that the instruments provide harmonic coloration to the vocal line, I have ensured that the voice in this movement remains free from being doubled by another instrument. This approach affords greater liberty to the singer in terms of the tempo and interpretation of the melody.

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[27] Pierre Boulez, Memoriale (1985)

**Figure 14**. *From a hundred flowers open*, bars 5-11

Writing for my own voice is a defining characteristic, shaping the music that I create. One example of this is the following: In the entire *Connected Identities* cycle, I was trying to use a different voice colour in each movement. The composition portrays the tree as a fragile entity, tenderly expressing its love for the sun. For this song, I wanted the voice to have a very thin, volatile timbre, starting with a whisper and reaching a climax in which the voice is somewhat thicker. In order to create a denser vocal texture, I have written melodies using pitches that I can sing after my voice break, particularly in sections where my vocal range extends beyond E5. Within this range, I rely on my head voice, which requires a greater amount of air to reach notes such as A6. As a result, I typically notate these high notes in forte or fortissimo in order to achieve the desired volume and intensity.

An important source of inspiration for this movement was provided by the work *On a Sufficient Condition for the Existence of Most Specific Hypothesis* (2008) by

composer and vocalist Ken Ueno. At the beginning of the piece Ueno utilises a vocal multiphonic, which undergo spectral analysis, transcription, and subsequent orchestration[28]. My compositional approach has been influenced by the way of creating one of the first climactic moments through the strategic use of instruments and orchestration across a wide register and the repetition of notes that are played just after a glissando performed by the strings (bars 14 to 18).

**Figure 15**. Fragment of *On a Sufficient Condition for the Existence of Most Specific Hypothesis* - repeated notes and orchestration

Inspired by Ueno's musical idea, I have adapted this approach in my own

[28] Ueno, Ken. (2022). "Embodied Practice in Ken Ueno's 'Person-Specific' Concertos." The Oxford Handbook of Spectral Music, edited by Amy Bauer, Liam Cagney, and William Mason. Oxford University Press, 2022. [Accessed online on 27 March 2024].

composition, "From a Hundred Flowers Open." Here, I employ a vocal glissando while the instruments respond with reiterated notes spanning a broad range. Similar to Ueno's composition, my piece also features an expansive harmonic spectrum. For example, within a specific fragment, the tuba sustains an E while the violin reaches a high pitch, effectively expanding the orchestral register. Additionally, I incorporate a bass drum beat, similar to Ueno's use of percussion, which enhances the overall intensity and depth of the composition, thus echoing Ueno's orchestral strategies while maintaining my creative identity.



**Figure 16**. Fragment of *From a hundred flowers open* - repeated notes and orchestration

An additional interesting aspect of Ueno´s composition relates to the employment of circular breathing and vocal multiphonics. Although the circular breathing technique initially escaped my attention until a more thorough analysis of the piece was conducted, the integration of multiphonics with the orchestra served as an inspiration for me to incorporate growling and multiphonics in the initial segment of the "Connected Identities" cycle's first movement titled "Nahual". It is important to highlight this aspect, as "The Invention of Sex" serves as a continuation of this thematic cycle, thereby emphasising the imperative of utilising the full spectrum of vocal colours in my own voice as one of its underlying premises.

The primary musical aim for this song was to evoke a distinct atmosphere inspired by the forest, in line with the meaning of the poem. The sound of each word and the emotional intention behind each phrase was the only guiding principle. The repetition of certain words, such as "sun" creates a specific melody that can be harmonically highlighted by the instruments, or even repeated by them. In this regard, the repetition of the word in the poem provides an opportunity for the music to expand and manifest itself as a kind of hymn to the sun.

Following the structure of the poem, my goal was to develop the atmosphere from the most intimate to gradually more open and extroverted. The way to achieve this was through playing with the timbre and dynamics of the instruments, soft at the beginning and later changing into repetitive notes in tutti, arriving when the text talks about the sun between the trees, while the main character (the tree) sings: "We are one, and we swallow the sun, the sun, the sun." The stroke on a tam-tam arrives at

the moment of the biggest climax, when the word "sun" is mentioned for the first time. In this fragment of the piece (bars 45-48), the woodwinds repeat the melody that appears in the vocal part, as if the forest repeated after her. The final climax arrives then to finish the movement, when the word "sun" is pronounced for the last time.

Certain words serve as key triggers for the music, such as "burn" (bar 20). It is accompanied in this bar by long notes that stop the sense of the pulse in music to put emphasis on its meaning. The word "open" (bars 38-29) is accompanied by all the instruments, generating a climax by playing all together in forte, with repeated notes symbolising the effect of the sun on the tree, as its light triggers it to open hundreds of leaves.

The complex and fast rhythmic figures that appear further on depict the sounds of insects and birds that eventually disappear gradually in response to the last phrase: "...Of the whispers of insects and birds like lustful ideas in someone's head". The pitched sound is gradually removed from each instrument, leaving only the percussive sounds like key-clicks, suggesting the murmuring of insects.

**Figure 17**. Ending - murmuring of insects of *From a hundred flowers open*

III. The Hunt

In "The Hunt", I aimed to create a contrast with the previous movements. It is provided by the tempo change - much more lively here - as well as continuous movement in music. The setting is the same magical forest as in the second movement, but with a new main protagonist: the deer in search of his doe, displaying eager, impatient and anxious personality. The sensation I intended to evoke was a feeling of persecution, represented by aforementioned constant movement (motoric rhythmic continuo in the woodwinds); the fast notes are passed from one instrument to another while the other instruments sustain some notes of the melody, creating an effect of a shadow or reverb.



**Figure 18**. Texture in the woodwind section

In the voice part, a lively and agile deer character is portrayed through the utilisation of various vocal techniques. The vocal line has been written to convey a sense of

speed and virtuosity, achieved through the incorporation of a range of extended techniques. These effects include sung, murmured, and spoken voice, vibrato capretino[29], and the entire vocal range from the lowest to highest notes. Although the vocal writing primarily consists of syllabic passages without coloraturas, the melody is written with challenging leaps and complex rhythmic figures. The intended vocal style avoids the use of bel canto in favour of an amplified chest voice that highlights the subtleties of each timbral change.

The character of music changes in the second part of this movement, which depicts the night.[30] The musical pulse recedes, and an atmosphere reminiscent of the forest ambience from the preceding movement is reintroduced. Here, the string instruments employ sustained, low-register notes that create a striking contrast with the high-pitched sounds coming from the crotales and piano. The absence of a pulse provides an opportunity to halt the forward motion of the music, simulating a sense of the deer coming to a stop in the forest. To exit this evocative atmosphere, I introduced gradually repeating rhythmic figures, eventually building to an energetic climax as these motifs are reiterated throughout all instruments. The harmonic language employed here is atonal, allowing me to employ dissonances to build musical tension that ultimately resolves in a more modal section. The vocal part incorporates increasingly complex rhythmic figures and features ascending glissando to convey a sense of desperation, culminating in a higher range above my vocal break that allowed me to showcase my voice strength.

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[29] Vibrato capretino or caprino  is a type of vibrato that is very fast and sounds like the bleating of a goat (hence the name).
[30] "Right in the night she calls me, lets me closer, oh the privilege of warmth."

In the following section I aimed to recover the energy of the opening, but this time making it much more violent. The music depicting a sexual act between the deer and the doe is somewhat aggressive, reflecting the sense of urgency, the anxiety, and the delight at the end of the phrase: "more than to feel is new."

The culmination of this movement is derived from the words "instant", "importance", "everything." Each of the words is separated by the moment of silence, as if they were short moments of sexual climax between two deers, passing very fast. The movement ends with a sustained chord, bringing an end to the sense of urgency dominating music up to this point.



**Figure 19.** Short "orgasms" represented by the woodwinds and piano

The concluding sentence of the deer character's vocal line is intentionally written to be delivered in a direct and straightforward manner. This approach is further complemented by a corresponding decrease in energy in the accompanying instruments. I chose to conclude the movement with an instrumental accompaniment that takes the listener back to its opening moments. The use of the same wind chimes utilised earlier in this movement (bar 1) helped me to create a sense of musical unity, highlighting the cyclical nature of the composition. Additionally, the final chord is purposefully crafted to resonate with the word "tree" that is the last word of the poem, re-establishing the atmosphere of the forest and providing a satisfying sense of musical closure.

IV. Perpetual Spring

The introductory section of this movement depicts a woman lost in the forest, wandering in the cold air of the wind. I wanted to portray a woman in a timeless place (the same woods that appeared in the two previous movements) by creating music without a pulse. I employed very soft, wind-like sounds in the instruments, in combination with electronics, plus a new sound making a more significant presence in this movement: the Tibetan singing bowl. The text is disguised, with the soprano just moving the lips without making any sounds while the electronics are delivering the phrases of the poem.

At rehearsal letter A (bar 7-48) I have intentionally granted a significant degree of interpretative freedom to the vocal line, so that the melody be sung in an expressive

and emotive manner. This approach allows a pronounced rubato among the entire orchestra, with each instrumental section following the lead of the singer. As the sung voice takes hold, the accompanying harmonic progression shifts towards a modal scale, with the intention of maintaining a tranquil and serene ambiance throughout the section. Following this introduction, the main part of the movement is inspired by jazz ballads, in which the voice should be sung in a natural, quasi-spoken way. The text combines two languages: English and Spanish, which invokes the female character previously featured in *Connected Identities*. As in the previous work, the woman appears split between two different worlds represented by two different languages. Each language is approached differently: when the text is in English, the woman speaks directly to a specific person; and when it is in Spanish, it is used in a more personal way, as if the woman was thinking and talking to herself.

In the second part (bars 48-81), which is mostly in Spanish, I wanted to incorporate the instrumentalists in delivery of the spoken text at the beginning, to create the impression of the forest responding to the woman's words and becoming an echo of her thoughts. My aim in this section was to capture the essence of a woman in a state of ecstasy during the act of lovemaking. In order to achieve this, I sought to write the music with contrasting elements and non-stop motion. To this end, I introduced variations in the orchestration and harmony every few bars. In the original version (performed in New York with a smaller ensemble), I used string effects to achieve these contrasts. In the version for the Secession Orchestra in Paris, which featured a greater number of instruments and three percussionists, I incorporated the use of percussion and structured the composition in such a way that the

percussionists could alternate between different groups of instruments after every few bars.

It took me a long time to discover a compelling way of representing a woman's sexual experience in a poetic way. I was aware that the stage director's intention was to design the setting in a very abstract manner, therefore I made the decision to use music in a more direct way. Several works influenced this composition, including Debussy's *La Mer*, as well as works written by female composers, such as piano concertos by Clara Schumann and Daria Dobrochna Kwiatkowska, as well as songs by Nina Simone and Meredith Monk. All these works influenced me in a more delicate and subtle manner than a very direct approach, although I also expanded my search for inspiration in the opposite direction, reaching to the sound files in an online "Library of Real Orgasms."[31] Some of the examples found there provided the models for energy processes that could be transcribed into music. My goal was to write music that could paint the words in a refined and poetic way without losing the idea of being a song or a continuation of a ballad.  One of the references I used as a basis for writing the voice part was Juliet's aria from Gounod's opera *Romeo and Juliet* (1867) that I sang several years ago. In this aria, the soprano's coloratura depicts the emotion of jovial love using leaps between the staccato notes in a virtuosic way, making the voice sound almost like a laugh. In the conclusion of my piece, I sought to infuse a traditional opera influence into my music, using coloraturas in the vocal line to create the impression of laughter. The music in this section conveys a lighthearted and playful atmosphere, while the lyrics maintain a direct tone. I opted to create

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[31] Miller, Blanco, Castro-Grañen (2006). [Online] Available at:
https://www.libreriadeorgasmos.com/#home [Accessed online on 2 September 2021].

coloraturas and give the voice a lighter, as well as virtuosic character. I incorporated the flute as an instrument that could imitate this laughter and add a virtuosic element to the music. By doing so, the overall effect is intended to be humorous and light-hearted, conveying a sense of joy to the listener. The piece finishes in a tutti, with the instruments supporting the voice that seems to be giggling while seemingly experiencing small spasms that gradually lead to the final climax performed by all the instruments. It  occurred to me that I aimed to create the climax of the piece not in the forte section, in which the instruments are in tutti, but rather in the following soft section, which sounds like a collective breath/exhalation, an aeolian sound[32] (in which only air is heard), representing the woman's pleasure and her sexual ecstasy in a poetic way.



**Figure 20**. Final bars of the fourth movement with Aeolian sounds

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[32] Aeolian: relating to or arising from the action of the wind.

**Chapter 3: Music and dramaturgy: *Géante rouge***


3.1 Introduction: the inspiration and the creative process


*Géante rouge* ("The Red Giant") was commissioned in 2020 by the Radio France Symphony Orchestra and premiered in February 2021 at the *Pierre Boulez* Hall of the Paris Philharmonic as part of the *Festival Présences* in homage to the work of Pascal Dusapin. This piece is inspired by the star Betelgeuse, a red supergiant located in the constellation of Orion, and it is dedicated to my sister Sasha Om. When I was a child I used to look at that star at night from my window in Mexico City and imagine what it would look like inside and, if it had a voice, how it would speak. The very first piece that I ever composed was at the age of eleven. This piece, written for piano and entitled *Mor,* portrayed my intense fascination with Betelgeuse. Throughout my youth, I often played it, and as I progressed as a composer, I drew inspiration from the musical idea behind this early work to compose *Géante rouge* (in Spanish, *Gigante Roja*). The music of *Géante rouge* describes the life of the star that has different shades and variations of red lights, as well as the movement of the explosions, and it aims to depict the star exploding alone in the void of the universe. I took further inspiration from the work of several authors, and composed the piece in homage to the work of Pascal Dusapin.

Dusapin's music had a great influence on this work, especially compositions such as *Waves* (2019) and *Morning in Long Island* (2010). I also drew inspiration from the compositions by Kaija Saariaho, *Laterna Magica* (2009) and *Solar*. While analysing

those works, I concentrated on the orchestration and timbral colour schemes, as well as the extra-musical influences that both composers drew upon. It was of particular interest to me how they both resolved to translate these inspirations into music. In *Laterna Magica*, for example, Saariaho creates the sonic idea of light by using particular extended techniques and timbral effects, such as: the use of breath tone on the woodwinds and loud whispers without the instrument, tremolo on the cymbal placed over the large bass drum, using a slow vibrato with a wide oscillation, gradual changes between ordinario and sul ponticello in the strings and the combination of instruments that play together in unison slowly alternating with each other. All these effects provoke a sensation that time is suspended and enhances the idea of a light changing gradually. Each sound texture is slowly combined and the focus is on the colour of the timbral combination, rather than the rhythm and melody. In Dusapin's works, on the other hand, the musical discourse and the sound layers intertwine and blend with each other. The structure does not appear to be delineated; instead, the composer concentrates on blending themes and groups of instruments gradually, making the music feel organic and fluid rather than concentrating on sound fragments in blocks. This is particularly noticeable in the way *Waves* is orchestrated.

In addition, I took inspiration from three texts. The first one, *Eureka* by Edgar Allan Poe, describes the energy of the universe and a mystical way of approaching its secrets. The second one, *The hollow men* by T.S. Eliot, inspired the end of the piece. The third literary inspiration was provided by Aleksi Barrière's poems, in which he uses defragmented and broken words to form new ones. All these extra-musical inspirations were key to my approach to the idea of the piece and its structure.

The literary sources provided the inspiration in form of the concepts that the three authors described in their work. I used the text in several different ways: the structural planning of the work, the creation of musical fragments that have a particular sound that links them to the concept they represent, and the ways of presenting and shaping the sound energy.

The first step in my creative process was writing down two lists, inspired by both *Eureka* and Aleksi Barrière's poems. The first list consisted of keywords providing "extra-musical" inspiration, for example: "red lights", lava, explosions, void, black, enormity, stars, energy, space, time, aggressiveness, anxiety, connection between stars and volatility. The second list included mostly adjectives that could be translated into sonic ideas representing the words from the first list: aggressive, strong, surreal, with a particular voice, strange, fluid, big, luminous, red, combustion, fire, floating, dying star, lament, intense and tender. I used these words to provide an outline of the energetic structure of the piece and create a narrative by selecting the order in which the concepts appear, which depended on a rather simple narrative: the idea of a star that sings in an abstract way and is about to die and scatter into space.

The inspiration taken from the three authors was crucial to enable me to develop the work as a whole and to find a more defined voice in terms of the colour and intention I wanted to achieve. Their texts served as the source of ideas, words and concepts, which initially provided an impulse to sketch a drawing or a graphic plan of the composition, eventually translated into music and refined in the final score.

Thus, the second step of the compositional process was to draw a graphic sketch

that would serve as a sort of a skeleton of the work (see Figure 17). The creation of the sketch was not a singular process, but rather one approached several times, with every sketch more refined and providing a little more visual information that later will be translated into the score.
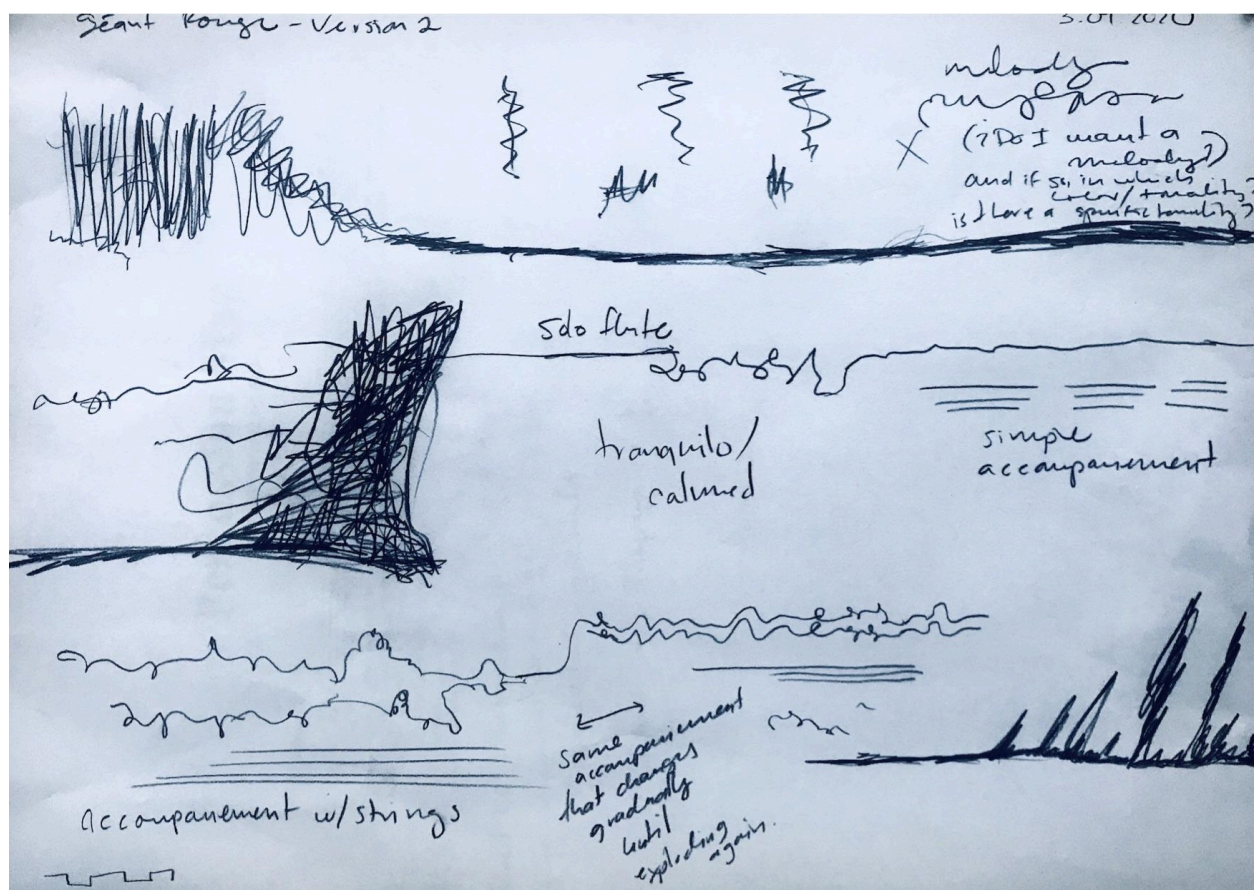


**Figure 21**. Fragment of the sketch for *Géante rouge*

The third step was an attempt to translate the visual images (the sketch) into the "sound shape" - I usually achieve this while improvising at the piano. After trying out various chords and scales, I selected sets of pitches which I classified into a collection of various scales that would be used throughout the work.
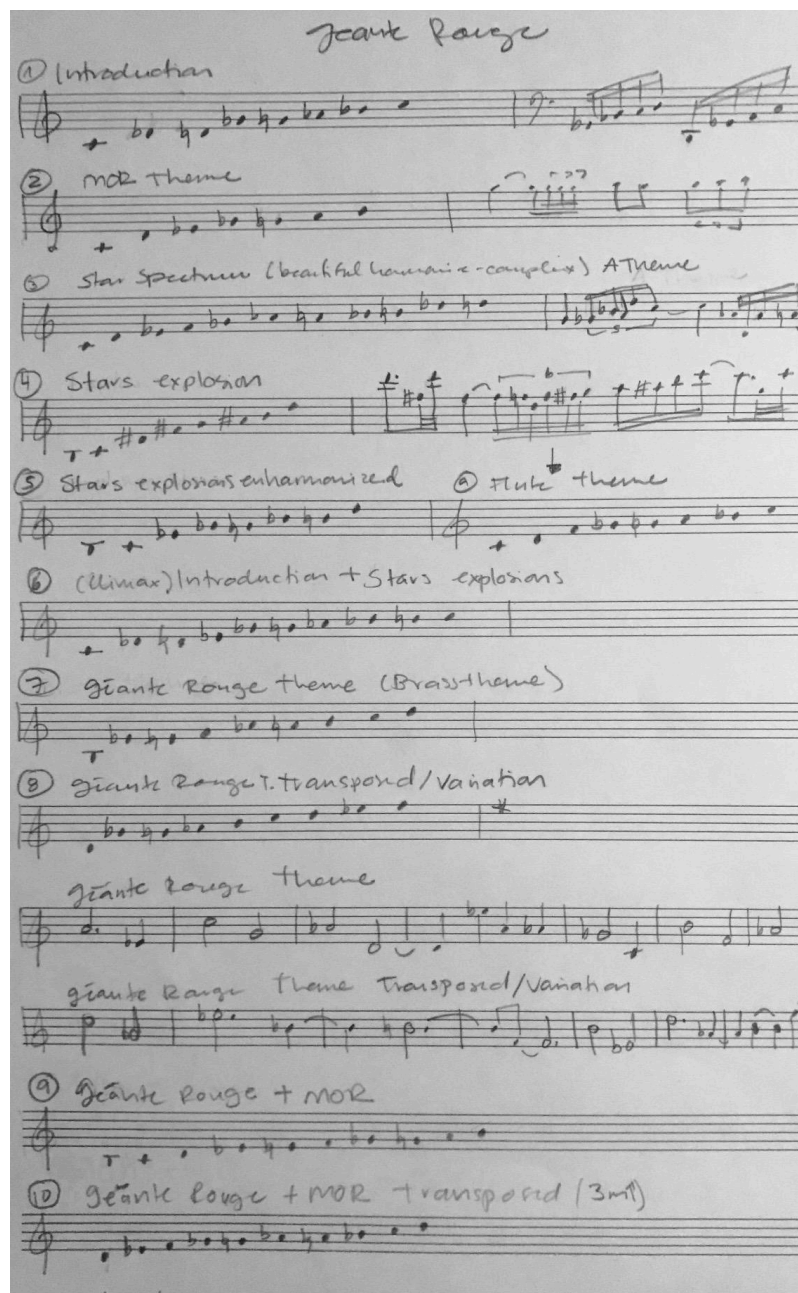
**Figure 22**. Manuscript of the scales used on *Géante rouge*

Rather than relying on any standard scales, either tonal or modal, I picked the pitches of the scales randomly, in an intuitive manner, with the purpose of providing a specific harmonic colour for each section or each group of instruments (although later I also occasionally mixed the different scales to create more colours in the orchestra).

I was trying to design a "synthetic scale" corresponding to the sound colours I was imagining, while avoiding a tonal centre or modal colour. In the process of transcribing those fragments into musical notation, however, new scales have emerged. All scales were then assigned a name (see Figure 18). Having the pitches organised in these scales enabled me later to shift focus onto the rhythm and orchestration, without concentrating so much on the pitches.

While starting the work on a new composition, I take advantage of two parallel creative approaches: one intuitive and imaginative, strongly linked to visual images put down on paper; the other practical and improvisatory, with the help of the piano, which helps me to create melodic ideas and harmonic ambience appropriate to the composition. In the process of translating these initial sketches and ideas into the score, I attempted to use a similar technique to that Dusapin used in *Waves*, which was to combine various sound textures, intertwining different layers and blocks of sound.

One of the crucial factors in the creation of musical energy is rhythm. By the means of rhythmic figures I was able to represent different concepts such as aggressiveness, fire, explosion etc. For example, a juxtaposition of semiquavers versus quintuplets helped to invoke a sense of the movement of lava. In various sections, I incorporated rhythmic figures that fluctuated between pulsating and non-pulsating patterns, representing the fast impulses and variants that come from the idea of red light explosions. Another example comes from the slow section of the piece, which I intended to have no pulse. I searched for sounds that could help

create the feeling of emptiness, uncertainty and void, from which the trumpet melody emerges, bringing the music back to a faster movement and reminding the listener of the sonic explosions featured earlier in the piece. To create this effect, I used extended techniques on the percussion and strings, aiming for a more "abstract" sound, as if coming from noises or textures, rather than being played by a human (see Figure 19).



**Figure 23**. Sketch fragment of *Géante rouge*, slow section

## 3.2 Drama as expression of the extra-musical programmatic content

In operatic works the dramatic form is, of course, related to the story, either available in the form of a libretto or resulting from the collaborative process, as was the case in *Nacht der Seeigel* (see Chapter 1). In the purely instrumental work, there is no stage

action in the literal sense, but there is an implicit drama in its construction. In the case of *Géante rouge*, the drama is related to an extra-musical idea discussed above. The extra-musical concepts and images helped me to develop and carry the music in a coherent and organic way, not dissimilar to my approach to opera writing, where a specific text helps me to shape the energy of the sound and the intention behind the piece.

One could argue that this approach is also similar to composing a symphonic poem, even though I am not narrating a story but simply using the literary texts as a creative impulse. It is not necessary for the audience to know the programme behind the work in order to understand it, and one only needs to know the title to be able to make a personal interpretation of it.

The dramatic and energetic form of the whole work is as follows:

- Opening (bars 1-98): explosion (concepts of red light, combustion, energy and lava), represented by defined rhythm and chords that are the main theme of the piece.[33]

- Second section (bars 99-125): more tender, soft music (connection, stars, volatility, tenderness) and the trumpet theme[34], leading to the next section.

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[33] This beginning is inspired by the idea of a being that begins concentrated and later disintegrates, described by Edgar Allan Poe in *Eureka*: "Being, who thus passes his eternity in perpetual variation of Concentrated Self and almost Infinite Self-Diffusion." Poe, Edgar Allan. Eureka: A Prose Poem. George P. Putnam, 1848.

[34] The trumpet solo that appears in this section (bars 114-125) is a melody taken from another work of mine - a section of *Connected Identities* called *The Aleph.* In this work, this melody symbolises a human shadow on a street corner being followed by a woman. I imagined this is what the red giant is dreaming just before it dies.

- Third section (bars 126-148): another explosion,  blurring of the self. Return of the eight-chord theme (the main theme of the star), build-up to climax (the movement in the strings), followed by movement in strings, fluctuating between pulsating and non-pulsating motion (symbolising the solar explosions), leading the entry of the brass.

- Fourth section (bars 149-176): a slow part[35], beginning with a tibetan bowl and the whistle tones in flutes (emptiness, the floating star)[36].

- Sixth section (bars 162-176) frenetic, energetic and flowing music, leading to the final chords, based on the main theme (the voice of the dying star). Here, I added new pitches to the original chords, evoking the image of a wounded star about to die, shouting its name for the last time in a broken and deformed way. Inspired by the works of T.S. Eliot, the piece ends "Not with a bang but with a whimper": gradual dying away; slow breathing in sustained chords, gradually blurring with more percussive, subtle and soft sounds (key clicks in winds combined with the silent fingering on the strings, creating an impression of gradually  unravelling and dissipating sound).[37]

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[35] In the beginning of this section I use the same effect as in the piece *Nahual* (also a part of *Connected Identities*) where the woman is born as a jaguar. This symbolises the return to the beginning of time.

[36] This fragment until the end is inspired by one of Barriere's poems (Source: private correspondence with the author,11th of October 2020:

*The sun the ever-giving sun herself ran out of hydrogen.*
*Her core collapsed and her envelope started slowly to expand*
*And engulfed Mercury then Venus then the Earth*
*The sun became a red giant a colder fire a sexless star.*

*Nothing we had ever done mattered anymore*
*But the elements of our sun scattered through the universe*
*Continue the immense procreation of things*
*Living through the same urge we have to live*

[37]  T.S. Eliot. "The Hollow Men." Collected Poems 1909-1962, edited by T.S. Eliot, Harcourt, Brace & World, 1963, pp. 76-81.

3.3. The role of timbre and approach to orchestration

While it was my purpose to evoke the idea of the star in a poetic and abstract way, I found it interesting to translate the extra-musical images into music with the help of the orchestration. For example, I imagined the sound of lava as a combination of irregular, moving bass sounds, which are realised in the parts of the double basses and cellos in divisi, playing fast clashing figures. I intensified this image (to illustrate explosions) by building up layers of sound and adding further instruments.

The influence of Dusapin can be noticed in the way I approach orchestration and combine different timbres in order to prioritise the energy flow of the piece rather than more conventional elements such as pitch sets or melodic themes or motives. For example, the rhythm, especially in the strings, plays a significant role by providing movement to each passage and allowing for the creation of contrasting atmospheres. The full range of the orchestra is employed during moments of explosive sound. The utilisation of low sounds and noise effects creates a feeling of depth or emptiness in the universe, while the high pitch sounds evoke the lament of a suffering star. In terms of melody, a free and intuitive approach was taken, with some inspiration drawn from other works. These compositional choices collectively enhance the dramaturgy of the piece.

I considered it essential to incorporate specific sounds that deviate from those typically found in a traditional orchestra. Doing so allowed me to achieve a greater range of colour in the orchestration and provided me with the opportunity to use the

sound of the orchestra in a unique manner, beyond its conventional character. This was achieved through the incorporation of unconventional instruments like whirly tubes and the Tibetan bowl, as well as the use of extended techniques in percussion instruments, strings and brass. For example, I employed whirly tubes to create a delicate and random-pitched sound that complements the orchestra, producing a sound that combines fast and slow vibratos when multiple whirly tubes are played together. This unique sound, combined with the orchestra, contributes to a change in the colour of the overall sound. Placing a solo for the tibetan bowl rubbed with a wooden mallet that directly follows a quick musical section with a heavy load of sound information involving all the instruments of the orchestra, allowed me to create a strong and sudden contrast between sections by employing an instrument unlikely to be encountered in an orchestra performance. This short solo gives the impression of opening a door that takes the listener to a dreamlike environment (the association is enhanced by the fact that it is an instrument often used in meditation sessions). The use of circular bowing in the strings enabled me to produce more random harmonics from each violin, resulting in an interesting soundscape that embodies the image of a star floating in the universe. The result of these harmonics depends on the movement of the bow, the velocity, and the pressure, if the circle is wide enough and the performer varies the pressure, each violin will produce different harmonics. Using semi-circular motion with a short superball mallet on the tam tam and the bass drum creates low and high tones while variating the velocity and pressure. This effect produces a sound not unlike the voice of a whale. Finally, the use of growling on the brass instruments, provides a deep and alienated sound. The growling sound akin to an animal about to pounce generates a critical tension that serves as the foundation

for the orchestral climax. These techniques enabled me to convey different images I had in my mind, translating them into sound and creating images related to the star.

Overall, the process of creating this piece was multi-faceted and complex, involving a range of influences and approaches. Through a combination of imagination, intuition, studying works by other composers, and taking inspiration from extra-musical sources, I was able to create a work that reflects my own artistic vision.

**Chapter 4: Composing for instrumental performers on a theatrical stage.**

**Crossing genres in opera composition: Der Kiosk, a children´s opera**


4.1 Introduction: origins and the concept


*Der Kiosk* is a children's opera[38] commissioned by the Junge Oper am Rhein and premiered on March 2021 in Düsseldorf. The work is based on a children's book of the same title by a Latvian artist Anete Melece, adapted for opera by the German librettist Andrea Heuser.[39]


The work, scored for soprano, Bb clarinet/bass clarinet, viola, percussion and electronics, is aimed for children older than 5 years old. One of the important initial concepts of this work was the idea that the musicians should appear on the stage and act as characters of the piece and therefore must be able to speak, act and sing, as well as play their instruments. The reason behind it was that the soprano is the only actual singer, reserved for the role of the main character named Olga, and the production team did not want to involve more singers on stage for the purpose of portrayal of the other characters. This concept, naturally, had a great impact on the development of the piece, which will be discussed later in this chapter.


The libretto was developed with the objective of creating a universal language that would resonate with people worldwide, regardless of their age and native language.

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[38] An opera intended for a children audience.
[39] The staging was made by the Italian director Ilaria Lanzino. It was nominated for the "YAMAwards" award in the category "Best Opera" in 2021 in Norway.

To this end, the libretto features a unique lexicon comprising invented words and onomatopoeias, some of them carry specific meanings. Additionally, the libretto incorporates detailed descriptions of the actions, emotions, places, and situations encountered by the characters. Notably, the characters' dialogue is minimal, and the libretto itself is only a few pages long, which allows space for the music to convey the story's mood, atmosphere, and characters. The language created by Hauser gave me the freedom to allow the music to tell the story independently of the characters' dialogue. In this way, *Der Kiosk* was designed to appeal to a global audience, and children can experience the story through the interplay of the characters, music, staging, costumes, and stage design.[40]

The story is about a woman called Olga, working as a saleswoman in a small kiosk over many years. Indeed, she has grown up in the kiosk and it became an integral part of her life. People walk past her, stopping briefly to buy various items or just to chat. Olga knows them all and is a good listener, but her customers all move on, without paying her much attention. She is stuck in her kiosk and dreams of going to the sea one day. The dream comes true unexpectedly, when one day thieves cause the kiosk with Olga in it to fall into the river, which carries her to the sea, where she is finally able to come out of her kiosk.

My aim in this opera was to create original and colourful music aimed at a youth audience, influenced by minimalist style, pop, atonal music, contemporary vocal

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[40] I have incorporated my prior experience of composing and performing an opera with a universal language intended for children's audiences *Brüte!* (2020) for voice, theremin and electronics. This work involved improvisation as a key component, and the libretto only provided instructions for the actions to be carried out on stage.

music featuring extended voice techniques, Balkan music, theatre music open to improvisation, experimental music and Latin jazz. Other important influential factors were the voices of both the soprano singer and the instrumentalists.

I have derived inspiration from the vocal works of other composers, specifically to gain insights into the process of working with notation for both singers and instrumentalists in situations where they must sing or speak. For instance, Luciano Berio's *Sequenza III* (1965) served as a source of inspiration for the method of using elements of indeterminacy which I have also incorporated in *Der Kiosk*.
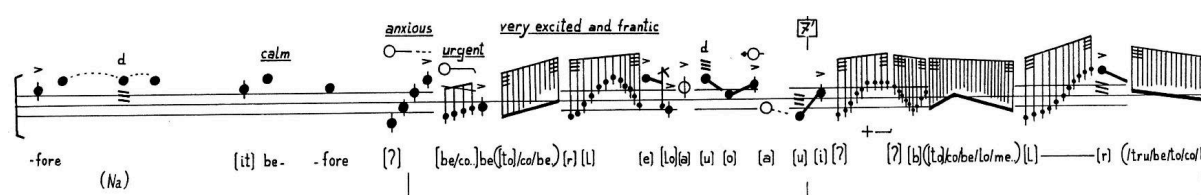
**Figure 24**. Fragment of *Sequenza III*, Luciano Berio

In *Der Kiosk* I have used approximate pitch notation on three lines (corresponding to high, medium, low register) in the sections with the spoken text, thus giving instrumentalists the freedom to speak and/or sing using a rough guideline for the approximate pitches.

4.2 Relationship between concept and music

The text created by Andrea Heuser is an imaginary text, a fictitious language in which the characters interact with each other. The libretto contains a dialogue between the

characters, and the actions are described in the stage directions. The music was largely intended to narrate many of these interactions. At the initial stage, I made a list based on the dramatic structure of the story, which helped me to keep track of the scenes and the characters occurring in them, and make decisions about the choice of instruments, placement of the electronics sections used as a bridge, and the development of the characters throughout the whole play.

The opera is divided into eleven scenes listen below:

**Table 2.** Scene overview of *Der Kiosk*

| Scenes | Title | Electronics | Instrumentation | Persons on stage | Duration |
|--------|-------|-------------|-----------------|------------------|----------|
| I | Introduction | City sounds | Mezzo-soprano, Vla, perc, electronics | Olga | 1'00" |
| II | A man with a dog | None | Mezzo-soprano, vla, cl, perc | Olga + cl | 2'00" |
| III | A woman in love | None | Mezzo-soprano, vla, cl, perc, voice | Olga + vla | 2'00" |
| IV | A woman with a baby | Sound of baby crying, synthesiser and samples | Mezzo-soprano, vla, cl, perc, voice, electronics | Olga + vla + perc | 3'00" |
| V | The jogger | Electronic beats | Electronics | Cl | 1'12" (loop) |
| VI | The tourists | None | Mezzo-soprano, Vla, cl, perc | Olga + cl + vla + perc | 3'18" |
| VII | Olga and the sea | Samples of voices, sounds of | Mezzo-soprano and electronics | Olga | 4'30" |

| | | | | | |
|---|---|---|---|---|---|
| | | water, the city, objects and synth pads | | | |
| VIII | The thieves | Night ambience sound by synthesiser | Mezzo-soprano , vla, cl, perc, electronics | Olga + cl + vla | 3'00" |
| XIX | The journey | Samples of water, water in a cave, object, bells, voices with filters and synth pads | Mezzo-soprano, vla, cl, perc, voice electronics | Olga | 7'00" |
| X | At the beach | Beach sounds; same sound samples as in scene IV | Mezzo-soprano, vla, cl, perc, voice electronics | Olga + cl + vla + perc | 7'30" |
| XI | The end | Electronic beats | Mezzo-soprano, vla, cl, perc, voice electronics | Olga + cl + vla + perc | 6'00" |

The music was intended to describe a character, a place, an action, or provide an accompaniment to what the characters were saying. The actions and intentions of each scene were crucial to my choices of musical elements, as they needed to correspond to different settings and constant changes of costumes and characters.

Scene II, "A Man with a dog", provides a good example of how I used music to create the character's personality. This scene features a single performer (a clarinet player) representing both the man and his hyperactive dog. In the book, the man and the dog are featured as two separated characters. In the libretto, both characters are

combined into one. While the man is represented by the performer's voice, I used the instrument (in this case, the bass clarinet) to illustrate the dog with melodic material, as well as the noise effects. The clarinet imitates spontaneous barks, using a multiphonic effect, while the player acts as a man when he talks to the soprano. Verbal indications in the score aid the performers in their understanding of the meaning of each musical action, as shown in the example below:



**Figure 25**. Fragment of the scene "A man with a dog"

In addition, the characters are supported by a rhythmic pattern in marimba, providing a background for the interaction between Olga and the man. The marimba serves to establish an atmosphere reflecting on the actions of the characters in this scene. For example, when the man stops walking as this dog becomes desperate, the marimba ceases to play, then follows with a different accompaniment when the man scolds the

dog (bars 70-74), and then resumes its original rhythm when the two keep walking forward.

Another example is provided in Scene IX, "The journey", in which the music describes the actions, emotions and intentions, which - although written out in detail in score annotations - are not expressed verbally to the audience. In this scene, music is the only element narrating the physical and spiritual journey of the woman from the titular kiosk, as she is carried away by the river towards the sea. As there are no instrumental performers on stage at this point, and therefore no need to memorise music, I was free to make the material a little more complex. The rhythmic aspect of the composition assumes a heightened complexity due to the absence of discernible rhythmic or melodic patterns. The percussion part features the use of multiple instruments and different mallets to achieve frequent changes in timbre. The only performer engaged in action on stage is the soprano (Olga), who walks through the audience with her kiosk, as if floating on the river.

An example of how the music was intended to describe an action and the relationship between the concept of the stage director and the music appears in Scene VII, "The thieves". In certain fragments of the score I had to use an open notation style, offering the stage director considerable flexibility in manipulating both the music and the musicians' movements on-stage. By adopting this approach, the director gains control over the scene's duration and can shape its artistic expression according to their vision. For this scene I composed a percussion part that could respond to the movements of the other musicians, giving the stage director the freedom to decide

the intention of the music, the length and the way the performers would interact with each other.



**Figure 26.** Indications for musicians and stage director in "The thieves"

## 4.3 Composing for instrumental performers on theatrical stage

The idea of placing instrumental performers on the theatrical stage and making them act, posed certain challenges. The instrumentation of the scenes depended on the available musicians; their availability, on the other hand, depended on whether they did or did not have to change costumes, whether they were involved in the acting and

whether they did or did not have to use their instrument as an acting prop. The duration of most scenes was predetermined by the stage director, with the consideration that all the musicians had to change costumes in almost every scene, as they were playing different characters. The libretto requires all characters to speak and sing in either a dialogue, a monologue, or simultaneously. Sometimes the musicians had to sing while playing their instruments, making some scenes particularly challenging. In some scenes every aspect is meticulously notated, including the noises, spoken words and laughter among the instrumentalists. In their vocal parts, I incorporated spoken voice, sung voice, and Sprechgesang, along with various indications to enhance the contrasting qualities of the voices.

Scene IV, "A woman with a baby", provides an example of how I composed for one of the instrumental performers on stage and the challenges that she had to face. In this scene, the percussion player has two character roles. I used limited sound sources in this scene: the voice of the soprano, the tambourine, the voice of the percussionist and electronics. The mother is represented by the percussionist, who interacts with a tambourine that represents the baby. I chose the tambourine because it is an instrument that can be easily transported and it seemed best suited to represent the image depicted in the scene, which was that of a woman patting a baby. The electronics are used to create an ambience, the atmosphere of the scene. Here I aimed to create a rather sweet and funny atmosphere, with the occasional baby cry that helps to establish the role of the tambourine. Olga and the mother engage in a short, mostly monosyllabic (and nonsensical) conversation, while all the actions are expressed with the music and the scenery. The part of the mother was specifically

written for a female percussionist, who must memorise both instrumental and spoken elements. In order to accommodate the performer in such an unusual way without overwhelming her with extraordinary demands, I simplified the vocal part by using Berio's aforementioned method of defining ranges of voice rather than specific pitches. I also included passages where she could improvise freely with the tambourine.



**Figure 27**. Fragment of the scene "Woman with a baby" of *Der Kiosk*

Since the libretto includes dialogue between the percussionist and the violist that needed to be conveyed, I requested that the percussionist sing and play simultaneously in order to interact with the violist. The way to solve this was to

compose specific musical phrases utilising annotations of intentions to assist the performers in conveying the intended meaning. The violist also plays her instrument and sings simultaneously, employing glissandos and an overpressure effect that blends with her voice to create a lamenting sound.



**Figure 28.** Dialogue between the percussionist and the violist in "A woman with a baby"

Scene V, "The jogger," is intended as a bridge, during which other musicians exit the stage to change their costumes for the following scene. This scene, which features a character of a running man, could not be accompanied by live instruments or by an instrument previously used to depict a different character. "The jogger" is therefore performed by the clarinet player without an instrument, accompanied by an electronic music pattern. The time of the action was measured on the stage and provided the scope of time I had to fill with music.

Apart from a few scenes, where reading from parts was possible, most of the music had to be relatively easy to memorise, as it had to be played from memory, which is

not a usual requirement from instrumentalists in opera, or indeed most ensemble performances. For that reason, I incorporated rather simple melodies, atonal patterns that are subject to repetition, as well as free improvisation and harmonic guidelines. A clear example of this is the end, designed in the style of a jazz song, where I provided the musicians with basic melodies and harmonic chord progressions as a foundation for their improvisation, accompanied by an electronic beat. Another example occurs in Scene III, where the violist is introduced. The violist ("A woman in love") has to sing and play simultaneously, so I decided to keep the music simple, with vocal and instrumental parts sharing the same rhythm. Additional challenge was posed by the fact that the player could not sing in a bel canto style and she never had singing lessons. For that reason, I indicated that the voice should be loud and have a painful and to some extent annoying quality. This gave the performer the freedom to experiment with her voice in a way that could correspond with her character, without the part being overly demanding in terms of the sound quality. This vocal technique was particularly fitting for the character of a woman in love who is suffering and experiencing emotional distress.

In order to give some freedom to the performers to sing, act and play their instrument, I have used parts in which they can improvise. A clear example of this is Scene VI, "A group of tourists". In this scene I have given the percussionist the freedom to improvise by repeating a pattern and varying it or improvising freely, which gives her the freedom to speak or sing without having to remember a specific melody, as well as to move freely while performing.

**Figure 29**. Notation using three lines with the percussionist singing and playing

The Scene VIII, "The thieves" acts as a bridge that focuses on contrast by incorporating a timbral shift, using indeterminacy and controlled improvisation inspired by experimental music. The composition of the scene involved the participation of the stage director, who would decide the length and intention of each fragment. In the previous movement, I exclusively utilised voice and electronics. However, for this particular segment, I seized the opportunity to have all the performers on stage, affording me the chance to compose for each musician to play an instrument they hadn't played in the previous scenes, or employ a novel approach to their playing. I instructed the percussionist to play continuous circles on the bass drum using a superball mallet, producing a sound reminiscent of a whale, complemented by the sound of two whirly tubes that would define the characters of "the thieves." I chose to use the whirly tubes, as they are small, portable instruments that musicians can move with on the stage, allowing them to play and act on stage as

well as interact with the kiosk. The instruments are accompanied by the electronic part made using the sounds of crickets in the forest to convey a nocturnal ambiance. The duration is approximate and depends on the on-stage actions of all the musicians.
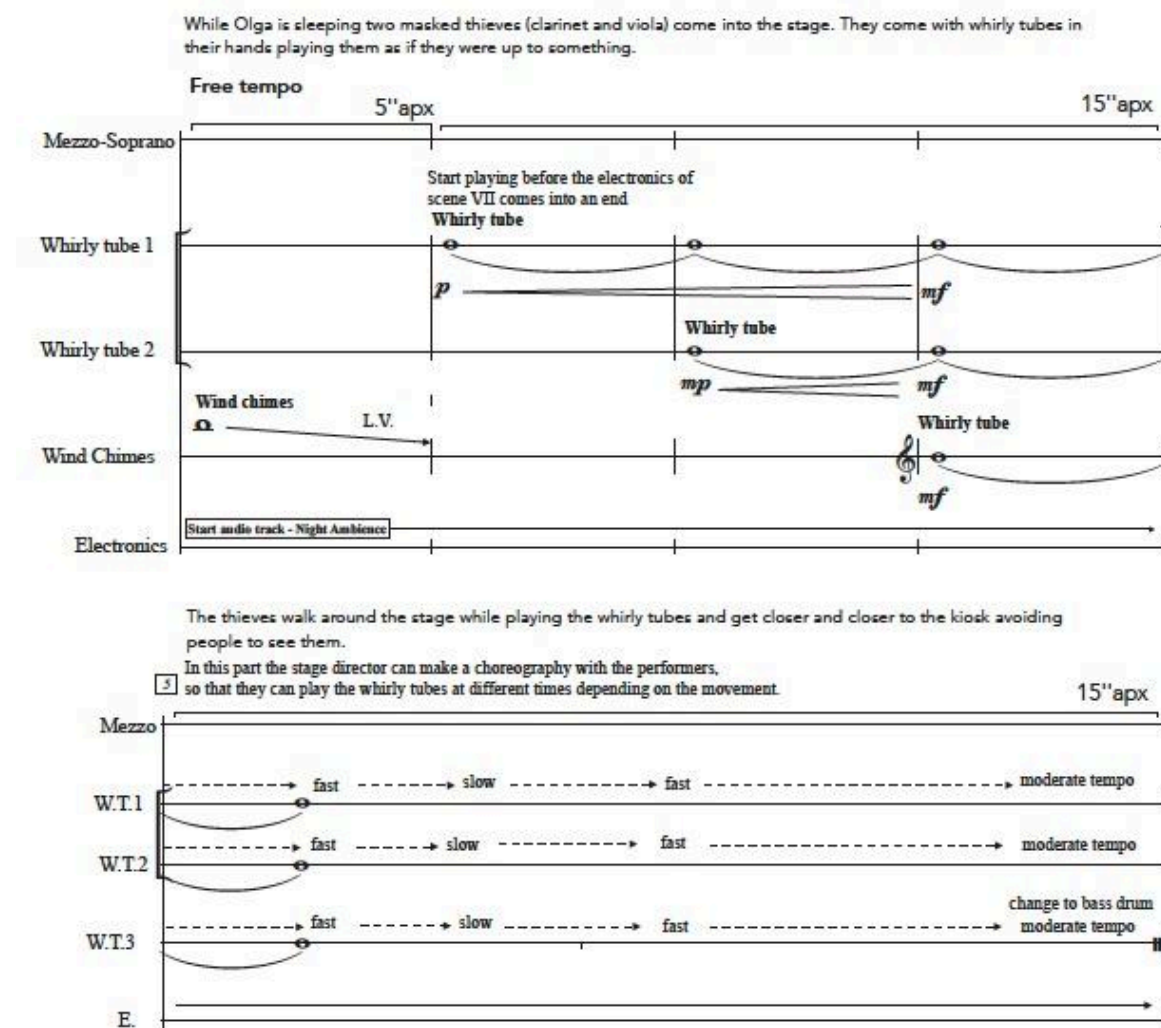


**Figure 30.** Notation with controlled improvisation creating a nocturnal ambience

4.4 Brief analysis and commentary. A multifaceted musical landscape: Blending genres in *Der Kiosk*

As mentioned at the start of this chapter, in this opera I incorporated influences from many diverse styles of music. I combined these elements in my own unique way to create music that reflects my personal style while acknowledging those influences, with the aim of creating the kind of opera I would have enjoyed listening to as a child. The following selected examples illustrate my approach to the stylistic synthesis this opera represents.

For scenes I, II and III I composed a rhythmic pattern inspired by minimalist music for the percussion player who played the marimba on stage, while the other instruments performed melodies inspired by jazz music using atonal passages for some of the melodies. For Scene II, "A woman in love," I combined these two genres with extended techniques such as overpressure in the viola part. I incorporated extended vocal techniques, such as Sprechgesang, used in the singer's and the violist's parts. As they sing simultaneously, it creates the impression that they are in agreement with each other. Furthermore, the use of Sprechgesang helped convey the violist's emotional expression, giving the impression of a weeping sound.

In Scene IV, "A woman with a baby," I used a combination of pop and atonal music. I chose this approach to create music that sounds unpredictable, yet maintains a pulse that provides guidance for the percussionist to follow the electronic elements and

also allows them to memorise their part in a straightforward manner. I created the electronic elements using samples and instruments from Logic, particularly incorporating a bell sound that evokes a childlike quality. The harmonies and melodies are atonal at the beginning of this scene, combined with a bass drum in the electronics that has a dance quality inspired by pop music. The bass drum served as a guide for the performers, allowing them to count the measures and enter the scene using cues written in the score.

At the end of this scene I added another element of pop music, which is a memorable melody that can be easily sung along a repetitive harmonic progression. This helped me to create a bridge between this scene and the next one, which is also inspired by pop music. In the following Scene V, "The jogger," I employed synthesiser sounds similar to the sound of water since the character in this scene is running on stage as if he were diving into a river, combined with sounds of an old synthesiser from the eighties, a recognizable harmonic pattern and a danceable beat inspired by the pop song "Maniac" by Michael Sembello from the movie "Flashdance". The reason to employ a pop music style in this particular scene was to provide an electronic pulse as a guiding element that would allow the performer to execute movements, including running and dance, smoothly. I also aimed to provide the stylistic contrast with the preceding scenes. The choice was influenced by my personal inclination to envision the character of "The jogger" as a dancer, which further complemented the artistic direction of the composition. It was also driven by the necessity to exclusively use electronic elements in this segment.

Scene VI, "A group of tourists", draws inspiration from Balkan music, particularly one of its most important characteristics (typical to music from Macedonia and Bulgaria), which is the asymmetric time signatures such as 5/8, 7/8, 11/8, 7/16, 15/16, etc.[41] The melodies written for this scene utilise the 7/8 metre alongside the Dorian mode. During my formative years, I was profoundly fascinated by Balkan music, deriving immense pleasure from its enchanting melodies and captivating rhythms. Consequently, I felt compelled to adopt this music that had deeply resonated with me since early childhood. My goal was to create a musical fragment possessing not only captivating rhythmic elements but also a sense of delight, fun and engagement for the performers.

In Scene VII, "Olga and the sea," I have created a mysterious atmosphere by combining electronic music with the singer's voice. For this scene, I sought to establish a serene ambiance that resonated with Olga's contemplative state as she prepared to sleep, pondering the prospect of her life at sea and yearning for unfulfilled desires. To achieve this, I composed a vocal melody with elements of suffering, tenderness, and beauty, employing an open notation approach, which granted the performer the freedom to improvise the rhythm in a highly unrestricted manner (bar 38 to 45).

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[41] Daskalov, Dejan. (2018). "The Synthesis of Balkan Folk Tunes in the Music of Vlastimir Nikolovski and Alexander Vladigerov." UNLV Theses, Dissertations, Professional Papers, and Capstones, (3238), p. 9.

This musical style draws inspiration from 21st-century concert music for voice, such as Moussong's *Qambar Batir* (2011). In this piece, melodies without specific rhythm are combined with graphic notation of the electronics.



**Figure 31**. Fragment of *Qambar Batir* by Aurés Moussong

In some of the sections, such as Olga's song (Scene VII, "Olga and the sea" bars 38-46), I have adopted the same notation principle, where I used pitches without defined rhythm, enabling the singer to perform freely, and using graphic notation for the electronics as well.



**Figure 32**. Fragment of "Olga and the sea" - voice and electronics

The electronic elements that accompany the vocal part are crafted by utilising samples of my own voice subjected to granular synthesis as well as filters in Logic that change pitch, apply different reverbs and various equalizations between the samples, resulting in an immersive sonic experience that evokes the sensation of Olga conversing with her inner self in a dream-like state.

In the subsequent Scene IX, "The Journey," the music serves as a narrator, conveying Olga's river journey without any other action, except Olga swaying back and forth with her kiosk. I used electronic elements combined with the acoustic instruments to create a mysterious atmosphere, creating a connection with scene VII "Olga and the sea". The motivation behind crafting a mysterious musical composition for this particular segment comes from the significance of Olga's journey on the river, leading her to the long-desired sea, wherein she confronts the unknown. It symbolises an introspective journey that leads Olga's to achieve a profound connection with her inner self, consequently pushing her beyond the confines of her comfort zone, embarking on a transformative trip of self-discovery and the realisation of her aspirations. To establish an ambiance of mystery in a magical-realistic world, I utilised samples of Tibetan singing bowls, wind, a guitar played with a contrabass bow, gongs and small crotales. Taking inspiration from musique concrète, the electronics also utilise samples of water, the sound of a river, bells of a church, and the sound of a sea shore. Afterwards, I introduced the acoustic instruments, which aim to describe musically Olga's journey.

For Scene X, "At the Beach," I drew inspiration from Caribbean music, in order to convey the notion that Olga has now happily arrived at the seaside. I opted to draw inspiration from a Caribbean rhythm for this musical composition, envisioning Olga's presence in the Caribbean. This choice was a strictly personal decision, considering that the script does not explicitly reference a particular place or culture, granting me the creative liberty to explore diverse musical genres through my distinct artistic expression. As Caribbean music evokes associations with the beach, joy, dance, and celebration, I deemed it fitting to captivate the character of the scene and engage the children in this culminating section of the performance. A particular type of Caribbean music that inspired me, calypso, is characterised by its unique syncopated rhythm, often in 2/4 or 4/4 metre. Typical instruments found in calypso include the drum set, Latin percussion instruments such as bongos, congas, and timbales, as well as bass guitar, acoustic or electric guitars and brass. Having a limited choice of instruments in my opera, I expanded the range of sounds by utilising the Logic's sound library (in addition to available percussion instruments), and added a flute that features a repeated motif, accompanied by sampled vocals and sounds of birds and ocean waves.

In the libretto, fragments of Scenes I, II, and III are repeated with minor variations in Scene X. All the characters reappear in the same order, only this time they are all enjoying being on the beach and the conflicts they previously had are resolved. To enhance their reappearance, I have incorporated musical repetitions such as the

rhythmic pattern of the marimba, this time adding slight rhythmic variations influenced by the calypso rhythm.  The marimba accompaniment in this instance serves to transport us back to the preceding scenes. I have also added the melodies that I had written for the other characters, also with added variations.

At the end of Scene X, various styles I drew inspiration from are merged together, including minimalist, contemporary, pop, Latin and experimental music. Here I aimed to compose music bearing a personal signature, which crosses boundaries between different genres. The marimba pattern certainly emerges from the minimalist influence with added calypso rhythm, while the contemporary atonal style is evident in the melodies written for the soprano, the clarinettist and the violin. The pop element manifests itself through the electronic elements accompanying the tambourine/baby.  Additionally, the experimental aspect is introduced through extended instrumental and vocal techniques, including the spoken voice.

The final Scene XI ("The End") features music inspired by Latin jazz which is related to the style of the melodies written for scenes number I, II and III. I chose to notate music in a fashion typical to jazz, featuring the melody with symbols for accompanying chords, rather than notating everything in a precise manner. This provides the basis for improvisation based on the written chord progressions that accompany the melody. The Latin rhythms influenced the syncopated patterns in the electronic marimba, as well as the meloxdies played by all musicians towards the

end of the piece. As for instrumentation, I opted for the Bb clarinet, to make a distinction from the bass clarinet's portrayal of the dog character in Scene II, allowing for a lighter sound and offering the clarinettist the ability to move physically while playing. The viola part, on the other hand, does not feature any more special effects or the player's voice, instead being treated in a standard manner, giving the sound a clean and bright quality. The percussion part is limited to two maracas that resemble baby rattles, enabling the player to dance freely. As an additional percussive sound, I incorporated a bass drum in the electronic part, which provides a rhythmic reference for all performers, enabling them to dance to a defined pulse. The final scene was always envisioned as a celebratory dance, so I wanted to give the instrumentalists a sense of liberation, giving them the opportunity to improvise on the basis of the written chord progression. Thus the opera concludes with a sense of shared joy.

**Chapter 5: The synthesis of different approaches and new challenges: *Mexico Aura: The Myth of Possession***

5.1 Introduction: The collaborative journey of *Mexico Aura: The Myth of Possession*

The initial concept of *Mexico Aura: The Myth of Possession* was born between 2019 and 2022 while travelling between Munich, Mexico and Berlin. The Neuköllner Oper commissioned the project along the Humboldt Forum in Berlin and brought together the participating artists with the aim of having an international creative team: librettists Eva Hibernia (Spain) and John von Düffel (Germany), translator Albert Tola (Spain), dramaturge Bernhard Glocksin (Germany), stage director Christopher Roman (USA) and myself (Mexico). The performers included Ana Schwedhelm (soprano), myself (soprano), Justus Wilcken (baritone), the dancers Mani Obeya, Brittanie Brown, Cree Willians, Stella Zannou, Jakevis Thomason, Yuya Fijunami, and instrumentalists of the Zafraan Ensemble, conducted by Melissa Panlasigui. The premiere of this work took place on July 21, 2022 with eight performances in total.

The aim of the project was to cover topics such as neocolonialism[42], migration, misinformation about Mexico in the German media and myths. To aid the production, the creative team held two workshops (in 2020 and 2021), devoted to the

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[42] Neocolonialism is the continuation or reimposition of imperialist rule by a state (usually, a former colonial power) over another nominally independent state (usually, a former colony). Neocolonialism takes the form of economic imperialism, globalisation, cultural imperialism and conditional aid to influence or control a developing country instead of the previous colonial methods of direct military control or indirect political control (hegemony).

development of the concept and making decisions about possible instrumentation. During the workshops we contacted a research centre in Yucatán dealing with migration, had a meeting with a mathematician and visited an archaeological museum. Following a suggestion from the dramaturge, I wrote a 15-day journal during my stay in Mexico City, describing the city, the sounds, as well as my experiences as a Mexican artist in Germany and in Mexico.

The final libretto's subject is the criticism of Eurocentrism as well as neocolonialism, the appropriation of art from another country, and migration. It also shows a German perspective on Mexico involving misinformation and the way the latter is "exoticised", as well as how migrants are treated in some institutions in Germany. Unlike other works presented in this thesis, this one is much more politically involved, although I am generally interested in themes that are politically and socially relevant. In this particular opera, this theme resonated with my own experience of living more than ten years in Germany.

As in my previous projects, the collaboration between the librettists, the composer, the artistic director/dramaturg and the stage director was a very important aspect of the creative process. However, compared to *Nacht der Seeigel*, the way this new opera was created was much more collaborative and had a more interdisciplinary character. My music served as inspiration to the librettists, who in turn included many indications for the staging. My work *Nahual* (part of *Connected Identities*), which features a half-woman, half-jaguar creature, inspired Eva Hibernia to create a

character called *Cabeza de Perro* - a combination between a man and a dog, who also had Mayan roots. The stage director was a choreographer, which was reflected in his approach to staging, and influenced the process of composition, as I had to consider the movement of the dancers on stage. The stage director also gave me some ideas of the images he intended to include - for example the trash and elements of costumes. This inspired me to integrate certain sounds  into the score, such as in the scene where the dancers speak under a gigantic plastic bag.

5.2 Composition process and challenges

In this opera I intended  to explore different approaches to the composition of stage music. This opera required many compromises and posed numerous challenges such as the language of the libretto, the amount of text, the limited instrumentation, issues with percussion, issues of musical style, the interdisciplinary approach, and cultural considerations. I will provide a detailed explanation of each of these challenges below.

The original concept was to have a multilingual libretto, but the dramaturg insisted on using German as the main language, as the composition was intended for the German audience. However, I did not see the point of the main characters, who are Mexican, speaking German among themselves, so after several discussions we agreed that the play should be in German, English, Spanish, and Nahuatl. Some of these decisions were made during the rehearsals: for example, the stage director

and I came up with the idea of gradual removal of consonants from the German text sung by two sopranos in the scene "Cabeza de Perro". Once only the vowels of the German text remain, it creates an impression that the German language gradually dissolves and transforms into another language, yet undefined. At that point the Nahuatl is introduced by the baritone. This way of treating the language was related to the characters' journey: the migrants spoke to each other using the German language in an attempt to assimilate into German culture, but they gradually changed into Nahuatl (the language of their ancestors in Mexico) when confronted with their roots.

The libretto contained too much text so that it was difficult to set some passages to music, as the music had no room to unfold. The libretto was partly written as a theatre play rather than an opera libretto, especially the sections of the text written by John von Düffel. The only part that was written idiomatically for what we think of as "opera", was the "Trash aria". The solution I found to this problem was to write music that was more of an accompaniment or a side note, an atmosphere that accompanied the text, rather than a text setting in a traditional sense. Another solution was to set John von Düffel´s texts in a spoken fashion, distributed between the dancers and the singers in some parts of the opera. One scene was also removed from the libretto entirely, to reduce the length of the work. In the case of the texts written by Eva Hibernia, the task of setting the words to music was much easier, as they were written in a manner more appropriate for an opera and gave the music more space to unfold. However, there were still sections of the text that were necessary to set in a spoken manner, due to the volume of the text, such as in the

main scene of Mia's character. The situation was made more difficult by the fact that Hibernia was unfortunately not open to any changes in the libretto. Eventually, I decided to record my voice and add it to the electronics part, so I was able to sing parts of the text, while the whole text was spoken by my character on the recording.

Concerning instrumentation, originally, nine instruments were planned, but due the budget restrictions, the final score features only six instrumentalists and three singers. The sound of the remaining ensemble was acoustically too thin, fragile and soft in some places. To solve this problem, I amplified the voices and instruments and distributed the sound among 23 speakers spread around the hall. I also added electronics in the passages where I needed a denser sound. With the help of the audio engineer of the hall, we developed a sound design that gave the instruments and effects a nearly cinematic quality, enhancing the bass and the balance between the singers and acoustic instruments, along with the electronics.

Another major compromise I was forced to make was to change almost all the percussion parts included in the original score, due to the demands of the stage director, who decided to have all the percussion instruments in one line on the limited space on the stage. This arrangement made it impossible to switch quickly between certain instruments and forced me to make many adjustments, including swapping some parts, changing or adding instruments, and removing some of the music during the rehearsals.

In reference to the problems associated with musical style, the demands of the dramaturg required further compromises regarding a more contemporary or experimental language I use in my music, which was deemed inappropriate in three scenes of the opera, and asked me to rewrite them. It was important to the dramaturg to have music that was more accessible to the audience in some parts. This was the most difficult challenge that I faced, as I envisioned music that was more like a noise than traditional melodic materials. The final result is therefore an eclectic collection of fifteen scenes of different musical moods, including modal passages, as well as more experimental ones. Some scenes were written as if they were songs, using the piano and the voice as a means of compositional process. Somehow using just the voice and the piano compelled me to write music that was more accessible, while starting the process with abstract drawings (like I did with *Géante rouge*) that are "transcribed" directly into the score, led to a more experimental language, in a certain way free of any tonal or modal influence.

This work demonstrates the concept of opera as an interdisciplinary, or even a transdisciplinary art form. The openness of all performers to the philosophy and practicality of mixing and expanding their traditional roles, made this challenge the least difficult one. The members of the Zafraan Ensemble were willing to be actors as well as players, interact with objects and toys, improvise and sometimes speak, walk on stage and recite texts. On the other hand, only two of the six dancers could read music, so the accurate performance of all the passages written for them proved much more difficult. The dancers were required to sing or play the ocarinas and native Mexican instruments, which they were unable to do with great precision, and some

compromises needed to be made to allow them more flexibility and approximate approach to the written material. Compared to the work on *Der Kiosk*, it was more difficult to engage performers in activities not usual for them.

Concerning the cultural considerations, the presence of two European librettists, one Spanish and one German, who had no prior experience visiting Mexico or engaging deeply in discussions surrounding neocolonialism, presented a notable challenge for me. Ideally, involving a Mexican writer would have been more suitable for addressing this subject matter. Unfortunately, I had no influence over the selection of the librettists, which added to the conflict. In an effort to reconcile this issue, I shifted my focus towards music as the primary element that could capture the essence of Mexican identity. Music, in this context, served as a counterpoint to the overarching discourse, which predominantly revolved around Eurocentrism and its self-critique.

To give music the character I desired, I decided to use Mexican native instruments, which would act as a symbol of decolonisation, and of the rupture of times in the libretto. The native instruments symbolise marginalised voices that stand in the background, as well as act as a metaphor for myself as a composer, unable to express myself through words and wanting the music to be a counterpart of the libretto. For this reason, I decided to give these instruments only to the dancers and instrumentalists, excluding the singers, who delivered the written text. The dancers act as a chorus that comments and communicates with their bodies and the instruments (rather than words),  in an abstract way. The instruments appear both in

the overture and in Paloma's performance, as well as in the scene that illustrates Mia's conflicts between being German and returning to her roots. They also have a strong presence in the song of the Mayan god, "Cabeza de Perro".

## 5.3 The relationship between music and concept

The scenes of the opera are separated and organised according to the play's structural dramaturgy. There are three parts divided into five scenes each, with fifteen scenes in total. Each of the scenes has its theme, features particular characters,  and is assigned a particular musical intention.

**Table 3.** Scene overview of *Mexico Aura: The myth of possession*

| Scenes | Performers* | Characters | Music | Idea | Author | Duration apx. |
|---|---|---|---|---|---|---|
| **Part I** | | | | | | |
| **Overture** | Singers, dancers, musicians, electronics and native instruments | Mixed | **Written + open score** | Cultural syncretism - Death whistles | John | 3'00" |
| **Scene 1 Jaeger's border** | Baritone, dancers, musicians | Claas Relotius | **Written score - improvisation (bridge)** | Spoken text with background music | John | 3'00" |
| **Scene 2 Violence** | Baritone, dancers, musicians | Claas Relotius | **Written score with electronics** | Spoken text with background music | John | 1'00" |
| **Scene 3 Trash aria** | Sopranos, dancers and musicians | Constanza woman and choir | **Written score with electronics - open score** | Sung + spoken | John | 5'10" |
| **Scene 4 The guide** | Baritone, musicians, electronics | Claas Relotius | **Written score** | Spoken text with background music | John | 5'00" |
| **Scene 5 Aria of Constanza** | Soprano, musicians, dancers | Constanza and choir | **Written score** | Sung + spoken | John | 4'00" |
| **Part II** | | | | | | |
| **Scene 6 Bridge** | Dancers, musicians, electronics and native instruments | Electronics + Instrumental | **Electronics** | Native instruments | Eva | 2'00" |
| **Scene 7 The four corners of the world - Yellow** | Sopranos and musicians | Mía, Paloma | **Written score with electronics** | Inspired by magic surrealism | Eva | 1'00" |

| | | | | | | |
|---|---|---|---|---|---|---|
| **South** | | | | | | |
| **Scene 8 White North** | Sopranos and musicians | Mía, Paloma | **Written score with electronics** | Sung | Eva | 2'00" |
| **Scene 9 Red East** | Sopranos, dancers and musicians | Mía, Paloma | **Written score with electronics** | Sung + spoken | Eva | 2'00" |
| **Scene 10 Black West - 1 and 2 parts** | Sopranos,, musicians, electronics | Mía, Paloma | **Written score with electronics** | Sung + spoken | Eva | 6'00" (part 1 4'00) (part 2 2'00") |
| **Scene 11 The underworld - (The man with the head of a dog)** | Dancers, dancers, musicians, electronics and native instruments | Mía, Paloma and Doghead | **Written score with electronics** | Sung + spoken - Death whistles | Eva | 12'15" |
| **Part III** | | | | | | |
| **Scene 12 Maria Delgado (deleted scene)** | Baritone, electronics | Baritone speaking - Maria Delgado dancing | Electronics (DELETED SCENE) | Spoken text with background music | John | 8'55" |
| **Scene 13 Epilog** | Sopranos, dancers, musicians and native instruments | Mía, Paloma | **Written + open score** | Sung | John | 13'00" |
| **Scene 14 The museum of the future** | Sopranos, musicians, electronics | Two guides | **Written + open score** | Sung + spoken | Eva | 4'32" |
| **Scene 15 End** | Singers, dancers, musicians, electronics and native instruments | Constanza woman and choir | **Written + open score** | Take some elements from the second trash aria. Sung + spoken | John | 1'00" |

It was a challenge to create a dramatic whole with so many themes and so many individual scenes. I made an attempt to create bridges between different scenes, as well as an energetic and dramatic line in which the music always had a distinct character that contrasted with the previous scene. To give this eclectic whole a sense of unity, the sonic atmosphere of each scene was presented at least twice, blending into each other; for example a part that sounded like a song would be repeated at a later stage. The recurring idea in this case was the use of the available timbres or characters, for example, the sound of native instruments, the melodies with modal accompaniment delivered by a synthesiser, electronics and voices, the use of percussion in rhythmic passages or the sound of trash in combination with noise.

5.4  Brief analysis and commentary. Different approaches to composition for music and stage

The most important aspect of the composition process was to explore different approaches to writing music for opera such as: composing the score directly without the use of any instruments, using conventional music notation combined with fragments of free or controlled improvisation, using piano and voice in the creative process, writing for the voices first and then adding an accompaniment with electronics, composing during rehearsals together with the stage director, composing using my own voice as a guide for the written score and the electronics, composing considering the dancers as part of the score, and using costumes/scenography as musical instruments and part of the score.

Different sections of the work, quoted below, illustrate these different approaches and the artistic results.

- Composing the score directly without the aid of any instruments, using conventional music notation combined with fragments containing free or controlled improvisation: "Overture"

This section uses a combination of acoustic instruments, voices and native Mexican instruments. The compositional process started in my studio. I imagined the music conceptually and then drew the graphic plan of overall energy, a process very similar to that used in the composition of *Géante rouge*. I found it helpful to write down a list of adjectives, such as "strong, provocative, painful, screaming, ancient, modern, strange, ritualistic, dark" and imagine how it should sound.  I also determined a scale of defined pitches,  before moving to a freer and more fluid way of composing, moving from notated music to free improvisational parts. I think that of all the different methods I used in various parts of the opera, this method produced the result that I liked the most, because of a relationship between what I think and imagine and what actually happens on stage during rehearsals, which is always something unpredictable. Communication with the musical director was a very important part of this process, as she was managing the dancers/performers who played in a very intuitive way, and the singers who improvised in some sections. To achieve the result I was looking for in the vocal parts, I realised I had to participate as a performer as well. It was also very convenient to be an active participant, listening to everything in every rehearsal and then playing with my voice, encouraging the other singer to try to

produce various noises with her voice, and having clear communication with the musical director. On the other hand, the discrepancies between the MIDI version and actual performance made it very difficult for the stage director to imagine what the music actually sounded like.

My way of composing with an open score or a controlled improvisation is to try to depict the energy I want to create in music, and give everyone an idea of what I intend to do. For example, I told the singers that they should express a high energy, sounding like they are trying to shout something incomprehensible that they cannot express. The creativity of the performers allowed me to achieve what I wanted: to create musical landscapes that are not controlled, evoking the sense of despair, loss of control, and mystery. This spontaneity of the musicians opened a door into music that sounds more free. The personality of each performer is also taken into account in parts of the piece, something that I appreciate very much, as sometimes the musicians and the dancers achieved something that I had not imagined.

- Using piano and voice in the creative process: "The guide"

All the scenes which involved the character of Claas Relotius were written by John von Düffel. Claas Relotius is a journalist known for causing a major scandal in the world of press. In 2018, he was exposed for fabricating stories, characters and quotes in multiple articles he wrote for Der Spiegel, a respected German news magazine. The case ignited discussions about journalistic ethics, fact-checking, and

the importance of truth. It highlighted the importance of strict editorial supervision to uphold the credibility of news outlets.

Düffel´s idea for the text was to write a theatre play, utilising dialogues and monologues which included fragments of text in form of songs, rather than writing an opera libretto. The ways to approach the character of Claas Relotius were musically very limited, since the text for this character is written mainly as a monologue. Therefore, I took a more cinematic approach, setting it as the spoken part and utilising music only to accompany it. For scenes such as the "Trash Aria", and "Aria of Constanza" the text was more suitable to be sung.

One of the fragments of Claas Relotius's text which has the the form of a song appears in scene 4, "The guide" (bar 1 to bar 173). In this song, I composed the melody for the lyrics and simply added the chord symbols. That way I could sing and play the melody at the same time. It was an effective, fast, and fairly intuitive way to compose. On the other hand, this method produced very limited results, since I was always inclined to use a modal language similar to a jazz song, which is different from what I usually do while improvising.

- Writing for the voices first and adding an accompaniment with electronics: "Trash Aria"

The text of "Trash Aria" is written by von Düffel and was inspired by lies and myths about the Mexican border which were conveyed in the articles about Mexico written

by the reporter Claas Relotius. In "Trash Aria" the text explores the theme of garbage and a landfill in Mexico City. It presents a fabricated narrative by Claas Relotius, which perpetuates stereotypes of Mexicans in his article, portraying them as economically disadvantaged individuals predominantly linked to drug cartels. The scene is intended to be presented in an absurd and ironic manner. The libretto depicts the challenges of their environment, including toxic fumes and fire, with two characters that are part of the story and also serve as narrators (the voice of Claas Relotius), claiming to have witnessed these conditions. These characters are two sopranos who are accompanied by the voices of the dancers, speaking like a chorus. The instruments, which appear only at the start of the scene, imitate the sound of the garbage in a rhythmic, almost violent way. To achieve this effect, I used plastic sheets of cellophane placed under the chains  inside the piano, which affected almost every pitch. I had originally intended this part for a synthesiser, but the acoustic sound of the prepared piano was more effective as the resulting sound had more noise.

An important aspect of this scene is to show the sense of superiority characteristic to the upper class. While composing this piece, I aimed to show a dystopian, dark, and painful world, contrasting with an elitist and class-oriented world. To achieve this, I combined the operatic bel canto of the two singers that represent the upper class, with the spoken voices of the dancers and electronics that convey waste pickers living in poverty and represent a painful and obscure ambience. The staging of this scene was based on the principle that the dancers follow the lead of the two singers, who are behaving as if they were at a bourgeois tea party surrounded by trash. Traditional singing style of the two sopranos contrasts with the spoken voices of the

dancers, combined with noises produced by plastic bags and the electronics. The staging went in the same direction, showing the two singers connected by a big long skirt made of plastic that they both wore, and the dancers mumbling, whispering, and dancing under the costume of the singers conveying the image of people ruled by the power of the upper class represented by the two singers.

I wrote the vocal parts of "Trash Aria" first, leaving decisions about the accompaniment for later, in order to give more projection to the voices and the text. The idea was that the singers' parts would be demanding, using all the dynamic power of their voices, while the dancers accompanied them with murmuring, speaking, and shouting. During rehearsals, it was decided that the dancers would speak the text in their native language.

The words, murmurs, and whispers, as well as the sound of plastic covering the dance area, were amplified with microphones. The acoustic instruments only play at the beginning of the "Trash Aria", and then performers stand up and pick up plastic bags, rubbing them with their hands to create a  garbage noise in the background.

The electronics part utilises samples of trash sounds like plastic, rocks rubbed on concrete, metal spoons hitting a metal pot,  the sound of two hands rubbing pieces of dirt, samples of my own voice with reverberation and subjected to different filters in Logic, and the voice of a Mexican woman who is asking for metals to sell on the streets, processed using a tempo stretch plug to transform the sound of her voice.

-   Composing during rehearsals together with the stage director: "Bridges"

Between scenes 1, 2, 3 and 4 ("Jaeger's border" through "The guide"), the stage director suggested getting involved to some extent in the composition process, which affected the bridges between the scenes. His main suggestions considered moments of silence, as well as noises made by the performers with their instruments. To accommodate his suggestions, I wrote a part utilising an open score (bars 1-5 of the Part 2 called "Bridges"), asking the instrumentalists to improvise for the length of time indicated by the director. This idea was used in several scenes during the staging process (some of these additional sections provided time for the dancers and singers to change costumes). Figure 27 below provides an example of a free section like this:



**Figure 33.** Open score for bridges between the movements

- Composing using my voice as a guide for the written score and the electronics: "The four corners of the world" ("Yellow South", "White North", "Red East", "Black West": scenes 7 to 10)

Eva Hibernia's text addresses the subject of cultural colonisation through the character of Mía, a Mexican woman living in Germany. Mía works as a museum curator, defends German culture and prefers to speak German as her main language. She avoids acknowledging her Mexican origins because of the fear of being "exoticised" by the Germans. In the museum where she works, she curates the exhibition of the artefacts stolen from Mexico many years ago. Her character contrasts with Paloma, a Mexican artist who visits the museum and shares Mía's roots, eventually convincing her that despite their contributions to the European country they live in, they would both be forgotten and unnoticed. Eventually Paloma convinces Mía to accept her roots and to embrace the fact that she feels superior to the people from her own native country.

For these two characters in "The four corners of the world" (scenes 7 to 10) I decided to use my voice as a guide to composition of each scene. One example is scene 10, "Black West". The words spoken by Paloma to Mía in this scene - "you have achieved what you wanted but you are asleep" - inspired me to write the duet for these two characters utilising a dream-like atmosphere. To create this impression, I used the synthesiser, electronics and acoustic instruments. While in the scenes written by Düffel I used only acoustic resources, the parts written by Hibernia gave

me more freedom to create a fantastic world evoked in her libretto by using the electronics.

For scene 10, "Black West", I recorded my voice in Logic speaking the text in German, which gave me an idea of the length of the whole scene. The audio recording provided a base for improvisation: I sang and recorded my voice several times as an accompaniment to this first audio recording. I used my voice with and without lyrics utilising different vowels, voice projection and extended vocal techniques. The composition process was quite intuitive, and the free improvisation I used for the different layers resulted in an interesting harmonic background and noises. Once the process was complete, I erased the first recording of the spoken voice - this was meant to be the part of the live performance (the role of Mía) - and inserted the lyrics into the score taking the electronics as a guide (bar 1 to 12).



**Figure 34.** Guide for the soprano accompanied with the electronics "Black West"

I chose not to use any instruments in this scene (only my voice) in order to convey the idea that Mía was talking to herself in a world of dreams she imagined.

In "The four corners of the world" and the "Epilog" I treated the characters of Mía and Paloma as if they were mirrors of each other. Both characters sing in a similar way in each of the scenes. In the "Epilog" each voice starts in bel canto style with mostly atonal melodies, then they gradually move to spoken text, using chest voice and eventually finish with screams and free improvisation at the moment when they both die. At the end, they both sing again utilising chest voice. This play of colours and styles was only possible by amplifying both voices and testing each passage with my own voice during the composition process. During the rehearsals these different styles of singing were refined in collaboration with Ana Schwedhelm, an extraordinary singer who was open to try different kinds of projection, and who - like me - had the background of academic classical vocal training. The collaboration, as well as working with my own voice, helped me to achieve desired effects with ease.

- Composing considering the dancers as part of the score with and without electronics: "Cabeza de Perro" (Dog´s Head)

The *Cabeza de Perro* character is a Mayan god-like creature that connects Mia's character to her Mexican roots. Originally, the text was written in German, but it made little sense for a pre-Columbian character to speak a modern European language. For this reason, I asked for a translation into Tzotztil or one of the other Mayan languages, however it proved difficult to find an appropriate interpreter. The only one

available was a person known to me who spoke Nahuatl, which is the language of Aztec culture; so the dramaturg decided to use this language, even if it was not related to the Mayan culture. Another controversial decision was made by the stage director, who came up with the idea of having a dog's head similar to a Chihuahua (placed on a baritone's head), which undermined the serious and dramatic character of the scene. All these arbitrary decisions, made without my involvement, seem to contradict the very concept of the opera, violating and undermining the aspects of culture the work was devoted to.

I attempted to resolve this conflict musically, by using electronics combined with the use of native instruments to "open" the door to an absurd and funny magic-realistic world, which changed the meaning of the libretto. I achieved this by starting the scene in a dramatic way and then transforming it into more rhythmical music that accompanies the voice of the baritone using ocarinas and a dance-like rhythmic pattern. In this scene the instruments played by the ensemble are replaced by the native instruments, which later take over the music when the baritone starts singing in Nahuatl. To be able to work with the text in Nahuatl, I got a recording with the pronunciation, along with the translation both into German as well as Spanish. The parts of the ocarinas, whirly tubes and the death whistles, played by the dancer and the musicians, are notated without specific pitch, with only attention to rhythm. Interestingly, I feel that this particular scene, in spite of all problems and controversy, was dramatically important and musically perhaps the best one.

- Using costumes/scenography as musical instruments and part of the score: "The museum of the future"

Another idea contributed by the stage director was to include in the score the sound of the costumes made of trash, especially in the last scene "The museum of the future" and "The End". The concept involved the singers and actors wearing costumes made from trash items and subsequently discarding them, forming a mountain of waste. The resulting sounds were noises made by plastic, cellophane, metal and small objects, which merged with the sounds produced by the voices and the instruments. This theatrical action demanded music that would build up to a climax, wherein the noise of the garbage would surpass the music, and the singing would gradually dominate the overall sound.

To convey this concept musically, I began with my voice and the piano, treating the singers as a choir. As the piece progressed, I tried to emulate the sound of a jazz band engaged in free improvisation in the instrumental parts. The composition features a blending of conventional and graphic notation (bar 129 to 133).

**Figure 35.** Fragment of "The museum of the future" - notation for singers and dancers incorporating noise

In the vocal parts, the last phrases are repeated until they reach a point of free improvisation, while the dancers actively incorporate the sounds of their trash-made costumes. The end of the song then immerses the audience back into the haunting ambiance of the dystopian world portrayed in the performance.

**Conclusion**

In this portfolio of compositions, I have created works that explore diverse horizons from the point of view of a composer and a singer and employ varied approaches to music and stage composition. Within these compositions, I have explored some of the characteristics related to the contemporary opera, particularly its receptivity to various elements beyond conventional norms; although it's important to mention that I am not the only one who has contributed to this exploration. Other composers have previously explored these aspects, which have inspired my own work and played a significant role in broadening the opera genre. These are some of the characteristics which I have employed within the compositions of this portfolio:

- Composition as a collaborative process, involving composer(s), librettist(s) and stage director(s): An example of this approach can be found in *Nacht der Seeigel*, which involved the close collaboration between three composers, merging their individual styles, traditions, and resources to develop a unified musical concept.

- Transdisciplinarity: In this portfolio of compositions, I have incorporated transdisciplinarity, exemplified by the inclusion of instrumentalists taking on acting roles on stage, dancers becoming integrated into the score, and other forms of collaboration. In the case of *Der Kiosk*, the musicians assumed active roles within the scene, not only playing their instruments but also embodying the principal characters of the libretto. By being present on stage, the

instrumentalists engaged not only in musical performance but also utilised spoken voice, singing, acting, and their instruments as props. I employed a form of notation in various segments of the play, facilitating the integration of the stage director's decisions into the musical score.

While composing *The Invention of Sex*, I have explored transdisciplinarity in the creative process, wherein the composer and singer is given the liberty to present her work in close collaboration with a stage director who concurrently serves as both librettist and dramaturge.

- Instrumentalists on stage: In *Der Kiosk* the performers play, sing, and act on stage. In *Mexico Aura*, I have actively encouraged the performers to embrace multiple roles within the opera. The dancers, for instance, not only danced but also contributed to instrumental performances, engaged in dialogue and acted. Similarly, the instrumentalists expanded their traditional roles by playing found objects, speaking, and participating in on-stage improvisations. Furthermore, the stage director played an integral role in making decisions concerning the musical composition, including the integration of bridges between scenes and ideas, as well as the incorporation of costume sounds.

An inherent limitation prevalent in traditional opera lies in the constrained time frame planned for rehearsals, typically not exceeding six weeks. Consequently, there are limited opportunities to extensively develop musical components through

collaboration with the stage director or to experiment with controlled improvisations. This constraint is a consequence of the customary practice of predefining the music for all participants before rehearsals commence in conventional opera houses. However, the production of *Mexico Aura* sought to deviate from this traditional approach. Time was allocated during rehearsals to enable the adaptation of the score and accommodation of the stage director's preferences. This departure from the conventional working scheme facilitated a more collaborative and flexible creative process throughout the production.

- The combination of extended voice techniques and the traditional singing styles: In *Nacht der Seeigel* and *Mexico Aura* the utilisation of extended vocal techniques along bel canto has provided conventionally trained opera singers with an opportunity to explore beyond conventional performance approaches. In both works I have demonstrated how singers can actively contribute to the creative process through engagement in controlled or free improvisations, enabling them to explore various facets of vocal projection with or without amplification. Singers have also been encouraged to interact with electronic elements alongside acoustic instruments, perform vocalisations with or without text, and employ diverse vocal techniques, merging bel canto with other singing approaches like using the chest voice, while also incorporating spoken passages, shouts, murmurs, and other vocal sounds.

My artistic perspective has been broadened by the experience as a singer who has delved into experimentation with diverse vocal techniques, and devoted years of

studying and premiering contemporary vocal pieces by other composers. This expansion, demonstrated in *The invention of sex* and in *Mexico Aura*, has allowed me to approach the performance of my compositions in a manner that fosters exploration of the utilisation of my voice. As I create and perform with my voice, I actively engage with the limitations and challenges that singers encounter when they perform my works.

- The use of extended instrumental techniques and the idea of the creative performer: In *Géante rouge,* I demonstrated the application of extended instrumental techniques to enhance the auditory experience of a conventional orchestra. These techniques, predominantly driven by extra-musical dramatic concepts, serve to enrich the overall sonic landscape.

The notion of the creative performer further opens avenues for exploration, enabling performances that transcend the constraints of written notation. This concept accentuates the musician's capacity for free improvisation, embracing both controlled and collective improvisational elements as integral components of the creative process, as exemplified in select passages from *Der Kiosk,* and *Mexico Aura*.

- Poly-stylistic approach: The incorporation of musical influences from diverse genres serves as a means to expand the traditional opera. By drawing inspiration from genres such as jazz, pop, and traditional music from various cultures, I have achieved an alternative dimension to a conventional opera.

*Der Kiosk* and *Mexico Aura* illustrate this approach, wherein a variety of musical genres converge with contemporary vocal music, either with or without electronic elements. These compositions demonstrate influence of different musical genres, encompassing aspects such as the utilisation of Berio's or Moussong's vocal notation and inspiration derived from the vocal improvisatory practices of composer-performers like Kate Soper or Ken Ueno.

I believe it is beneficial for a composer to collaborate with singers who have experience with contemporary vocal music and feel comfortable engaging in improvisation, interacting with electronic interfaces or fixed electronics as well as exploring various vocal techniques.

In certain productions, like *Mexico Aura,* it became evident that the success of the singers' performance not only relied on a strong foundation in bel canto technique, but also necessitated the openness to experimentation, creativity, and innovative approaches. The involvement of singer Ana Schwedhelm in the production of *Mexico Aura* exemplified such a proactive and imaginative approach. Moreover, the opportunity to utilise my own voice in the performance enabled me to embark on uninhibited experimentation and exploration.

- Various approaches to musicalizing a text, including the musicalization of a text without a specific language. In *Der Kiosk*, the librettist ventures into innovative approaches to textual composition, diverging from traditional linguistic structures that are conventionally set to music. Instead, the librettist

opts for a distinctive method, relying exclusively on an invented language utilising instructions aligned with the overarching musical concept. In this children's opera, the music transcends its role as mere accompaniment; it assumes the mantle of a narrator and invests substantial significance in onomatopoeic expressions.

In *Nacht der Seeigel,* a significant facet of my approach becomes evident in the distinct musical treatment of characters who were not originally part of the libretto but were introduced by the composers themselves (the sea urchins). This exemplifies how music can assume an active role as a character within the storyline of a libretto.

Various methods of incorporating text into music can be observed in different works. For instance, in "Olga and the sea" from *Der Kiosk*, the text is fragmented using electronic elements, creating the impression of the singer engaging in self-dialogue as she prepares to sleep. Similarly, in Mía's song in *Mexico aura*, I recorded my voice, applied multiple filters, and performed alongside electronic components, creating an immersive auditory experience, with my voice as the primary creative tool. This mirrors the effect in *Der Kiosk* where the singer converses with herself.

- The integration of a multilingual text: Incorporating multiple languages into an opera, as in *Mexico Aura*, serves as a powerful artistic choice with numerous benefits. It enhances cultural authenticity by representing diverse backgrounds and settings realistically, allows for deeper character development, and provides a means to convey emotions and stories more effectively. Multiple

languages can introduce variety in storytelling, broaden musical diversity, and foster cross-cultural engagement, making new operas more inclusive and artistically innovative. They can also emphasise global themes, ensure historical accuracy, offering a richer, more immersive, and culturally relevant operatic experience.

- The idea of the expansion of the acoustic instrumental ensembles: In this portfolio of compositions, I have employed non-conventional instruments and incorporated various objects to expand the sonic possibilities within the ensemble. For instance, in *Géante rouge*, I integrated whirly tubes, and in *The Invention of Sex*, glass bottles; plastic materials, cellophane, vocal elements, native Mexican instruments, and electronic components were incorporated in *Mexico Aura*. This utilisation of non-traditional instruments and supplementary objects significantly contributes to the diversification of the sonic palette.

The inclusion of found objects and everyday materials in my compositions serves the purpose of capturing the essence of our contemporary sonic environment and crafting music that resonates with present-day experiences. This artistic approach enables me to capture the multitude of sounds, including noise.

Furthermore, the inclusion of native Mexican instruments holds cultural significance, serving as a tribute to my heritage and acknowledging the profound musical traditions of my country. By integrating these traditional Mexican instruments with

modern composition techniques, I aim to establish a bridge between the past and the present.

In conclusion, the expansion of instrumental ensembles through the integration of non-conventional instruments, found objects, and native instruments of Mexico facilitates the exploration of novel sonic realms, challenges conventional norms, and ultimately results in the creation of innovative music deeply entrenched in our contemporary surroundings.

- The utilisation of non-conventional spaces and the use of technology: As a contemporary composer, I have encountered limitations in the fixed setup of traditional opera theatres. These theatres typically consist of a single stage where the audience faces the performers, singers are usually on stage and the orchestra is in the pit, although many contemporary operas are now being produced in different settings with instrumentalists visible to the audience. Generally, neither the singers nor the instruments are amplified, and many opera houses lack advanced sound systems that would allow the audience to experience the performance from multiple angles or with immersive sound.

In the creation of *Mexico Aura,* I worked in a white box equipped with 23 speakers placed around and above the stage, enabling an advanced sound design that provided the audience with an immersive sonic experience. The performers were amplified and the sound was mixed live, granting the singers the flexibility to employ various vocal techniques and move freely on stage. In the case of *The Invention of*

*Sex,* a monodrama was presented in a concert-like format, with stage direction allowing the amplified singer to move among the musicians, with the orchestra becoming part of the stage design. In *Der Kiosk* the work can be performed both in open spaces and traditional theatres.

While these approaches are not entirely novel, they serve as examples of how incorporating some of these resources into conventional opera theatres in the future could impact the musical outcome and broaden the options for composers, in contrast to operas composed for traditional theatres, utilising exclusively acoustic instruments and offering opera singers limited opportunity for movement.

These are characteristics that come from my personal experience as a composer and singer:

- The integration of the composer-performer: In several of my works, I assumed both the role of a composer, as well as a performer (singer/actor), particularly in *The Invention of Sex* and *Mexico Aura*. I offered insights into the experience of composing for my own voice and engaging in on-stage interactions with musicians and the stage director. This unconventional approach embraces a fluid creative process, where I remain open to modifying or adding elements to the score during rehearsals, influenced by the suggestions from other artists involved. This presented an opportunity not typically afforded to composers detached from the performance aspect.

- Different approaches to composition in one single work: In the development of this portfolio, I have explored various approaches to the composition of music and stage. In *Géante rouge* and *Cambrian explosion*, I demonstrated how to initiate the composition process by taking a drawing as a reference without using any musical instrument in this initial stage of creation. In *Die Nacht der Seeigel,* I composed with the assistance of the piano and voice, while in *Black West, the four corners of the world* from *Mexico Aura,* I utilised the voice as the starting point without the use of the piano. In the case of *Mexico Aura,* I also collaborated with other disciplines that significantly contributed to the overall musical development of the work.

- Integration of women, minorities, and artists from developing countries: As previously mentioned, the integration of individuals largely overlooked in the modern opera is crucial in the creation and recognition of new opera, as it provides an alternative perspective that contributes to the evolution of the operatic genre. In this portfolio of compositions, I aimed to achieve this by proposing new narratives and voices in the themes explored in *Mexico Aura.* In addition, all participants in this production were migrants from the Black and Latino community, which enhanced the collaboration with underrepresented artists in the opera field.

As a migrant woman from a developing country involved in creative endeavours within a European (and U.S. American) context, I enriched each production with my unique contributions and a distinct perspective compared to my colleagues. One of

such contributions was incorporating a wide diversity of musical influences, including my own tradition. The examples of this are evident in *Mexico Aura*, where I blended the sound of traditional Mexican instruments with Western ones, or in *Der Kiosk*, where I integrated the calypso genre, amongst other musical influences.

On the other hand, my perspective led to modifications in the original concept in several productions. In the case of *Mexico Aura*, for instance, the initial plan was to depict a character representing the stereotype of a disadvantaged Mexican woman who migrated to work as a cleaner at a museum. However, I proposed an adjustment to this narrative, advocating for the portrayal of a female artist to avoid the cliché of the migrant as a typical labourer. Another important change I contributed to was to go away from the original idea of the German libretto and incorporate a multilingual approach that portrayed the Nahuatl language as equally important as German and Spanish.

The Future of opera:

As an artist, it is essential for me to make a contribution to the development of the operatic genre to enable and encourage other composers to continue its evolution. In my work, this serves as a starting point that others may further elaborate upon. One potential area of expansion for opera would be collaboration among artists, enabling the various disciplines involved in opera creation to be more engaged in a collective creative process. Vocal exploration can expand through applying the innovations to choral settings, whether it be a virtual or live choir, possibly interacting with electronic

interfaces. In the future, movements of actors, dancers, lighting design, set design, where narratives would emerge from diverse sources and influences from various cultural traditions contributing to the evolution of the operatic genre as we know it today. Another area of expansion involves a deeper involvement in the realm of transdisciplinarity, thereby having even greater freedom to experiment by merging disciplines.

The artistic growth I aspire to involves creating compositions that blend the various elements explored in this portfolio, all while actively seeking innovative approaches through my unique artistic expression, considering the challenges and limitations they might present. Additionally, I hope to create new staged works similar to *The Invention of Sex,* where I can participate as a composer-performer, as well as write the text myself. I envision creating an opera that continues its creative exploration by combining singers from diverse traditions, as well as incorporating traditional or indigenous instruments in addition to Western ones.

Overall, it is crucial for me that my work continues to support musicians, writers, and visual artists who have not had a voice in the history of the traditional operatic genres. With this in mind, I see myself building bridges between cultures and introducing new voices of living authors that can contribute to the enrichment and cultural diversity of the operatic genre. Through the use of my own voice and presence on stage, collaborating with artists who believe in my work, I will continue to pursue creative freedom and, through my voice, achieve something personal, inclined towards exploration and innovation.

**Appendix - Synopsis and program notes**

*Nacht der Seeigel* - Synopsis

*Nacht der Seeigel* (The night of the sea urchins) intertwines a complex narrative through the lives of three distinct characters. The pregnant woman, the fleeing man, and the aged scientist exist in separate temporal realms, each wrestling with their own sense of loneliness and yearning for a deeper connection.

The work unfolds through a series of arias that offer poignant insights into the characters' inner worlds. A pregnant woman expresses her apprehension about impending motherhood. Meanwhile, the scientist, introduced through "Die Verschmelzung" (the Fusion), recalls a mystical encounter with sea urchins, connecting his past experiences to his present isolation. A man struggles with the fear of a mundane, conventional life and flees from his responsibilities.

The narrative takes a dramatic turn with "Die Überschwemmung" (The Flood), a moment that symbolises a cathartic event connecting the characters. The flood, created by sea urchins, is a metaphorical conflict that each character confronts in their own way. After the flood, they engage in a surreal, magical dialogue, emphasising their interconnectedness despite their disparate locations in time and space. The opera explores themes of love, isolation, and human connection, challenging conventional operatic norms with its storytelling and musical composition.

*The invention of sex* - Program note

This piece has four movements: Cambrian Explosion, From a Hundred Flowers Open, The Hunt and Perpetual Spring. The first movement is an instrumental variation on the beginnings of sexual reproduction. The next three movements are three poems that depict the experience of love and sex from the perspective of a tree, a deer, and a woman. All characters are located in a forest telling their story in different seasons of the year. The following lines are the matrix for the first movement from which the rest evolves. These lines were written by the author Aleksi Barrière:

> Until 1,5 billion years ago, life reproduced by cellular division only. A unicellular organism would divide into another similar cell, carrying out its DNA unchanged, and only slow and sparse mutations would allow evolution. But then some bacteria evolved forming 'eukaryotic cells'. These cells could form tissues, combined into multicellular organisms. And some even acquired the ability to mix their genetic material with other organisms to create entirely new individuals. So they would go on a hunt for a mate, someone different, seek out the alterity without which they were incomplete. Nothing would be "the same" again after that: life grew into a perpetual quest, constant exploration, change, adaptation. Such was the invention of sex, and the beginning of the era of the Eukaryotes. Messy, chaotic, wasteful creatures, also ingenious and outwardly splendid. Just the opposite of the elegant density and efficiency of bacteria, a life form to which it seemed that nothing needed to be added, in its solitary perfection. And oh, how we reproduced once we could! We were intoxicated with the possibility to ex-ist, i.e. "stand out of ourselves", unfold, communicate, mingle, transform. Sex led to the so-called Cambrian Explosion, during which the Earth was filled with plants and animals, the wild diversity of life as we know it today, millions of different shapes and forms and sizes and colors. Fabulous flowers, the peacock's train, scents and songs, all expressions of that primal extroversion. Hard-wired into all of us Eukaryotes, from an evolutionary standpoint, as the urge to reproduce, sex became much more than that in complex beings, and often dissociates from it entirely into pure pleasure. It fills all creatures as a force of creativity, of boldness, of sophisticated emotional development, and of bonding.

*Géante rouge - Program note*


*Géante rouge* (Red Giant) was a commission from the Orchestre Philharmonique de Radio France in 2020, premiered in February 2021 at the Pierre Boulez Hall of the Philharmonie de Paris. The composition draws inspiration from the star Betelgeuse, a red giant located in the Orion constellation. The music vividly portrays the life of this star, with its various shades and variations of red light, as well as the motion of its solitary bursts in the emptiness of space. When I was a child, I used to gaze at this star from my window in Mexico City, imagining what it might be like inside and, if it had a voice, how it would speak. The first piece I composed was for piano (Mor), reflecting my intense fascination with Betelgeuse. As I progressed as a composer, I drew inspiration from the musical concept of this early work as an ode to all stars that share the same life cycle. Betelgeuse's explosion also serves as an image of our own sun's distant future. *Géante rouge* is influenced by the writings of Edgar Allan Poe, T.S. Eliot, and Aleksi Barrière. It pays tribute to the work of Pascal Dusapin and is dedicated to my sister, Sasha Om.


*Nothing we had ever done mattered anymore*

*But the elements of our sun scattered through the universe*

*Continue the immense procreation of things*

*Living through the same urge we have to live*

Aleksi Barrière

*Der Kiosk* - Synopsis

*Der Kiosk* is a story revolving around Olga, a woman who has devoted many years to her small kiosk, a cosy place that has become an integral part of her life. Each day, various characters pass by – a man with his faithful dog, a woman deeply in love, and even a mother with her precious baby. They all engage with Olga, sharing stories and fleeting moments. Yet, as quickly as they arrive, they move on, leaving Olga behind within the confines of her kiosk. Her secret dream is to someday escape to the seaside, a place she's longed for.

Then, one unexpected day, fate takes an unexpected twist following an accident that sends the kiosk, along with Olga, on a journey down the river. Eventually, it carries her to the vast, open sea. As Olga steps out of her kiosk, she discovers newfound freedom and happiness. To her delight, she's joined on the beach by those she encountered before making her dream come true.

*Mexico Aura: The Myth of Possession* - Synopsis

*Mexico Aura: The Myth of Possession* is a performance that unfolds within the Berliner Humboldt Forum, a cultural space housing the Ethnological Museum. The Neuköllner Oper, known for its fusion of political and musical artistry, brings this project to life.

The production addresses the complex issues surrounding cultural preservation and appropriation. It's a collaborative work featuring texts by John von Düffel and Eva Hibernia and music composed by Diana Syrse, who also takes on several female vocal roles.

The narrative explores different perspectives. John von Düffel's contribution delves into the story of Claas Relotius, a journalist infamous for fabricating reports. On stage, Relotius becomes a storyteller whose accounts, including tales of landfill hardships and ancient Maya rituals, are met with scepticism, challenging the audience's readiness to accept narratives that reinforce preconceived notions of foreign cultures. Eva Hibernia's scenes focus on the preservation and transformation of culture as they unfold in a museum setting. The narrative features a curator defending her commitment to collecting and preserving artefacts, raising questions about the merits of her stance in dialog with a Mexican artist who challenges her and brings her again back to her roots.

The performance incorporates five dancers who interact with the narrative, guided by director and choreographer Christopher Roman. These elements, along with an evolving array of costumes, transform the stage from the initial depiction of a landfill to a thought-provoking conclusion where participants wear regal attire made from recycled materials.

In essence, *Mexico Aura: The Myth of Possession* offers a multifaceted exploration of cultural preservation, transformation, and the persistence of preconceptions, all set within a cultural venue that sparks dialogue about art, history, and the challenges of representing other cultures.

# Bibliography

Anzola, L. (2012) "Gesture Processes V.2" [Online] Available at:
https://www.lauraanzola.com/gestures [Accessed online on August 18, 2023].

Daskalov, D. (2018). "The Synthesis of Balkan Folk Tunes in the Music of Vlastimir
Nikolovski and Alexander Vladigerov." *UNLV Theses, Dissertations, Professional Papers, and Capstones,* (3238), p. 9.

Floros, C. (2016). "Music as Message." [Online] Available at:
https://www.peterlang.com/view/9783653971644/chap12.xhtml [Accessed online on 18
August 2021].

Foss, L. (1963), "The Changing Composer-Performer Relationship: A Monologue and a
Dialogue." *Perspectives of New Music, 1(2)*, pp. 46. [Accessed online on 28 August 2021].

Graf, M. (2008), "Musik und Erotik" *Eine Kategorisierung des erotischen
Ausdrucksverhaltens in avantgardistischer Klangkunst,* [Online] Available at:
https://static.unigraz.at/fileadmin/_Persoenliche_Webseite/jauk_werner/docs/Musik%20und%
20Erotik.pdf [Accessed online on 21 August 2021].

Mikawa, M. (1962). "The theatricalisation of Mauricio Kagel's Antithese" and its development
in collaboration with Alfred Feussner". *The Musical Times*, Vol. 156, No. 1932 (AUTUMN
2015), pp. 81-90. Published by: Musical Times Publications Ltd.

Miller, Blanco, Castro-Grañen (2006), "Librería de orgasmos". [Online] Available at:
https://www.libreriadeorgasmos.com/#home [Accessed online on 2 September 2021].

Poe, E. A.(1809-1849)."Eureka: A Prose Poem." *New York: George P. Putnam,* 1848.
[Online] Available at:
[https://www.eapoe.org/works/editions/eurekac.htm](https://www.eapoe.org/works/editions/eu
rekac.htm) [Accessed online on 02 September 2019].

Saariaho, K. (2013), "Laterna Magica," [Online] Available at:
https://issuu.com/scoresondemand/docs/laterna_magica_36681/3 [Accessed online on 16
August 2021].

Stegreif Orchestra (2022), [Online] Available at: https://www.stegreif.org/en/who-we-are
[Accessed online on September 05, 2022].

Yun, Du (2016). Retrieved from Pulitzer Prize website:
https://www.pulitzer.org/winners/du-yun [Accessed online on August 20, 2023]

Ueno, Ken. (2022). "Embodied Practice in Ken Ueno's 'Person-Specific' Concertos." The
Oxford Handbook of Spectral Music, edited by Amy Bauer, Liam Cagney, and William Mason.
Oxford University Press, 2022. [Accessed online on 27 March 2024].