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Ritual Dissent
A compositional approach to trees, cycles and rituals

Skriftlig reflektion inom självständigt arbete

Till dokumentationen hör även följande inspelning: disidencia ritual
A la Lunita y la Tierrita por ser mi casa y darme luz
A mis padres por todo el apoyo durante todos estos años
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Introduction

“Cutting down a forest is not only an ecological tragedy; it is literally destroying an archive of historical data.”

V. Gerber Bicecci

When I first read this quote I was in the process of understanding exactly where the powerful idea of composing and creating a work in which the main character was a tree came from. At that early stage of the project, I had not yet found the conceptual support that would give me the necessary grounding to understand the fundamental role that this tree would play in my piece. Trees are beings that collect an immense amount of information about the events that happen to us on Earth and record it just as human beings have recorded the experiences they have lived throughout time. The environmental disaster that has been going on for many years, also caused by humans themselves, and the impact this is having on our planet, is undoubtedly one of the reasons that have led me to want to invite reflection, through my work and research, on other possible ways of coexisting with all non-human beings that inhabit the Earth. As Gerber explains in her quote, the effect of destroying the environment to which we belong causes not only ecological but also historical changes and most of the time irreversible ones. In addition to conceiving trees as indispensable and unique beings, I am interested in how they cohabit with the environment with all other living things. They communicate and intermingle successfully with other organisms—such as fungi, insects, and birds—and cross the level of consciousness that allows them to live their existence most harmoniously.

The power of rituals, in addition to all the symbolism they represent, has been another source of inspiration for this dissertation and the final development of the work disidencia ritual. Rituals are not only part of our daily life but they define, sociologically and culturally, the communal sense of the society to which they belong. It is through the understanding of them in the culture to which I belong, that I have been able to reflect and understand the need for their existence, evolution, and recognition. The creation of ritual dissidence has invited me to approach the conscious introspection of what it takes to create and explore ritualism from a creative, contemporary, and intersectional perspective. The research for this piece is also about taking it to another realm where the human element wants to enter into a true connection with the environment of which it is a part, just as trees interconnect with all other organisms. This piece created based on this

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dissertation is a result of two years of studies in the master's program: Contemporary Performance and Composition—also known as CoPeCo. This piece created based on this dissertation is a result of two years of studies in the master's program: Contemporary Performance and Composition—also known as CoPeCo. This piece has been the result of a creative process that has been largely influenced by the development of this program as it takes place in four different universities and academies in Europe: Eesti Muusika- ja Teatriakadeemia in Tallinn, Kungliga Musikhögskolan in Stockholm, Conservatoire National Supérieur de Musique et de Danse in Lyon and Hochschule für Musik und Theater in Hamburg.

In the first section of this dissertation, I will elaborate on the concepts that relate directly to the piece disidencia ritual, creating a theoretical framework that allows a better understanding of the context of the piece. In this section the concepts that will be found are related to trees and the way in which they grow, I will also allude to the influence of an archetypal tree that I later use as a model for the final piece. Another idea elaborated on in this part is dendrochronology's perception of the record that trees have of the events that occur on Earth, as well as the cyclicity that exists in their rings, and how this connects to the next concept in this section: cycles. The reflection on cycles will go from a general understanding that we are organisms that function, in many ways, in a cyclical manner and further expand the notion of cyclicity concerning breathing and the menstrual cycle, making a connection of the latter with the different phases of the Moon. I also explore the possible consequences that are found while playing the clarinet depending on the moment of the menstrual cycle in which the person is.

Once this section is concluded, I move on to the second section of this dissertation. This consists of a detailed analysis of the final work presented at the Hochschule für Musik und Theater in Hamburg on July 14, 2022, as a result of the final exam of the master's program. This analysis begins by pointing out the reasoning behind the title of the work, since, in a way, this title is contradictory in itself; later I present the model extracted from the archetype exposed in section 1 and open the section on the harmonic part of the piece since this was the starting point for the creation of disidencia ritual. Once the harmony of the work has been explained, I move on to the structure and form of the piece, explaining the circularity in its structure and how this corresponds to the phases of the moon, which are also intertwined with the menstrual cycle. I later discuss how the visual elements of the work were conceived and the trans-collaborative process behind this work by describing the participation of the artists Lucía Aragón and Ana María Bermúdez and how their presence in this work has had a great impact. To conclude this section I mention and develop another important part of this piece: the final performance.

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2 For more information visit: http://copeco.net/
This performance is the achievement of the union of all the elements developed for this piece put in the context of presenting it to the public. Here I discuss the influence of rituals in our current society and what it was like to go through the process of creating a ritual that extends artistically.
Section 1: The state of the art: Trees and cycles

The tree and its rings, a walk into nature

The starting point of my creative process when beginning the development of my Master’s final thesis, *disidencia ritual*, was trees. In this thesis, they become the model on which the work’s structure, harmony, and visual elements are based. One arboreal trait that I was most attracted to is the trees’ ability to record and collect events that have affected them—as they grow, they receive, morph, and become a living history book of their surroundings. They can communicate their life experiences without the ambiguous and disruptive resource of words. Thus, the aural and visual elements of *disidencia ritual* are inspired by and modeled after trees’ forms of communication with others—plants, animals, or fungi—which are radically different from what humans can comprehend.

The tree Archetype, the reference

Throughout time, the tree, in varying forms, has been presented in stories as an ancient archetype that serves as an aid to tell myths, fables, and legends. In her book *Luna Roja*, Miranda Gray refers to the Sacred Moon tree as one of the two common-place images that symbolize feminine energies, the other being the cup or chalice:

The image of the Sacred Moon Tree is very ancient and is present in religious art from sources […] In Assyrian art the Sacred Moon Tree appeared laden with fruit and a crescent moon peeping out from between its upper branches, although on other occasions it was represented by a much more stylized image: a pillar crowned by the moon³.

Here, the Sacred Moon Tree is referred to as an archetype that expands across several cultures, having been used as a descriptive element within legends and myths. The Sacred Moon Tree serves as the representation of a crucial element in my thesis: the feminine energy, the representation, and the understanding of the female body and its particularities.

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Dendrochronology

Time is a complex concept that trees and humans experience in a radically disparate manner. One element that connects the archetypal tree discussed above with the one that is used as a model for *disidencia ritual* is the insight that dendrochronology offers with regard to the passage of time in trees and what their rings can tell us about it.

In Western science offers a way in which we can learn from how trees reflect the happening of events in their lifetime. Dendrochronology—from *dendron* “tree,” *chronos* “time,” and *logy* “science that studies”—is the science of dating trees through their rings, having its origins in the 15th century AD and possibly before. Leonardo da Vinci is often cited as the first notable scientist not only to write about tree growth but also to speculate that tree rings and environmental parameters (such as rainfall) in the growing season might be linked, undressing the history of trees by means of their rings. As Valerie Trouet remarks, there is a direct connection between human and environmental history through dendrochronology:

Figure 1: Graphical representation of the Sacred Moon Tree
Dendrochronology is in a unique position to reveal the interactions between human history and environmental history because it sits right at the nexus of ecology, climatology, and human history.\(^4\)

Dendrochronology’s approach to trees has been a very poetic and inspiring reference for my creative process. The way in which a tree’s experiences are reflected in its rings—affecting their shape, thickness, and color—is surprisingly similar to the way I experience natural cycles: my menstrual cycle, the seasons, and the cycle of the moon, amongst others. In correlation to the understanding of the natural cycles such as the seasons, climate changes, and other environmental causes, trees also experience them in their way. Dendrochronology has focused on investigating this, thus, bringing us closer to a better understanding of trees.

![Figure 2: Diverse transversal cuts from trunks’ trees](image)

Going back to the Sacred Moon Tree, Miranda Gray uses this symbol to refer to another, the Tree of the Womb, which appears in a myth called *Awakening*\(^5\). This mythical tree weaves together the image of the Sacred Moon Tree with the womb, the moon, and

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\(^4\) Trouet, Valerie, *Tree Story: the history of the world written in rings*, Johns Hopkins University Press, Baltimore, Maryland, 2020, p.6

the connection between a woman and her cycle. The established connection between the Sacred Moon Tree and the Tree of the Womb is a reference point for the inquiry about the connection between nature and cyclicity within the female body.

**Cycles within watery animals**

As for every other living being on the planet, cycles are part of our nature. Our cycles regulate critical functions such as hormone levels, behavior, heart rate, sleep, blood pressure, body metabolism, and body temperature. But, are we connected and concerned with the rest of the cyclical elements that surround us? In their book *Bodies of Water*, Astrida Neimanis remarks that the human body is hydrophilic, reminding us that 60 to 90 percent of it is constituted of water—just about the same water-land ratio as the Earth’s surface.

Just as our animal bodies are majorly made up of water, the cycles that keep them living and thriving do not differ significantly from those that occur in the bodies of other animals, plants, fungi, and even environments. These shared vital processes remind us of our belonging to nature—not separate from it. Paying attention to our cycles can lead us to a completely different understanding of our notion about the formation of our bodies. Thus, I find the connection between bodily, environmental, and lunar cycles not only intriguing but also an important sign of the clear need to establish the link between the context they are part of and the lives they support. Menstruating bodies experience a cycle that not only has its effects on other cycles within themselves but is also often found to provoke changes and reactions in the cycles of others.

**Breathing**

We cannot live long if we stop breathing. We can stop eating for up to three weeks. We can stop drinking water for up to three days. We can only live for around three minutes without taking a breath. In just a few minutes of oxygen deprivation, we can cause irreparable damage to our bodies. Breath is an important cycle in the human body and its regulation can be accomplished in various manners. A study from 2001 discusses how reciting prayers and mantras can affect our breathing rhythms:

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Reciting the Ave Maria prayer and yoga mantras enhances and synchronizes inherent cardiovascular rhythms because it slows respiration to almost exactly six respirations per minute, which is essentially the same timing as that of endogenous circulatory rhythms.7

As a clarinet player, I have been able to experience that controlled breath is essential for sound-making. The musician uses their instrument and the music as a mantra that guides the expansion of the breath, its cycle, and the rhythm of the breath. The focus on the cycle of breathing goes even further than the human element of living but the cultural element of playing an instrument. The first thing one needs to learn in order to play a wind instrument, in this case, the clarinet, is to control and expand their breathing.

Diaphragmatic breathing8 is a process of learning, expansion, and repetition that is worked on at a conscious and intense level during the first ten years or so of playing a wind instrument. This process not only establishes a fundamental learning base on how to obtain a good sound quality in a wind instrument but also restructures and defines such a basic cycle/movement in our body as breathing. In addition, breathing defines the position in which the performer works with her instrument, giving her a better body posture. The importance of recognizing this cycle and working on it by understanding how it can be expanded and become more conscious has provided support for this research.

**Menstruation and our moon**

People who menstruate experience two different cycles that form the menstruation cycle—the ovarian and uterine9. During these cycles, there is a series of hormonal changes that make possible the coordination between these two cycles. The menstrual cycle is presented straightforwardly and clinically in this text but some more holistic questions arise: Are these cycles connected to other cycles in nature? How do we relate to them? Going back to Miranda Gray’s book *Luna Roja*, her explanation of the phases of the menstrual cycle is described in four phases: pre-ovulatory, ovulatory, premenstrual, and menstrual. Furthermore, Gray describes the changes that a person who is menstruating is

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8 Diaphragmatic breathing, is breathing that is done by contracting the diaphragm, a muscle located horizontally between the thoracic cavity and abdominal cavity. Air enters the lungs as the diaphragm strongly contracts, but unlike during traditional relaxed breathing (*eupnea*) the intercostal muscles of the chest do minimal work in this process. The belly also expands during this type of breathing to make room for the contraction of the diaphragm.


experiencing while living their cycle, the majority of them quite painful and uncomfortable:

Each month the female body undergoes a series of changes […] which may include variations in hormonal balance, vaginal temperature, urine composition and quantity, weight, vitamin concentration, fluid retention, heartbeat, breast size and turgor, consistency of vaginal discharge, mental concentration levels, vision and hearing, psychic capacity, pain threshold, and many others.  

The changes that menstruating bodies experience throughout each cycle are numerous and naming these changes, as well as understanding them, is the first step towards understanding the great importance of the presence of this cycle in our body and why it is so remarkable. Taking the concept of menstruation into the musical realm, several studies discuss the effects of the menstrual cycle and musical performance. One such study is that of speech pathologist Jean Abitbol. In his study *Does a hormonal vocal cord cycle exist in women?* Abitbol tries to objectively determine whether voice changes accompany biological and/or hormonal changes during the menstrual cycle. Some of the effects of the 38 women with whom the study was conducted confirmed that of 38 participants, 22 had vocal premenstrual syndromes, experiencing hoarseness and voice fatigue. The discussion dealing with the menstruation cycle and the effects it has on playing an instrument has led me to wonder about the changes people who menstruate experience when playing their instrument.

The experience of playing a wind instrument since the age of 11, has made me clearly understand some of the changes that occur (both physically and psychologically) in my body when playing the clarinet while I am menstruating. For the explanation of this personal experience, necessary to understand my work, I would like to expose some of the examples I have found about this subject. An example is seen in the noticeable existence of menstrual cramps. The occurrence of cramps has caused me to reflect on countless occasions, on the impossibility for me to produce the exact timbre of the instrument that I desired and even was asked to produce (from the lack of understanding of my clarinet teachers as well as myself about this topic). This is always easier to control at other times of the cycle when I am not menstruating. Another example I have found is that the differentiation of the contrasting registers (bass, middle, high, and treble) of the instrument is also affected. This happens because there are two fundamental elements necessary to have control of the various registers of the instrument. Both the thrust and tension movement produced in the diaphragm as well as the air velocity are technical

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elements that are part of this activity. And these movements, as mentioned above, are affected by the occurrence of menstrual cramps.

The acknowledgments of these examples in conjunction with some others have arisen in me some questions that would be worth discussing with the clarinet and wind instrument community.
Section 2: disidencia ritual (ritual dissent)

In Section 2 of this dissertation, I will elaborate on the musical and visual representations of the central concepts of disidencia ritual—the archetype of the tree, the cycles of the moon, menstruation, and breathing. Furthermore, I will delve into the connections between rituals—the elements that conform them, their symbolic meanings, and relationships, and the composition process of my thesis piece, reflecting on its artistic, psychological, and ecological implications.

The creation of the material for each part of disidencia ritual

ritual dissent - the title

The word dissent is understood as the formal expression of a partial or total disagreement concerning other individual or collective criteria, with a self-excluding connotation, sometimes, with the established order in society. Thus, in sociology, dissidence would be equivalent to self-exclusion from belonging to a group, such as a community, a party, or an institution of which one is or was voluntarily or involuntarily a member. The combination and dissonance of the words ritual dissent were the origins that gave me an understanding of the importance of community in the society we are living in nowadays. In the culture I come from, rituals represent a great sense of community and belonging, creating and unifying collective memory. However, partly and wholly, dissent can also be directed toward a single thought, specific acts or activities, and even beliefs.

The form in which these two words create friction, commitment, and unconformity in me, is what prompted me to make a ritual that would find its support in dissidence. This dissidence that is replete with symbolism, just like rituals, makes no sense if it is not confronted by a society or a community that rejects it. A dissidence that drives the creative engine unifying the elements presented in this work.

My Tripartite Tree, a subjective understanding of trees

As described in Section 1 of my thesis, the divisions into which the archetypal tree was divided caught my attention and prompted me to expand my understanding of trees in general. One of the differences between the Sacred Moon Tree and the one that I created as a model for my piece is the division of two parts into three parts: the crown, the trunk,
and the roots. As previously mentioned in Section 1, Dendrochronology’s approach to
trees is to get to know them through their wood\textsuperscript{13}, like knowing human beings through
their life experiences, the marks on their skin, and looking for the physical traces of the
events that they lived through. With this scope, I explored the object that, within my
musical practice, relates to trees the most, my own modified tree: the clarinet. This is how
the clarinet became the main sound source of this project—the sonic matter with which
the piece is constructed.

It has always interested me to understand, on a conscious level, what it means to
grow, expand, meet new life events, and keep on living. Claiming a tree as the main
character of the piece by using it as a model pushed me to search for a way in which I
could position myself as part of the environment that surrounds the tree. I had to attempt
to have an experience and understanding of time that went beyond my human perception.
For this, I created a sounding Tree\textsuperscript{14}, a translation of sorts of the rings of a tree into sound,
a process on which I will further elaborate. I made the musical and psychological exercise
of sharing the musical space (harmony) and time (harmonic development and
progressions) with this Tree. My attitude while composing became a crucial element of
the piece. As in a ritual, I had to be fully present during this part of the compositional
process. The sounding Tree and I were both present bodies and selves.

The importance of using the clarinet to give the Tree its sound started with my
realization that the instrument itself is made out of an actual tree and, thus, carries all the
experiences and inscribed memories that this tree or trees must have seen in the past.
Furthermore, the instrument itself with which the work has been created has its
temporality, which is disparate from my own and from that of the tree itself, but at the
same time, it coexists with them in their ecosystem.

Thus, as I mentioned above, my sounding Tree became the basis for the creation of
the harmonic material of the piece, as well as an important visual and conceptual model
for the general aesthetics of the piece. The irregular, circular shape of its rings, its cracks,
and its ecological implications were also constantly present during the composition
process, undoubtedly influencing both conscious and unconscious compositional
decisions.

The compositional process of this disidencia ritual began with the harmonic
structure. Inspired by dendrochronology, I used the image of one transversal cut of a tree

\textsuperscript{13} Read Section 1, Dendrochronology

\textsuperscript{14} From this part of my thesis, the created “sounding Tree” will be named with the capital letter “T”. 
and translated it into an inharmonic\textsuperscript{15} spectrum that served as the harmonic basis for the whole piece. I converted the separation between the rings of the Tree into pitches with a simple code: the visual distance between the rings would dictate the intervals that separate one pitch from the next. Although systematic, this process was also quite freely executed in the sense that I did not accurately measure the distance between the rings of the Tree and mostly calculated it based on the first interval that I wanted the spectrum to have: a perfect fifth plus a quarter tone: Bb\textsubscript{1} (the lowest note of the bass clarinet) and F quarter-sharp 2. These were the images used to convert the rings of the Tree into sound (see figure 3):

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{figure3.png}
\caption{Figure 3: The image on the left was used to draw the Tree’s rings creating the image on the right}
\end{figure}

After choosing the image of the tree trunk that I was going to use, I decided to use its twenty-six rings—a way of connecting my current age with the first twenty-six years of the life of such Tree. For practical reasons, I reduced the number of the rings from 26 to 22 plus the fundamental pitch which, as I mentioned above, is the lowest pitch on bass clarinet (Bb\textsubscript{1}). The reader should think of every pitch as a partial of a whole spectrum of this Tree. Such spectrum represents the Tree as a whole for the first twenty-six years of its life. This was the final result of the inharmonic spectrum:

\textsuperscript{15} The inharmonic spectrum is called and constructed like this because the pitches that follow the fundamental pitch (Bb\textsubscript{1}) are partials of the inharmonic spectrum.

‘Inharmonicity’: The degree to which the frequencies of overtones (known as partial tones or harmonics) depart from whole multiples of the fundamental frequency. [Web Document] Retrieved from https://wwwdefinitions.net/definition/inharmonicity. (accessed on 26 Aug 2022)
The first pitch here is the fundamental pitch of the inharmonic spectrum and the last pitch is the ring number 22. My intuitive understanding has its foundation in practicing clarinet for 13 years. Based on this intuition, I understood that the range of the instrument was an important element to take into consideration and I decided to lower or raise some to different octaves some pitches so I could have a better quality of sound. It can be appreciated that the bigger the distance between two rings, the longer the interval that separates the pitches that correspond to each of the rings. The microtonal quality of the intervals is also based on the intuitive process that comes from playing the clarinet. I had enough freedom to let myself explore which microtonal intervals could work better with the instrument and take a decision based on that. Once I had translated the rings of the tree into a complex inharmonic spectrum, I proceeded to elaborate a series of chords that would serve as the harmonic progressions disidencia ritual, all of which are extracted from the score in figure 5.
In this image, we can see three different types of groups of compilations of rings of the same Tree: the green ones (which represent the trunk), the pink ones (representing the roots), and the yellow ones—which stand for the branches of the Tree. The red line that goes between the sections of the Tree’s trunk, roots, and branches is an arbitrary route that I made to set a harmonic progression within the same spectrum or overall sound of the Tree. Naturally, all of these representations of the different parts of the Tree will share many of the same sounds as they are all ‘partials’ of the same spectrum (which stands as a translation of the whole Tree, as explained above). However, in order to give further variety to the harmonic progression charted above and to avoid it from sounding like a mere filtering of different partials of the whole spectrum, I created different versions of each ‘partial’ or ring of the Tree, thus providing the trunk, the roots, and the branches with different sonic characters despite their sharing a few or several of the same pitches. Furthermore, microtonal transpositions and other processes came into play as a way to bring harmonic variety to my sonic representation of the Tree.

The musical structure of the piece

The structure of the piece is a representation of cyclicity, an element that is present in every practical and theoretical aspect of the piece: the moon phases, tree rings, and menstrual cycle. Therefore, I decided to start and end at the same point of the piece, with the important difference that the ending is the inverted and retrograded version of the beginning. As in nature, nothing repeats the same. The structure of the piece was determined by the full cycle of the moon. I knew that on the 14th of July 2022, in Germany, the day of the premiere of disidencia ritual, the moon was going to be 99.96% visible\textsuperscript{16}. I translated this poetic coincidence into the piece, beginning it with the full moon phase and finishing at the same point. This was the final structure of the piece disidencia ritual:

Sections of the piece and their relation with the phases of the moon

The structure of the piece consists of four different main parts with three transitions between them.

**full moon**: The first part *disidencia ritual* is called *full moon*. The musical material used in this part is named *moon* and consists of the appearance of 13 different voices that formed a variable moon—extracted from the recording of the moon\(^{17}\). The *full moon* part’s duration is around four minutes.

**transition one**: Progressively, between the first and the second part of the piece is where the first transition begins. This part is shorter—three minutes—and less harmonically dense than the first and the second parts of the piece.

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\(^{17}\) See harmony analysis of the piece *disidencia ritual*
third quarter: The name of this part corresponds to the moon phase after the full moon. This part is called third quarter, which is formed by the material of the piece I called tree.

transition 2: full moon: The moon phase after third quarter that happens is called new moon. This part of the piece will be called also new moon. This part’s duration is around two minutes.

first quarter: Right after the new moon phase the first quarter part appears. This part’s name is also called first quarter and its duration is longer and corresponds to the inversion and retrogradation of the tree material, creating new musical material called inverted tree.

transition 3: Before the last part of the piece there is a transition that goes from the inverted tree to the inverted moon. This part lasts for about two minutes.

full moon: The last part of the piece corresponds to the name of the first part of the piece, full moon. The material developed here is the inverted and retrograde moon creating the material called inverted moon.

The harmony in disidencia ritual

The harmonical blocks were constructed based on the fundamental pitch Bb1. I would always have the fundamental and then decided which pitches I found most interesting to create several blocks. From this point, I started working on the sound design. I recorded all the pitches with the bass clarinet and classified them into three different kinds: normal pitch (ordinary pitch), moved-bended pitch (a changed pitch bending it closer to the higher and lower semitones), and bitten pitch (tightening the embouchure cutting some of the natural harmonics of the pitch). The result of this was a recording of a total of 66 differentiated pitches. Once I knew which pitches I was about to use for each of the green blocks (the trunk) I started determining how was I going to create the pink rings—the roots.

For the roots, I decided to have a transposed harmony based on the original one (the green one) generated by transposing everything a perfect fourth plus 41 cents (5.41 semitones) higher, giving me the result of 22 new pitches. This decision was made after trying and listening to several transpositions of the pitches. The same method was used for the yellow pitches—the branches. These were transposed a minor sixth minus 24 cents (7.76 semitones) higher adding another set of 22 new pitches. These transpositions sounded completely different than the original harmony. The result of these new combinations of pitches from the three parts of the tree was these chords or blocks:
Here I have decided what the harmony of the first part of the piece was going to be sounding like. For the first part of the piece—full moon—I wanted to integrate as much as possible the sonification of the moon and I decided to do so by using and manipulating some recordings I found from the actual moon (See fig. 9).

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18 I use the term *sonification* here to refer to the fact that I used the data exiting from the recordings of the moon found and I recreated them sonically in order to integrate them for in composition.
I analyzed these recordings, searching for the predominant frequencies and I would play around with them until finding the best shape for the moon and the beginning of the piece.

I decided on the harmony for the material *moon* based on the connection to the next part of the piece, *third quarter*. These moon pitches were obtained by utilizing a single narrow band in an equalizer (see fig.10) filtering the original recording of the moon,
partial by partial until I had a total of 13 pitches. I decided to create a harmonic block also for the recording of the moon that would serve for the first part of the piece—full moon:

After I listened and explore several possibilities, I knew which pitches could fit with the entrance of the tree. At this point, I started to work on the harmonic transition that corresponded to the second part of the piece—third quarter. These pitches were the result:
I created the material for the *inverted tree*\(^{19}\) by inverting and retrograding the Tree, as well as reorganizing all the pitches. These blocks were the result of this process:

![Figure 13: Representation of the blocks created for the harmony in the musical material *inverted tree*](image)

The material used for the harmony of the *inverted moon* is based, like the *inverted tree*, on the *moon* material but inverted and retrograded. The result of this process is these pitches:

\(^{19}\) The *inverted tree* and the *inverted moon* are not just inverted but also retrograde.
Similar to the moon, the inverted moon has been composed by utilizing a single narrow band in an equalizer filtering the original recording of the moon (see fig.15).

Figure 15: Equilised recording of the inverted moon by using a single narrow band filter
The visual elements of the piece

The visual elements of *disidencia ritual* are created through a transdisciplinary-collaborative process between the artists Lucía Aragón, Ana María Bermúdez, and myself. These elements can be divided into three main parts: the scenography of the piece, the canvas, and the videos.

Figure 16: Compilation of images from the trans-collaborative process

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20 Transdisciplinarity connotes a research strategy that crosses many disciplinary boundaries to create a holistic approach. It applies to research efforts focused on problems that cross the boundaries of two or more disciplines […] and can refer to concepts or methods that were originally developed by one discipline, but are now used by several others. ‘Transdisciplinarity’, Wikipedia [Web Document], Retrieved from https://en.wikipedia.org/wiki/Transdisciplinarity. (accessed on 28 Aug 2022)

21 To see more about her work visit: http://www.lucia-aragon.com/

22 To see more about her work visit: https://anamariabermudez.com/
**The scenography of the piece**

The scenography of the piece, established by Bermúdez was based on the idea of circularity and how to connect the rings of the tree with the main performer—myself—the cycle of the moon—represented by the canvas—and the repetition of the videos—projected in the wood circles. We aimed to have a performative stage within which the ritual process could be brought into. Here, the process of working with the materials was something to take into consideration since we wanted to use as much as possible existing materials—like the wood used for the circles. The creation of the materials is also part of the ritual, as it is how both artists were able to connect and establish themselves within the ritualistic process that makes up the piece.

![Figure 17: Wood circles created for the video projections](image)

**The canvas**

The canvas was created by Aragón. The first impulse for the idea was the previous collaboration between her and me through artistic improvisation. I presented some of the musical material I was already developing for the piece to her and we decided to use this
material as an inspiration for Aragón in her process. After a working process of three days of developing the sound and the canvas, we were able to conceive a final result. The impression that we wanted to project on this canvas was the combination of the four phases of the moon, which would correspond to the structure of the final piece. There is also a white space corresponding to the full moon phase that was intended for projecting parts of the video. This canvas also represents the relationship with the female body and the more-than-human elements\textsuperscript{23}—the animal-non-human hybrid—represented in the lower part of the painting.

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{figure18.png}
\caption{Canvas made for the piece \textit{disidencia ritual}. 2mx2m}
\end{figure}

\textsuperscript{23} The more-than-human refers to everything that circumscribes the human body without excluding it. This concept positions the homo-sapiens into a world full of diverse subjectivities, even encompassing human-related entities such as our intestines’ microbiota and immaterial objects like ideas, traditions, and stories. Definition extracted from: Amaya, L., \textit{Music Composition as a Means to Connect With the More-Than-Human: A Dialogue Between the Works of Walter Kitundu, Liza Lim, and Luis Fernando Amaya}, PhD, Proquest, 2022, p. 12
The videos

The creation of the videos: As mentioned above, we have a total of 25 circles and the canvas—26 circles in total—that correspond to the 26 rings of the tree. These circles were separated into four groups of circles of different sizes and the biggest size corresponded to the canvas:

![Diagram of circle distribution](image)

Figure 19: Scheme of the distribution of the circles of disiendencia ritual

The videos projected are a collection of manipulated images from my family archive, trees, plants, and the presence of human activity in nature. These images were collected during the two years of duration of the CoPeCo program. Each of the circles has its duration and narrative line in relation to the other circles and it was thought to correspond to the moon's phases. During the full moon section, the video is projected only in one of the circles inside the canvas. This video was created in collaboration between Aragón and me. It was inspired by the video previously made for the presentation of the first part of the piece in February at the Conservatoire National Supérieur de Musique et de Danse de Lyon.
During the third quarter, the videos are projected in the twenty-five circles and they follow the musical line that is developed for approximately 10 minutes.

The videos follow, as the structure indicates, a beginning and an end that starts and finishes at the same place. Like the music, the videos are also inverted and they disappear from the 25 circles, leaving just one of them on the canvas for the last part of the piece, full moon’.

The performance

The last part on which I would like to elaborate for the analysis of the piece is about the performative part. The original idea for the performance is based on creating a ritual. As mentioned above, the ritualistic elements are not done just during the performance but rather started to be a part of the piece from the very beginning of the composition process when we were working just with the material.

The conception of the ritual

Some elements took part in the process to determine this piece the way it is:

The role of the moon and its position on the day of the performance were determinant since it was going to be used to create the structure of the piece.

The importance of the colors: three main colors take part in this piece and they are related to the performative and visual parts. The colors were determined and inspired by The Sacred Moon Tree. Based on its representation four figures represent the connection
between the Moon and the menstrual cycle. These figures have been used to represent the
different phases that both the moon and the woman live during her natural cycle. At the same
time, three out of four of these figures are represented by three different colors—white,
red, and black or blue. Gray is explaining all four phases of the moon and the cycle
from this point of view in her book *Luna Roja*:

The "Great Goddess" is represented by three female figures or goddesses symbolizing the feminine
life cycle […] The Maiden […] was associated with the color white. The Shining Mother […] was
associated with the color red. The Witch was the representation of wisdom […] and was associated
with the colors blue or black.

As Gray explains the three colors that represent these figures are white, red, and
black. The colors in the visual and performative elements were used to represent these
figures that are connected to the moon, its strength, and its cycle which also represents the
menstrual cycle.

The *breath*. The performance is divided into two parts: the first part in which the
performer needs to develop her relation to her breathing and the second part—towards the
end of the performance—in which the performer is representing a choreography based on
the Shining Mother and the use of the red color. The breath takes a representative role

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*Figure 21: Images extracted from the premiere of the piece *disidencia ritual*
during the first 20 minutes of the piece since the instructions given to the performer are based on the idea of using the breath to stay in the ritualistic part of it. Using the breath as a means of connection and understanding takes us beyond our body. To meet with one's breath, connect with the body, with the elements that are happening around, and be active in observing all that is happening.
Section 3: Conclusion

When I first started to write my thesis, I found it difficult to put into words everything that this piece has provided me. Getting to know the Tree, both as an archetype and a model for disidencia ritual, enabled a conceptual and spiritual approach that helped me compose this work. As I elaborate on Section 1 of this thesis, one of the main concepts that informed my research in an impactful way was the understanding of the point of view that dendrochronology offers about a non-human experience of time and events. This led me not only to better understand scientifically how trees record the ecology of the Earth but also pushed me to analyze how I, as an organism also inhabiting this planet, perceive and register it. A sense of profound admiration for trees filled me, both on a personal and artistic level, as I begin to understand how essential they are for almost all the organisms that inhabit this planet. In such a way, my artistic scope has expanded in the process of giving myself up to the exercise of creating a Tree as a model for disidencia ritual. The opportunity to imagine and create informed by the Tree’s ways of coexisting with other organisms, allowed me to experience my presence differently while observing, listening, and creating.

One main highlight of this creative process is the development of a closer relationship with the cyclical elements that occupy me as a woman. Considering the conceptual importance of cyclicality in disidencia ritual, exploring the artistic potential of an element as personal as the menstrual cycle has been incredibly valuable for my entire creative process. This has been influenced by my interest in searching for an artistic openness that allows me to find a holistic and politically meaningful perspective. In the process of doing so, I have been able to find practical and artistic reasons for engaging with this bodily cycle, as well as that of breathing, since both affect me directly in my relationship with creation.

Another element that helped me to achieve and understand the composition process of disidencia ritual is the research and reflection on the rituals. In a general way, I have been able to know more deeply about the great influence that rituals have on societies. My perspective is that rituals are a source of creation that allows a society to remain united through a sense of belonging. The search to create a ritual that can connect all the elements that I was interested in—the tree, the cycles, the presence of the moon and its phases, the creation of the music through the tree rings, and trans-collaboration, among others—have an honest and intuitive openness towards the final result of the work.

As an instrumentalist, working with the bass clarinet as the primary sound source enabled me to delve into the timbral and acoustic qualities of the instrument, generating a

24 This is both when I am composing as well as when I improvise and perform with one of my means of creation: the clarinet.
new pallet of sonic colors for myself. This has allowed me to have a familiar starting point in the composition process, enabling me to delve into musical areas that have not been central to my musical practice until rather recently. For instance, the creation of a specific and unique harmonic language for this piece represented one of the biggest challenges. However, my experience and familiarity with the instrument aided me in finding a path to expanding its sonic qualities and bringing them into other musical areas such as the form of the piece, the timbral choices, and, as I mentioned above, the harmony. It could be said that the bass clarinet served not only as an object that produced most of the sounds of the piece but also as a musical partner who informed every aspect of it.

The creation of *disidencia ritual* has given me various artistic opportunities to develop as a composer, clarinetist, improviser, audiovisual creator, and transdisciplinary collaborator. Being able to develop myself artistically in different environments (i.e., four different institutions, countries, cultures, and artistic scenes) where I have been welcomed with honesty and support, has incited me to grow not only artistically, but also on a personal level. To have pushed my limits as a creator using all the resources I have been learning during the past two years, as well as having expanded those I already had, has been undoubtedly one of the most remarkable aspects of the creative process of this piece.

The integration of all the exposed elements in my creative process, the exposure to all the challenges experienced as well as the subsequent reflection and understanding of *disidencia ritual*, are a massive combination of what has been needed to achieve and complete this work and has allowed me to continue with this research if wanted.
Reference List

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Articles


**Appendix**

Video of the premiere of *disidencia ritual* performed at the Hochschule für Musik und Theater Hamburg on the 14th of July 2022.

*Premiere of disidencia ritual (Video Link)*

Elena Perales Andreu: Direction, audiovisual composition, and performance
Lucía Aragón: Painting and video
Ana María Bermúdez: Scenography