CLÀUDIA FERRANDO I PARÉS

ATMOSPHERES

A SYMPHONY OF MOVEMENT QUALITIES

HOME OF PERFORMANCE PRACTICES

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ATMOSPHERES
A SYMPHONY OF
MOVEMENT QUALITIES

CLÀUDIA FERRANDO I PARÉS MA PERFORMANCE PRACTICES

A Thesis presented by Clàudia Ferrando I Parés, to Master Performance Practices. In partial fulfilment of the requirements for the award of Master of Arts in Performance Practices.

HOME OF PERFORMANCE PRACTICES

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SYNOPSIS

In Atmospheres: a symphony of movement qualities I explore how transposing movement qualities to sounds can extend, deepen, and challenge the relationship between dance and music. The use (and abuse) of music in dance triggered my query into this topic, influenced by my experiences in contemporary dance and hip-hop dance styles. Trying to understand the similarities and differences between movement and sound and wanting to conciliate these approaches of dancing to/with/without music, I embarked on a search for sounds supporting dance improvisation, ground of my artistic practice.

In this search, *sampling* became a tool which enabled me to understand and compose music, collecting recorded sounds (samples) and treating them to achieve sonic qualities relating to movement. Coming from a non-musically trained background, I learned sound production DIY, influenced mainly by my dance perspective. I approach sampling as I do dance, as a collection of movements that can be transformed by focusing on the *quality*, the *how* the movement is executed. Sampling is used in *hip-hop* as a musical production strategy to extend recorded music segments (mostly the beat) to give space for dance. I use sampling similarly, extending and magnifying sounds to give space for dancing in improvisation considering a *somatic approach*.

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Somatic approaches are largely used in contemporary dance improvisation, helping the dancer to focus on the execution of movement rather than its outcome, through enquiry and verbal instructions facilitated by the teacher or choreographer. I take the role of the *MC* (master of ceremonies), in charge of exhorting the crowd to dance such-as with *hip-hop's* origin; an inspiration for facilitating dance developing complex narrative and poetic strategies, rhythms and cadences, which expands the possibilities of using language to guide movement.

This multidisciplinary approach allows me to bridge aspects of my artistic practice, as well as expanding and challenging the borders of performing arts disciplines, such as dance and music. Stepping into the field of music through sound production and spoken word, it is a process of understanding dance anew, opening possibilities to reconsider what is dance and what else can dance be.



ACKNOWLEDGEMENTS

This research departs from my dance practice over the last 20 years. The teachers, colleagues, and partners I have been in contact with during these years are part of what comprises the knowledge I have in this field, which I could not start listing as they are so many, but without whom this work would not be possible.

I am very thankful to my supervisor, Jochem Naafs, for his support and advice throughout the thesis writing; as well as to my external mentor, Emily Welther, for her clarity in feedback and the fruitful conversations throughout the research process, which enabled *Atmospheres* to become a body of sound. I am indelibly thankful to Feli Navarro for unconditional help, support and generous technical advice. Also, to Niki Chistoforidou, for persistently coaching and helping me refine in spoken word, spotting and pulling the best out of me through my voice. To Hannah Grosch, for her beautiful voice and craft with the double-bass, bringing nuance to Atmospheres, and also for sharing her expertise.

At the very beginning I was not sure how to carry out this research, shot in the darkness of an unknown field. It would not have been possible without the encouragement and

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inquisitive expertise of daz disley, who shed a light of possibility to a space I discovered to be full of wonders.

And of course, I am wholeheartedly thankful to my parents, l'estima i cura tots aquests anys.

Gràcies.



DECLARATION

I, Clàudia Ferrando I Parés, hereby certify that I had personally carried out the work depicted in the thesis entitled, "Atmospheres: a symphony of movement qualities". No part of the thesis has been submitted for the award of any other degree or diploma prior to this date.



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INTRODUCTION

This thesis emerges from creating sounds correlating and enhancing movement qualities, which is the aim of this research.

I create sounds mainly through music sampling, an operation inspired from the origins of hip-hop, when DJ's extended break beats, the drum sections of funk music in turntables, to make space for b-boys to dance. In sampling, I explore ways to extend music, so it gives space for dancing in improvisation approached somatically. Through the recovery from a chronic injury, I found in *Feldenkrais method* an approach to dance sustainably and pleasurably, and, in improvisation, a field of growth, creation, and thinking; the blending of somatic and improvisation core elements of my approach to dance.

This approach to dance constitutes my practice, the departing ground of this research, influenced by various styles I encountered and practiced over the years. This returned me to the origins of my dance career, when I was practicing *hiphop* and *Latin dances*, where the music is a crucial part of movement which informs the scope of the research.

This time, through *Sound production*, I updated and deepened my understanding of musicality, composition, and

improvisation. Furthermore, this method is now a component of my artistic practice, standing with certain independence from dance.

The use (or abuse) of music in current dance training ignited this research. Perplexed by the lack of acknowledgement to music, trying to puzzle together my knowledge from *hiphop* and contemporary dance, I dive deeply into producing sounds to find alternative ways to enhance somatic dance in improvisation. In improvisation, the somatic experiencing of movement is majorly addressed through verbal language, in form of enquiry or instructions given throughout class or training.

In this research I consider an extended approach to the use of spoken word, potentially giving it more space and being less instructive; inspired by MC's use of poetic language, rhythm, and cadences. This multidisciplinary approach becomes the basis of this research, persisting throughout the thesis.

The following chapters unveil distinct aspects of the research. In the context of study, in chapter 1, I give an overview of the relationship between dance and music, concretely on the dance styles rooted in this research, providing some insight into the methods, practical approaches and their historical, cultural, and social contexts that situate the framework of

the research. Chapter 2 presents the methods I undertook to explore the aims and objectives of the research: dance practice, spoken word, and sound production. Chapter 3 reveals the findings, outlining positive and weak points, summarized all together on chapter 4. Chapter 5 opens discussion on the presented aspects and the possible future directions of this research after the master. Finally, chapter 6 is a conclusion on the thesis. Two appendixes are included with an explanation of two fundamental aspects of this research: the movement qualities and sound effects, which are additional information to help have a more detailed glimpse on the movement and sound production practices of this research, followed by references and end notes.

CHAPTER 1: CONTEXT OF STUDY

The context of this study is situated in the field of dance improvisation, observed through different approaches such as *Gaga movement language*, *Funk-style dances* and its relation to music.

My approach has been practice-based; thus, the emphasis lies in the methodological aspect and the practices that have influenced my dance and sound production. Their historical, social and cultural context are necessary to understand: 1) their possible linkages and differing principles and 2) to give clarity to my approach DIY to sound production. A combination of all these approaches and practices become the theoretical and methodological ground for this research. I consider my embodied knowledge and the practices I engage with not in opposition with theory, but the main ground of knowledge making. The body of research in the performing arts is both the object and the subject, knowledge is always embedded in the artist (Oosterling, 2016).

Dancing **to** music might sound like the most obvious thing to a majority of people, but it is not a straightforward fact. Recently, mostly within *contemporary dance*, we have seen a tendency to move away from music from dancing in response to the breakage from ballet and modern dance, where movement

"attached to specific cultural notions that are reserved for Euro-American artists, and thus the term is fraught with expectations, exclusions, and prejudices." (Kwan, 2017, 47).

Contemporary dance is broadly referred to in the academy as Western concert dance, forgetting that other dance genres are also contemporary. That excludes, for example, hip-hop dance styles, which originate in a different social, historical, and political context, and usually their practices are misinterpreted as they do not belong to institutionalized fields (Schloss, 2009, 8-11). In this thesis, following Kwan's terminology, I refer to Western concert dance when I speak of dance practices derived from modern or post-modern dance, not perpetuating the confusing term of contemporary dance.

Hip-hop is another term that leads to confusion, as it is used to refer both to a cultural movement, a music genre, and it is at times mis-used as a demographic designation (Schloss, 2009, 4-5).² In this thesis, hip-hop is referred as the counterculture originated in New York City in the 70s that included movement, sound and visual practices by Afro-Caribbean, African-American and Latino neighbourhoods. This later would be assigned by Afrika Bambaata as the "four elements" of hip-hop: DJing, MCing, b-boying and Graffiti Writing (Chang, 2005, 90). On the other hand, I also refer to Funk-style dances, which have been misplaced under the label of breakdancing together with b-boying (Schloss, 2009, 60), but which are significantly different in both movement vocabulary and music repertoire. Funk-style dances originated in California around the mid-70s, co-existing with b-boying, practiced both in commercial settings and in the streets. The global phenomenon hip-hop, took the dances and practices associated with this culture out of the streets into dance studios, television, radio, recordings, and eventually internet, which popularized some facets whilst excluding others. One example is rap music, that nowadays is considered in the

¹ With the "No Manifesto" of Yvonne Rainer in 1970, the advent of postmodern dance would later be ascribed, as a period led by the collective Grand Union, established in New York City challenging the prevailing aesthetics of dance that time, namely Ballet and Modern dance and rejected virtuosity, spectacle, or moving and being moved (Kwan, 2017, 43). Thus, breaking with the former dance cannons, meant also challenging dancing to music, something was already challenged before in the collaboration of Cunningham and Cage around 1940's.

² Hip-hop is another umbrella term, used to refer to three different concepts. One is "a group of related art forms in different media (visual, sound, movement) that were practiced in Afro-Caribbean, African-American, and Latino neighbourhoods in New York City in the 1970s" sometimes referred to as "hip-hop culture". The second refers to a form of popular music that was developed out of hip-hop culture also known as "rap music". The third meaning is sometimes used as "a kind of loose demographic designation for contemporary African-American youth, regardless of whether or not they have any overt connection to rap music or to other hip-hop arts (Schloss, 2009, 4-5).

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mainstream as hip-hop, but which only contains the *MCing* and *DJing* (or equivalent) aspects, whose renders it not *hip-hop*. Another example is dance classes labeled as hip-hop merging modern dance or ballet steps, a commodification and appropriation of *hip-hop* as a new trend, still present broadly nowadays.

The foundational elements of *hip-hop dances*, comprising the music they are danced to, the original name of the steps and how they are performed, can only be learned by personal interaction with the founders of these styles.

"there are still elements of hip-hop that are not primarily situated within the mass media, a fact that is rarely reflected in either the popular press or hip-hop scholarship" (Schloss, 2009, 40).

In this research I refer to the knowledge I gained learning from people who learned *funk-dance styles* and *b-boying* in the original places and were devoted to transmitting the culture³ as well as to the literature from Joseph G. Schloss (2009) (2014) and Jeff Chang (2005) who are deeply involved in the *hip-hop culture*.

The *cypher* is a fundamental element of *hip-hop*, which traces its roots to a long-standing tradition, in originating cultures, whereby an informal circle of dancers take turns to dance.

"The circle of onlookers as a competitive dance space has a well-documented history, having been used throughout the African diaspora for dance (Daniel 1995), religious rituals (Epstein 1977), and martial arts (Obi 2008)" (Schloss, 2009, 100).

This practice combines elements of spontaneous dancing with choreographed routine, similar to what jamming is to musicians, a mix of improvisation, competition and mutual support (Schloss, 2009, 55:99). In *Western concert dance* improvisation similar principles are shared: some people dance, whilst others observe.

One of the fundamental differences between dance improvisation in *Western concert dance* and *hip-hop dance* styles is in former the relevance of the somatic experience of the mover (Katan, 2016), (Santos, 2018) in contrast to the importance in responding to the music in the moment in latter (Schloss, 2009, 90).

Approaching improvisation through a somatic perspective is broadly practiced in *Western concert dance* and there are a variety of methods and styles. Somatics is a field within bodywork and movement that foregrounds internal physical perception and experience. The integration of somatic approaches in the dance field happened in parallel with the

³ From 2011 to 2015, in Catalunya and in USA, I focused my training to people who were specialized in funk-dance styles and were devoted to transmitting hip-hop culture closely to their origins, these people were: Manel Cabeza, Kiko López, Kanga Valls, Susana Ayllón, Chris Martin, Shaun Evaristo, among others. I studied closely with Manel Cabeza, Frank Da Costa, and Susana Ayllón, member of their professional education groups in the period comprised 2013-2015.

introduction of improvisational performance in the 70s with the American performance group Grand Union, which gave birth to a number of new dance techniques such as Contact Improvisation and release (Lycauris, 1991, 98). Many artists developed their own approach to improvisation stemming or influenced by this trend. My approach to improvisation is both influenced by my practice as a Feldenkrais practitioner and the encounters I had with choreographers and dancers working with *instant composition*⁴ and *Gaga movement research*.⁵

Feldenkrais is a somatic educational system that focuses on improving movement function and overall well-being through awareness, exploration and gentle movement. Efficiency and effortlessness are at its core, including principles from martial arts and yoga, with the potential of enhancing performance in any field. The focus is on the sensation of movement rather than the outcome of it, rendering the process the main actor instead of virtuosity or skill.

My approach to Gaga and instant composition is inevitably informed by my Feldenkrais practice. In Gaga I appreciate the possibility of maintaining sensual listening similar to Feldenkrais, without having to sacrifice physicality or virtuosity. This allows me to explicitly integrate my Feldenkrais knowledge in Western concert dance. The structure of Gaga dance classes resembles Feldenkrais Awareness Through Movement lessons in that the dancers explore movement prompts verbally instructed by the teacher to trigger kinaesthetic and proprioceptive sensations inspired, at times, by metaphors and imagination. I find the use of imagination to generate new movement patterns linked to a somatic experience fascinating, as I think it allows for continuous discovery whilst being connected with the body during improvisation.

In *Embodied Philosophy in Dance* (2016) Einav Katan elucidates how the use of metaphors in Gaga are not detached from the movement experience but instead used to activate precise actions and evoke distinct physical feelings, correlating sensuality and bodily actions, which renders not all aspects of metaphors imaginary but where elements of kinaesthesia, proprioception, and other stimulus are integrated into the movement research.

Even though in Gaga they are not named as such, tasks based on metaphors and imagination are used to explore the idea

⁴ Instant composition considers compositional elements by means of the work with improvisation, approach associated mainly with choreographers and artists Julyen Hamilton, João Fiadeiro and Mark Tompkins. Instant Composition problematizes the concept of composition, choreography, improvisation, dance, movement, amongst others, of the construction of a corporeality that does not copy the choreographer (Santos, 2018, 169). 5 Gaga is the movement research developed by Ohad Naharin, used as the main training method of the Batsheva Dance Company helping the dancers develop and advance their movement's precision and sensibility. The focal points of the training its sensual inquiry, the direction of the dancer's toward the physical research, and an integration of varied physical inquiries at the same time (Katan, 2016, ix).

of movement qualities. Movement qualities is a broad term used in many dance styles to refer to how the movement is done, sometimes also referred to as texture or intention. In Laban movement analysis (1963)6 the quality of movement is assigned to the category of effort. The tension of the body is altered to match a metaphor and explore a movement task. The way I analyze my movement improvisations to find a language to reflect and communicate how I do what I do is through a methodology I learned under Larry Goldfarb. I am familiar with Goldfarb's movement analysis: SPIFFER (Sequence Path Initiation Foundation Flow Effort Respiration). I was introduced to it during Feldenkrais training as a tool to decode and better understand the structure of lessons. Since 2020 I have been collaborating in transcribing and editing audio recordings of Goldfarb's advanced trainings, which allowed me to closely study SPIFFER, which I include in my dance practice. Goldfarb was trained by Moshe Feldenkrais in the late 70s and studied Laban's analysis with Scott Clark, which became critical for the development of SPIFFER, giving it a very specific and accessible language to observe movement (McCaw, 2015). Nonetheless, it is important to highlight the importance NLP (Neuro-linguistic programming) and cybernetics play in the basis of Goldfarb's movement analysis, and its origins, as it was developed

working with people on the job and seminars for physical therapists. In SPIFFER I find a clear structure to narrow down my movement improvisations and reflect on the different movement patterns I explore. When considering movement qualities in this research I considered the categories of flow, foundation, effort and respiration to observe and determine which aspects of the movement could be transposed to sounds systematically.

In Gaga, for example, common instructive metaphors like "float" or "having a thick ball in the body" are used to create a specific body state that can be iterated and explored in the movement research (Katan, 2016, 45-47). The aim is not to imitate or create an illusion but rather to transform and change the bodily state and observe how these metaphors alter the movement itself (Katan, 2016, 68). In funk-style dances imagination and metaphors are used to create different body states, corresponding to a movement style as, for example, Puppet, Waving, Boogaloo, Vibrating, Air posing, etc. These movement styles use music to create illusory effects inspired by cartoons, characters, or elements that have a distinct body tension, attitude and gestures. Specific tones or beats in the music trigger these movement styles as for example Popping developed by using sharp, rhythmic muscle contractions (called "hits" or "pops") to punctuate large, sweeping, circular motions, primarily performed to the sound of a synthesizerbased funk music (Schloss, 2009, 60). In instant composition,

⁶ Laban Movement Analysis originated in the work of Rudolf Laban, is a practical and theoretical system describing qualitative aspects of movement and interrelations among them (LSSI, undated)

where the focus is on exercising choice within the "present moment" of the dance (Lycouris, 1991, 28-31), the notion of movement quality can relate to the idea that dancer and choreographer Julyen Hamilton refers to as "not losing the beginning" or "being in the constant now", "respect to the movement" and finishing of movement (Santos, 2018, 174-179).

The underlying principles in approaches to the imagination in improvisation might stem from different motivations, but I experience the similarities of altering the body state to access new movement patterns. What I find most striking is the distinctive usage (or not) of music.

In Western contemporary dances the priority is on the somatic bodily experience whereas in funk-style dances it is in being with the music.⁷

For me it is a paradox to participate in Western contemporary dance training and find recorded music being used but generally ignored (largely dependent on the teacher and style). From the practices named, instant composition is consistent with either using live music and then relating with it, or not using it at all. In the training there are not musicians

present, so the practice is generally done without music. In the case of Gaga, or styles stemming from it, there is always recorded music playing but the emphasis is on listening and following the instructions of the teacher, so the music becomes an element of the background. It resembles *elevator music*, generic term referring to the recorded music that plays in restaurants, shops or factories to entertain, which I find very unfortunate in dance training. This is quite often the case in *Western concert dance* training.

This to me questions the necessity of music in dance training and improvisation, and considering alternative music practices that can enhance the somatic experience of the movement without cancelling the music.

Tracing back to the origins of *hip-hop*, *DJ's* extended the instrumental breaks of funk records by using two turntables simultaneously, which they saw was giving space for the dancers. In this I see an opportunity to use operations of sampling to alter and produce music that can be in relationship with dance.

In the following link an explanation of the *Merry-go-round*, the original creation of extended break beats by DJ Kool Herc is shown and its impact in hip-hop history:

https://www.youtube.com/watch?v=xDRLHt5JKe8 (Bringing down the band, 2023)

⁷ I particularly draw from my time training with Manel Cabeza, dancer and choreographer specialized in popping and hip-hop in Barcelona, and his emphasis on the importance of listening attentively to move exactly with the sounds in the music.

Creation of music through alteration of records was not a completely new phenomenon. In the 40s Pierre Schaeffer experimented with tape loops and sound-effects, coined under the term *musique concrète*, pivotal when it comes to sampling, including noise as music composition. This gave birth to musicians experimenting with these operations worldwide which would later give birth to music genres such as electronic music, acousmatic music, hip-hop, among others.

I observe the work of female artists and pioneers in electronic music such as Daphne Oram and Delia Derbyshire. Oram developed Oramics, a technique for graphical sound concerned with sonification of scores. It resembles the manifestation of the imagination into movement, and sound transposition that this research conveys. Derbyshire influenced largely the music world, popularizing electronic music with the theme music of the British science-fiction television series *Doctor Who* (1963), innovatively using tape loops and including voice over and musical instruments with field recordings in her compositions.

In sampling I see extensive possibilities of composing including different treatments such as looping and extending, correlate to qualities I explore in movement. My approach to sampling, not coming from a musically trained background,

is DIY, which I consider it gives me the opportunity to approach composition without a set of idiosyncrasies that might be present as a result of musical training. This approach is coherent with the origins of hip-hop, where the experimentation with turntables (without pre-established music training), taking advantage of accessible technologies, lead to the development of form. In this research, taking advantage of technology available to auto-didactically discover ways of composing music that feeds dance practice, I become self-sufficient: the DJ, the MC and the dancer. This necessity stems from the precarity of the freelance dance scene, where often budgetary constraints preclude working with musicians in live improvisation for training, research or performance purposes. An alternative approach to music production and dance is needed to reconcile the somatic with the responsiveness to music, that combines improvisational approaches from Western concert dance and hip-hop culture, challenging conventional modes of performing and training. In addition to sampling, the poetic use of spoken word will be explored by searching ways to infer somatic experience of movement combining instructive tasks and metaphors with MC'ing. Improvisation in dance is explored as a source of inspiration for the production of sound and generation of spoken word in a multimodal approach exploring further possibilities of facilitating dance with sound and language.

This research is based on three crucial methods developed to explore the translation of dance to sound and language, metaphorically drawn from hip-hop culture: dance, facilitation (MC), and music (DJ); Dance Practice, Spoken Word, and Sound Production, illustrated in this chapter.

Whilst Dance Practice stems from the extensive knowledge I acquired over the years, Spoken Word and Sound Production are approached from a DIY perspective, elements from the former are used to inform the latter. Even if I am not trained as a poet, rapper, musician or sound designer, my decisions are informed on the basis of the practical, theoretical, and professional depths from my dance background, reflecting my stylistic decisions in composition and production.

In Appendix 1 the movement qualities used in this research are explained, clarifying how they are embodied, with both anatomical reference and metaphoric association.

Appendix 2 outlines and gives a short description on the characteristics of the sound treatments mostly used and serves to highlight the relationship between sound effects and movement qualities.

DANCE PRACTICE

During the research I continued my improvisation dance practice to distil and grasp the movement qualities inspiring sound making. To reflect and narrow down the focus of my movement research I choose to concentrate on the aspects of flow, foundation, effort and respiration from the SPIFFER model. The first three categories pertain to what in Laban movement analysis it is considered movement quality. I included respiration, referring to the rhythms and reach of breathing, as it has a potential for sound making. Foundation refers to the distribution of the body's weight in relation to support area, flow is the role of timing and control, and effort refers to patterns of muscle action (Mind in Motion, 2020).

I chose five distinct movement qualities, relating aspects of the music and sounds I uncovered stimulating my movement explorations. These qualities are *float*, *thick*, *spread*, *stretch*, and *shake* (see Appendix 1). The inspiration for choosing these qualities, and not others, and the names I give them, stems from Gaga, as I observed their associated metaphors, were repeatedly given in training⁸, and I find they are fundamental

for preparing the body for dancing, as they activate different bodily states.

The movement research starts by stimulating the movement qualities and engaging with the reciprocal loop between the metaphors and associations I use for evoking a movement quality and the kinaesthetic proprioceptive response (Katan, 2006, 47-64). After having passed through the different movement qualities I am sensorially awake, my body is warm, open and prepared for composing through improvisation. I do not have a designed outline or order of movement qualities when I transition from one to another and how much time needs to be dedicated to each, but rather I allow the response of my body to the movement exploration to determine the direction taken. This adheres both with Feldenkrais and Gaga principles, depending on everyday conditions and how they affect the body, and fostering variability to avoid falling on habitual behaviour. I normally invest between 30 and 90 minutes for movement quality research, and uninterruptedly explore the movement qualities with and without music. With music I curate and arrange tracks to stimulate a body state pertaining to a movement quality, and without music I maintain focus on the internal listening.

I normally have a small pause and then work with instant composition. The duration of the compositional practice varies

⁸ During the period of 2015-2018 I received regularly training from Eldad Ben Sasson former dancer of the Batsheva Dance Company at the Contemporary Dance School Hamburg (CDSH). From 2015 until actuality I participated in various live and online Gaga training classes and workshops for dancers under Adi Zlatin, Alvin Collantes, Béatrice Larrivée, Chen Agron, Kasia Kizor, Matan David, Saar Harari and Tanja Saban.

and depends on time available and the focus of the dance practice. These explorations are mostly done in silence, but I also do them to recorded music and to silence alternately. My intention changes as I am not consciously evoking a certain movement quality but focusing on presence in the moment, letting it inform the movements I am doing. Having prepared my body with the research on movement qualities allows me to compose movement rich in dynamic changes.

I have been sharing and guiding dancers and non-dancers in this method during last year, both in self-organized sessions at ArtEZ and in Hamburg with colleagues, and in organized events.⁹

SPOKEN WORD

Spoken word is a method used for reflection and facilitation of the dance practice, as well as a method for artistic self-expression, taking operations from MC'ing, where words, composed metaphorically and poetically, express the internal reflections of my bodily experience.

In Feldenkrais and Gaga spoken word forms instructions that guide the participants' experience, either through inquiry or directed movement actions, and infers the sensorial experience of the movement. The teacher expresses the sensorial experience of the movement by recalling the sensations they had as they had been doing the movement (in case of Feldenkrais, as the teacher is not doing the movement during the lesson) or expressing their internal sensation and imagery deployed as they do the movement (Katan, 2006, 45).

Spoken word is added to the dance practice or done immediately afterwards as a recalling of the movement quality research. I document these reflections using audio recording in order to later be able to elucidate the knowledge generated, so it feeds the sound production practice. I normally take recorder in hand, or attach it to my body, and start naming and describing the experience I am having or has just happened. I relate both the bodily sensations and the metaphors and imagination associated with the sensations or movements.

An example of this is found under this link, where I inferred *thick*, going through the different associations and sensations I felt as I was moving:

https://soundcloud.com/claudiaferrand/1-thick-brain-storm/s-xmQEJF4LVR4

⁹ Workshop given to ArtEZ's administration members (October 2023). Workshop in Barcelona Institut del Teatre under the frame of a series workshops of *Presència escènica* organized by Xavier Sisquella (November 2023). Classes in Contemporary Dance School Hamburg (March 2024).

Naming makes the experience singular and technical, raising possibilities to establish a relationship beyond the personal experience (Condró, 2017, 12-16). The feedback loop between experience and word, gives discursive order from the chaotic experience generating possible translations.

Spoken word flows, creating a poetic rhythm of its own, leading to a verse or melody. For example, reflecting on *float*, the sentence "las olas que vienen y van" ("the waves that come and go") brought a swaying property emerging from the words "vienen y van" evoking the continuous movement *float* is characterized by. Repeating this sentence over and over at different volumes highlights the movement dimension as spoken words, and it is also a form of looping, involving only technologies of the body, instead of turntables or software.

Originally, I conceived this method as just spoken word, but throughout the research I started implementing writing, to recall the elements feeding the sound production practice, as well as the recurring elements in each movement quality. Writing and reading the writing, I detect the rhythm and rhymes the words produce. When preparing longer phrasing, as some spoken word sections in both audio and the performance, I organize, and compose the words to match what I feel with the movement quality.

In the link below I showcase how I evoked *shake* verbally in the performance:

https://soundcloud.com/claudiaferrand/2-shake-audio/s-JzKJpOt1G4V

Using writing, I also reflect on the parallels between the dance practice and the sound production, using words and also drawings and schemes.

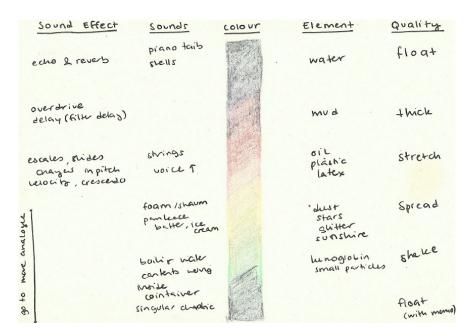


Figure 1. Sketch correlating different aspects of my practice.

SOUND PRODUCTION

The production of sound involves originating, recording, editing, and composing, and includes diffusion in space. The sources of sound consist on instruments, sounds from the environment or made from daily objects, and voice. I use mono, stereo, and binaural microphones to record the sounds, at times attached to a Tascam recorder or to software (Q-Base).

I used *Ableton* (2021) to arrange the sounds, and *Audacity* (2023) for basic edits. Ableton is a software primarily made for live composition, which closest relates to my dance practice based on live composition. Its broad library of effects enables to explore different strategies to alter sound during editing, and live, thus affording great flexibility and capacity to discover which approach I feel more comfortable with when creating sounds.

My first inspiration for sounds relating to movement qualities, came from my experience improvising to music, where sounds trigger a sensation closely related to a movement quality. One example is Brian Eno's *Remastered 1/1* album (2004), in which reverberating elongated piano tunes evoke *float*. Another example the deep synth beats in M83's track *Slight Night Shiver* (2005) accentuating *thick*. These informed

my choice of instruments or effects applied, to achieve a sound like the one I was looking for.

In case of *float* I first played with a combination of four chords where the root note was a C. I found those chords to have a cozy, welcoming harmony, related to my sensation of floating in water. I placed my recorder close to the strings of a grand piano, and pressing the pedal, the sound would have an echoing effect due to the sympathetic vibration existent in the strings and body of the piano. I later emphasized the *echo* and *reverberation* of these tones electronically. A combination of layers of loops enabled continuous changing tones, constituting *float*'s harmony. An excerpt of it is found on the following link:

https://soundcloud.com/claudiaferrand/3-float-teppich/s-jjrvk6dqtbP

In thick I took a different approach, collaborating with Hannah Grosch. I asked her to play the same combination of chords on double bass, describing to her the length and quality I was looking for in the sounds. I amplified the intense vibrating texture of the tones coming from the instrument using *gain* and *overdrive* effects, to add harmonic richness and presence to the sounds. In the link an excerpt of the strings with these effects:

https://soundcloud.com/claudiaferrand/4-strings-doublebass-thick/s-Mt7Lc7bx5a4

In other movement qualities I did not know beforehand which types of sounds I was looking after. In these instances, my approach explored field recording prompted by the metaphors used to guide movement qualities. In *spread* "the sensation of pancake batter as it spreads on a hot pan" is used to guide the muscular activity this quality has. The actual sound of pancake batter on a pan does not correspond with the muscular activity and internal sensation I was looking for, and that led me to multiple trials with materials of different consistencies and applying a variety of effects until I reached a desirable result. To my surprise, recording with binaural microphones held at a distance whilst I scoop ice cream in the bathroom solved the mystery. In the following link an excerpt of this recording:

https://soundcloud.com/claudiaferrand/5-icecream/s-WJAfRz1vXBI

Another approach I used was to explore recording my breathing patterns whilst performing a movement quality. I would record both as I do the movement, and later just the breathing pattern itself. In the case of *shake*, the sound of my breath was part of the cluster of sounds included in the final performance, that can be heard in the following link:

https://soundcloud.com/claudiaferrand/6-breath/s-t1x9XhJO3DG

These are some examples of the multifaceted approach to making, recording and editing the sounds, that later compose *Atmospheres*. In Appendix 2 I give an explanation of the effects I used mostly and the correlations I found with movement.

Atmospheres is the name I give to the composition of sounds from each movement quality. They are composed of layers of samples, which are edited recordings. In the following link the complete composition of the atmosphere float:

https://soundcloud.com/claudiaferrand/7-float-atmosphere/s-cUTm2XN3trT

An important element in sound production is the reproduction of the sound. For most of the research, I worked with headphones during editing whilst knowing I wanted to use more than two speakers in the performance. The choice of speakers instead of headphones was also important, as listening to music through headphones isolates us from the environment (Cox, 2015, 22). In opposition to conventional stereo playback, a four-channel speaker system allows the creation of a sculptural space that generates depth in the mind of the listener (Polli, 2013, 23). My interest is in producing sound evoking movement, thus challenging the diffusion of sounds in space is important. It is not necessary to have more than two speakers to give presence to the sounds, though adding more speakers gives the opportunity

to choreograph the sounds in space according to the quality I am aiming to achieve. *Float*, for example, benefits from a panning effect, which enhances its aetheric quality. Another concern I have is to create a sonic environment such that regardless of listener position, immersion is generated, and therefore positioning of speakers, and elements of the mix such as volume and effects create a condition to experience sound better (Speakman, 2019).

CHAPTER 3: FINDINGS

In the following chapter I unpack the findings separated in subchapters presented in order of relevance for the future developments of this research. My major discovery has been undertaking the methods discreetly whilst unveiling their connection and relationalities, which ultimately informs and sustains a multidisciplinary approach to practice-as-research.

ISOLATION OF METHODS

At the beginning of the research, I did not delineate how much I would use the produced sounds in my dance practice or how spoken words would merge with dancing, assuming it would be relatively natural to use them all together. Merging roles and practices though was very difficult. When I tried to play the sounds whilst I was moving, I could not fully let myself immerse in the sound or the movement, as I was concerned with possible tweaks and alterations I wanted to do to the sound, that were distracting me from being able to be present with the movement. At the same time, still learning to operate both software and hardware devices, it would throw me off the practice when trying to re-arrange the sounds live to match my movement, as it would take me a long time to find the effects and quickly apply them.

A similar situation happened guiding a group of dancers using my practice. Whilst I am accustomed to guiding through alternating spoken word and movement, when adding sound and composing with it live (taking the *DJ* role), my facilitation suffered as I was not ready yet to embody the qualities whilst simultaneously juggling the many variables required of live sound composition.

As the research progressed, I found myself dancing more and more in silence. To produce sound, I would invest hours sitting and listening, without moving a millimetre. For spoken word I would warm up my voice, write, speak and recall the movement research in my imagination.

I felt a need to separate the roles: dancer, *DJ* and *MC*. Clearly separating the practices helped me to immerse in each individually, to embody and find my personal approach. Nevertheless, I found there would be a connection or feedback loop between dance practice, spoken word and sound production even practiced in isolation. Examples of this are the new rhythmic patterns emerging in my dance practice and the increased capacity I found of combining different rhythms with different body parts. In spoken word, I listened to the sonority of the intonation of the words, finding relations to the composed sounds for each movement quality. In sound production, the effects I chose reflect how I approach and guide movement qualities.

The acoustic dimension inherent in words

Preparing for the performance, and coached by Niki Chistoforidou, I explored and discovered the sonic role intonation, articulation and volume play bringing forward the movement qualities (both acoustically in the space and as a call to imagination of the sound and movement). We explored word-by-word, letter-by-letter, the different possibilities of vocal delivery to find out which would enhance the movement quality to the point. Before working with Niki, I was not aware of the qualitative improvement in transmitting movement qualities through the vocal delivery of speech, informed by a theater practice. Words, on paper or spoken, infer sound and movement, and relate to our bodily experience of the environment. As ecologist and philosopher David Abram explains in The Spell of the Sensuous (2017), human language is not purely a mental phenomenon, but a sensuous, bodily activity born of carnal reciprocity and participation. Our discourse is influenced by gestures, sounds and rhythms, arising from the perceptual interplay between the body and the world, belonging to the animate landscape as much as to humans (Abram, 2017, 56). An example of this is "bouncing bones" a phrase I used in the performance referring to shake. The beginning of both words "boun" and "bon" can be intonated so it brings the suspension bounce has, raising and lowering slightly the pitch smoothly when pronouncing the vowels of the first syllable of both words. When saying "bouncing bones" in this way the movement trajectory of

bounce is inferred twice, with intonation, pitch and volume enhancing the movement the words inherently contain.

The sonic and movement aspect of the research is enhanced through *spoken word*. When I explore vocal delivery more deeply, words become more than just vehicles of meaning. Further examples include "crumbling", "splashing", "shiver", "tremble", "vibration", "float", among others.

Sound effects and their relation to movement qualities

In the field of music, words referring to senses other than the auditory are used to describe the quality of a sound, pointing out the intrinsic relationality with other disciplines, relating with our primordial, preconceptual experience, inherently synaesthetic (Abram, 2017, 45). A sound can be "clear" or "muddy", "crisp" or "fatty", "round" or "edgy".

When approaching sound effects, I consider the possible relation each treatment can have on movement drawing parallels to it. For example, a *delay* is a sound effect where a segment of sound is stored and then played back after a period of time, so there is a delay from the first to the second reproduction of the sound. In movement, *delay* for me is a slowing down of the movement from one body part to another, so that the transition of the movement from one body part to another is more obvious whilst continuous. For *float* a sensation of fluidity and continuity needs to happen,

and a *delay* effect achieves both in sound and movement, creating the sensation of ripples and waves.

As I explored every *quality* in *sound production*, I found out which effects were most effective in bringing the movement quality to the fore acoustically, as well as their possible translations into movement instructions. In future prompts referring to sound effects can guide *dance practice* providing new vocabulary to describe movement, offering the possibility to make the practice more accessible for non-dancer participants.

WRITING AND ITS RELATION TO METHODS

Throughout the research I realized the persistent role writing has for me to reflect on my artistic practice. Initially I intended to use audio recording as the sole method to document my research explorations, an element I thought was necessary to prime the auditory and avoid relying on the visual. However, I found using just audio recordings was not efficient. The audio tracks were sometimes long (more than 10minutes) and even if I would name the files with keywords to know to which method and experience of the research they were corresponding, reviewing and tracing the important elements in the recordings was challenging when using non-visual means. Allowing writing to support my research

practices made it efficient. I settled on what for me are the more organic forms of note-taking, sketching, and drawing, which became indispensable elements for the development of methods and reflection.

When it comes to spoken word, writing became a very important element for the generation of performance material. I created the material reciting the words in my head, or out loud, relying on the auditory element words infer, and writing and composing these rhythms on paper. In The Book of Rhymes: the poetics of hip-hop (2017), Adam Brandley discloses the similarities rap has with poetry, that I encounter when practicing spoken word. Rappers create sometimes just by writing or by repetition and memorizing out loud. In rap, the rhythmic component is very important, and the content of speech has to fit a 4/4bar, the main rhythmic signature of hiphop. Transcription of the lyrics is very important, as it infers the placement of accent, pauses and intonation. As Niki and I worked the spoken word parts of the performance, we used written signs in the transcription of the speech as a way of clarifying the rhythmic and tonal aspects: circles emphasize words whilst vertical lines mean pause. Curved lines connecting two syllables means those need to be connected when spoken. This system of scoring enables me to bridge written word with indications of stylistic delivery in a parallel to my use of audio treatments and effects. Below an image example of this transcription made for the performance:

it starts as a small oliver small particles inside trembling, shalling, quiverry. moving up and down left and right ay Csmall visration mat reaches the dest, the sharbers, along the arms to the wrists soft hands crumsting in small pieces boincing bors in all directors. it starts as a small thine that takes the crumbing, tosting, boundy, webbing, rippling, dropping, splashing the limbs to the walls unstoppable, agressive being taken by a shive Linees collapsing to the floor falling down and standing quicking being tossed to the side reacting up with the arms and dropping them sown in ah. (ah). back ripples bouncing and jumping through the room this shive becomes a tornado wildly annotis all joints going hackwire taking many directions losing control

Figure 2. Spoken word shake for performance.

DIFFUSION OF SOUNDS IN PERFORMANCE SETTING

The editing and composing aspect of sound production takes place initially on headphones, as it allows me to be portable when creating and editing whilst hearing distinctively and in high quality. Still, I am considering that the final sounds will be coming out through speakers, and that a translation process will need to take place. Diffusing sound through speakers is challenging as it depends on environmental conditions composed of many variables that are not present when listening through headphones. This process of translation is similar to rehearsal of movement in a dance studio and later bringing movements to a stage or venue where it will be performed in front of an audience. It is a process of transforming the material, so it maintains its quality whilst integrating new environmental conditions, subject to unpredictable components such as the audience presence and position.

In this research, adding further complication, I wanted to transfer the sounds to multi-channel speaker playback to bring more dimension to the sounds, and create an environment for sonic immersion. In the process of transfer, I encountered difficulties in maintaining the quality of the sound and the stability of the mix, based on the multiple layers composing the set, and depending on the environmental conditions of the space of the performance and the type and location of

the speakers used. For example, in *thick* I use low frequency bass sounds for the string samples and beats, sounding very distorted and buzzy depending on the speakers I was using. I had to alter the EQ from all layers of the set to achieve the same balance of sounds I had when I was listening through headphones.

I worked with a 4-speaker system, and to have the chance of covering 3 spatial levels (low-lying down, mid-sitting, high-standing) I set 2-speakers on pedestals and 2-speakers on the floor. I chose to cover different levels as I want to maintain presence and clarity of sounds regardless of the position one occupies whilst listening, like when one wears headphones, but without the hindrance of wearing headphones. In the software interface I route the sounds to the speakers and monitor the volume of each signal. Taking a DIY approach to making multi-channel playback on a theater setting (conventionally used to stereo playback) brought complications. The audio routing setup consisted of: laptop and audio interface, cabling from audio interface of 4 channels in 2 routings of 2 channels each, directed to 2 DI boxes, and cabling to the 4 discrete speakers. The 2 DI boxes though had only mono output, down-mixing each pair of channels and blending them into 1 mono signal each rather than keeping them separated into 4 channels, which resulted in an incorrect speaker configuration in the space, a fact I was not aware and was not visible in my software configuration.

The software displays a visual representation of signal levels, relating the routed signals to their intended physical outputs, which can be misaligned with the underlying system configuration. A couple of hours before the performance, Feli Navarro, technically assisting the performance, noticed how the sound was not coming out the speakers the way I routed them in the software. He quickly found the problem in the hardware and we arranged additional mixers between my PC and the speakers in order to keep the signals discrete so I could then accurately target the locations the mix required. These last-minute adjustments were things I did not know could happen and prove my naivety and freshness in this field of practice. I came across many other stumbling blocks when transferring the sounds from headphones to speakers and facing the multiple variables at play when diffusing sound in space presented me with additional learning opportunities in bringing the work to audience.

BREATH AS A SOUND SOURCE

Through the research I explored the sound of my breath as a possible source for evoking *movement qualities*. When listening back to the recordings, particularly for *shake*, Emily Welther, my external mentor, pointed out to the emotional character it had. My breath is cut, interrupted, agitated, sounding in different volumes, and at some points my

exhalations are mixed with my voice involuntarily coming out, giving an impression not only of the movement I am evoking, but also the emotional state I might be in. Below a link to an audio of the described experience:

https://soundcloud.com/claudiaferrand/8-breath-raw/s-VotCVq0vZcq

Until that feedback, I was not aware of the emotional characteristics a recording of my breath can infer, which made me consider the overall affectual impact the recordings I was composing were having. Integrating considerations on affect in this research would have required different methods and strategies to experiment with and monitor the listener's experience, which I did not planned. This led me to curate the material focusing on my experience of the correspondence between sound and movement and leaving the audience experiencing aside for the moment, which might be considered for the future of this research. The feedback I received from audience members becomes additional information to take into account for the future.

MY ROLE AS A DJ AND MC AND THE BODY IN PERFORMANCE

As I prepared and executed the performance, I decided to focus on my role *DJing* and *MCing* and leave the dancer role

on hold, concentrating on deeply embodying these practices, which could be at risk when juggling with the three at the same time. For the performance my decision was to give priority to the diffusion of sounds and spoken word, the facilitation of the sonic experience my main focus, coherent with the research process, which would have been at risk including dance in the performance, giving that the dominance of the visual has dulls our other senses, especially our hearing, as some authors affirm (Cox, 2015) (Pettman, 2017). As feedback, I received comments on the absence of the dancing body or of my presence as I was playing the sounds. In the frame of a theater setting, I think some expectations were set to expect dance whereby in future I might be more focused to create a framing more aligned with a purely sonic outcome by situating the work in other environments or collaborating with other artists.

The sounds were created from my embodied knowledge of movement and my dance practice, which makes dance present, and differentiates my performance and role as a DJ and MC from how DJs and MCs in hip-hop perform. I did not consider though ways to distinguish and describe those differences, or elements to track the presence of the dance practice in the sounds, which offers potential paths towards the future exploration of the value of producing sound from a dance perspective.

The body in performance is present through the research, tracing from the dancing practice originating the production of sound until the final audio outputs, as well as my vocal delivery reflecting and guiding dance, as showcased in the performance. Body in performance is a continuum in this research, a medium by which the research develops, and not necessarily the main focus of the performance *per se*.

CHAPTER 4: SUMMARY

The research departed from transposing movement qualities to sounds and opened up an array of possibilities to reflect on the relationship between dance and music in a multitude of settings in the performing arts, as well as reconsidering my artistic identity.

In this process I discovered the multifunctional aspect of the three methods I used, not so much about making sounds for dancing as an ultimate goal but instead more about how these practices feed each other. Dancing lost its priority but became a platform for me to understand and approach different disciplines. My multidisciplinary de-disciplined practice grew, embracing new aspects (sound production), elaborating on some facets of my teaching approach and making them an artistic research method (spoken word), and both deepening and redefining my movement practice (dance practice).

A multidisciplinary approach to practice-as-research proves to be effective to transfer the knowledge from one field of expertise in learning another. In this case, taking methods of dance practice and applying them to producing sound and spoken word, de-disciplines both the fields where these practices belong, as well as de-disciplining my dance practice.

CHAPTER 5: DISCUSSION AND FUTURE PERSPECTIVES

How music can be better used in dance training keeps on being a mystery to solve, as in this research I did not have the chance to share my sound practice in a training context and figure out how it enhances or hinders the questioned approaches igniting this research. What I did find are ways of creating music that relate to my *dance practice* and that can be transferred to similar settings (for example creating music for other dancers and choreographers, be it performances or training) or in totally different settings, as sound works in sound art contexts.

Delving deep into these different roles and practices revealed aspects I did not foresee, for example vastly enjoying creating sounds and composing, to an extent that dancing became less relevant. I also discovered recalling sensations and metaphors from my dance practice enough to inspire sound composition, without the need to explicitly move with the sound. The sounds ultimately, became something else than what I originally thought, much livelier than what I had imagined. In this process I experienced great satisfaction producing sound from/for movement, and I will explore this further in future with other's practices. I would like to explore this approach with fellow dancers and choreographers,

finding out which sounds their practices require, both with live composition and recording. Seeing how many ways movement can be transformed to sounds with effects and sampling, I would like to explore the potential of this practice by deepening my engagement with the tools and methods I focused on during this research.

One of the aspects I have been referring to in the three methods has been giving space to the sounds (and movement) produced. The *atmospheres* are composed of many layers of edited sounds, but compared to many musical works (from popular, electronic, or classic musical genres), composed of lyrics and instruments with several processes of editing and treatment, my music is more minimalist. Sticking to some instruments, harmonies and effects parallels to the sampling of breakbeats, where all instruments are removed, except for the drums, which gives space for the dancers to fill in the gaps. Producing sound (and movement, and spoken word) is similar, in that it cannot be too full or there is no space for more to be filled in through other means.

The outcomes of this research, the composed *atmospheres*, can be presented as sound art, which I had not aimed for initially. I realise though, the different approach I bring to this field coming from dance. I performed the piece in *4bid gallery* as part of a sound art event (4S4S - 4bidden SOUNDS 4bidden SPACES) next to other sound artists, which allowed

me to experience my work in another context outside of the master. My sounds are subtle and spacious, compared to more electronic-made, beat-heavy synthesized sounds, as well as a minimalist in terms of hardware compared to the multiple synthesizers and panoply of high-tech gear the other artists were working with. How I think in terms of diffusing the sounds is in "giving them space", placing myself more in the periphery, different to the common DJ setup, placed frontal or centre, watched as they manipulate their devices. Coming from dance, where no expensive gear can hide or enhance your performance, in sound I bring a similar approach.

Working with *Soundsquares* software (2024) expanded the options of composing sounds in space and choreographing the paths the different sounds follow on 4bid gallery's, 12:1 speaker system, which opens the possibility to think of sounds as being choreographed in space and brings more options of exploring movement qualities spatially. I imagine some ways of further choreographing sounds in space live, in ways that challenge the audiences listening experience, possibly working also with dance simultaneously. I would like to explore further challenging performance settings, the role of the DJ, and the content of the sounds in sound art.

I would also like to bring back more sounds of the dancing body. Those were initial steps from the research that I discarded and I see they could be very interesting for my further exploration now that I have gathered editing skills that can enhance the sound, so it concords with the quality of movement.

I want to expand my sample library to have more choice when composing and practice more live composition so it is quicker and easier to use software and hardware at the present moment, in such a way I do not need to rely so much on sequenced material (e.g. *float* or *thick* are 10 minutes of composed multilayered sample whereas *spread* and *shake* are shorter samples I was composing live). Movement vocabulary is attained with years of practice, first through repetition of sequences and phrases, which can later be improvised live, I imagine with my *sound production* practice a similar process can take place.

I would also like to deepen *spoken word* as a practice, working further on words, intonation and rhythm. It has the potential to reveal aspects of dance that remain hidden and bring dancers' personal voices to the fore. I imagine working with dancers and sharing my discoveries with them as a reflective and creative practice.

The DIY approach as a whole in this research nourished me with a lot of learning and strategies, through which I developed my own personal style in *sound production* and my use of voice. There are still many gaps in my knowledge, which surface at moments I bump into challenges of process, which would be different if I would have a more directed approach to learning how to make music. My learning comes from trial and error and I find in this way my knowledge is very much based on experience and on the making.

ATMOSPHERES A SYMPHONY OF MOVEMENT QUALITIES

CHAPTER 6: CONCLUSION

I came to this research with a strong perspective and practice rooted in several dance styles and Feldenkrais teaching, now deepened and revisited, bringing new perspectives gained from working with sounds, as well as a refinement of my vocal delivery facilitating movement through language, expanding my previous knowledge of dance and choreography. Contributions can be made in the field of dance by integrating this knowledge in teaching, research and performance making.

Furthermore, and more excitingly, I am very much looking forward to future contributions in the field of sound art, bringing my perspective and personal approach to sound making based on my dance experience, exploring the possible intersections of dance and music, and finding approaches to move audiences with sounds and my voice. I recall feedback I received after the showing at 4bid, an audience member said they could feel "a shiver" in their body that I was narrating in the locations I was describing as they were listening to it. For me this presents the potential of the boundarylessness of movement and dance, creating sounds that can enable movement and somatic experiences.

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I am not sure how the sounds I make can be used in dance improvisation, considering the contextual frame of this research from a hip-hop perspective. I also do not think the sounds I created fit a social dance environment as the original sampling in hip-hop did, in their mode of igniting dance. For now, I see the different possibilities I can continue exploring and experimenting with, involving sound and movement, weaving music and dance, and working with multi-speaker systems to challenge conventional performing arts modalities, continuing to challenge and question what else dance can be. This research is just the very beginning.

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ATMOSPHERES A SYMPHONY OF MOVEMENT QUALITIES

APPENDIX A

Movement qualities

The movement qualities are inspired by Gaga movement language and informed by Goldfarb's SPIFFER model for movement analysis. Following I describe general characteristics of each movement quality, referring mostly to the flow, foundation, effort, and respiration categories of SPIFFER, though at some points inferring information from the other categories of the model initiation, path, and sequence. An example, "start moving the right hand as if it would be floating in water, allowing it to affect the whole right arm, and let it move in space" shows the overlapping of all SPIFFER categories, happening inevitably when moving. "Start moving the right hand" refers to initiation, "as if it would be floating in water" is what for me is the movement quality, in this case, float, and the metaphor calls for a specific use of flow, foundation, effort, and respiration. In "allowing it to affect the whole arm", still metaphoric language, refers to the sequence (first the hand and then letting it "affect the arm" asks for a progressive change: hand, wrist, lower arm...until the whole arm moves in this movement quality). Then "let it move in space" refers to the path of the movement, where is it happening. My focus is on the quality aspect though, as that helps me have correlate metaphors and sensations to the textural properties I find in music.

I use metaphors, anatomic, and descriptive language to exemplify how I engage with these movement explorations, which can help imagine what I think, feel, and sense as I move. These qualities are not hermetic categories, but rather fluid, better considered as a focus on the movement exploration, where might be that other movement qualities are also being used and at play but having less attention.

Float

Generally, the movement is gentle, normally in circular, rippling or serpentine motions, resembling that of seaweed floating in water. From inside I feel like there is a different sensation of weight, almost like a weightless body, in some way overcoming the pulling weight of gravity (Katan, 2016, 43).

I shift my weight gently and continuously, without holding upright in a definite position throughout. I slightly lift, press, roll on the floor with the different areas of the soles of my feet. At some point, through this process of weight shift, balancing and unbalancing as I stand, I lose track of how much I am actively doing or is *happening to me* by letting my weight off-balance drive the shifts and changes. I negotiate between staying upright and following unbalances.

The flow of my movements is continuous, without clear beginnings or endings, in contrast to when I do a movement and I attend to the ending, internally feeling that is full and concluded (Santos, 2018, 175-176). In some moments the movement accelerates and decelerates but I do not interrupt completely any movement. It is more like fading in and fading out.

I think of every part of my body being soft, and the bones being held, weightless. When I move I do it in such a way that I do not actively contract the muscles to **do** the movement. I scan to find places of tension and let go of it (Feldenkrais, 1964, 5).

I observe my breathing, trying not to alter it, listening to how it goes in and goes out. I let my lips be slightly open, releasing tensing my jaw, and perceiving the flow of air cool and warm my lips. Breathing is in some way also soft, and the sound it makes is very quiet, at times I can not even hear it, it is almost imperceptible.

Thick

Thick, in contrast to float, I perceive the weight of my body, sensing the pull of gravity and exaggerating it, each movement made from a conscious decision to move my mass in space. My musculature might be more visible, the movements sharper and dense.

When I shift my weight, I think of pressing with the feet to the ground. In some moments I might exaggerate it thinking of pressing into the ground, as if the floor would be sand and I could press my feet into it or would be covered in grapes that I squish each step I take. Shifting weight is an intentional activity.

The flow of movement it is as if slowed down due to the resistance enacted through pressing the feet into the floor, and the resistance of my limbs moving through space with the idea of *thick air, moving through honey,* or any other substance that would offer resistance when moving through it.

Sometimes I actively push a surface from the space I am at, the floor or the walls, to feel the sensation of resisting and pushing away from my centre, to then transfer this idea to an imagined substance. Exploring different levels of push and resistance I search for the maximum and minimum range of thickness and the levels in between, which affects the speed of the movement, faster equals less resistance, slower more resistance.

The movements are effortful, actively contracting the muscles. If I contract the muscles for a long time they might shake, and I quickly start sweating and my face flushes. It is demanding to remain for an extended period of time exploring this movement quality, as it is tiring and intense. I chose to contract some body parts whilst others are relaxed, *grabbing at will* (Katan, 2016, 134) and exploring a dynamic interplay between tension and relaxation.

Due to the active contracting in this quality, I hold my breathing, sometimes consciously though most of the times involuntarily. I also notice how my breathing range is reduced, the length of both inhalation and relaxation reduced. Breathing might be audible due to the slight contraction of the vocal cords.

Stretch

In stretch, I consciously pull body parts away from each other or from surfaces around, to create a sensation of pulling and stretching. I think of elongating my body in space, reaching for extreme positions where I can feel a stretch in skin, muscles and other connective tissue. I notice that when I explore this movement quality I end up in some linear shapes, probably inspired by Yoga or Ballet, emphasizing elongation of the body in space.

I think of actively distributing my weight, perceiving each part of the soles of my feet, and sensing their contact with the floor. I keep on changing my position throughout, and when other parts of my body are leaning on the floor I think of distributing the weight I am giving in homogeneity.

I move with the purpose of finding possibilities of stretching in different places and positions moving through space. I move without *locking* into a position, rather I find places of extreme stretch and there I move slightly which releases the tension of the surrounding muscles, giving me the chance to find even more places of opening and stretching. In some ways it is a continuous slower flow, that at moments decelerates almost to a halt and then starts again. As I stretch, I tense and release, contracting concentric and eccentrically, which shortens and lengthens the muscular fibres. I do it by resisting against the motion of elongation and giving into it.

In this quality I consciously breathe out accompanying the release in places of stretching, as that helps me to cope with balancing and discomfort. At times this is supported by imagery such as sending breath into the muscles or imagining them heating up and melting. I also enlarge the length of my breathing out as I find it helps me stretch further.

Spread

Spread is the momentary sensation of letting go the tension my muscles are holding. In some way, this quality happens throughout all qualities in small spans of time, as it is a release of tension, required to move. When I think of it as a movement quality, I emphasize on the sensation of release, of letting go, trying to move through space without tensing or holding the muscles as much as possible. Lying on the floor renders this exploration more possible compared to standing, as it allows to roll and shift without having to hold the weight of the body.

I perceive the areas of my body contacting the floor and I think of letting the weight of my body *drop* or *pour* down into the floor. I try not to resist, but *surrender to gravity* (Katan, 2016. 43).

In some ways it feels like the flow starts with an impulse that decelerates slowly, fading out, correlating with the giving in of the weight and continuous release.

The emphasis is on letting go contracting the muscles, using the floor or other areas to support the weight of the full body or body parts and be able to release holding.

My intention is to expand my breathing so that it supports the releasing of the weight into the floor. I think of slowing and deepening breathing in and out.

Shake

Shake is a very active and vigorous movement quality where I bounce or shake my body in different directions, by loosening and tensing different body parts. I play with the range of motion, sometimes making it small or big, and exploring the quickness or slowness of the shake. I find it is a very rhythmic movement quality that easily warms up my body.

Either standing or in any other position, the area of contact with the floor is not fix but mobile, as I am bouncing or shaking and very small shifts of weight are taking place.

The flow of movement is accelerating and decelerating very quickly and suddenly. If I shake small, the timing of acceleration and deceleration is shorter, if I shake bigger it might have more stops.

Whilst I shake and bounce some body parts are very lose whilst others are very *active*, necessary to wiggle and shake vigorously. For example, I will wiggle and shake the pelvis in many different directions and let the rest of the body be passive and respond to the echoes of the shaking provoked in the pelvis.

I take two approaches with my breathing. Sometimes I let my breathing respond to the shaking, listening to the echoes produced, how the rhythmic bouncing and shaking affects my breathing, catching up for breath. Or I actively *shake* my breath, accelerating and decelerating breathing in and out, moving actively the diaphragm up and down, the breathing initiating the shaking movement. I chose if the breathing is audible or silenced, but if I shake very vigorously for a long time it will be difficult to maintain my breathing discrete.

APPENDIX B

Sound effects

Sound effects are an essential tool, foundational for music production (Wilmering et al., 2020, 1), used in this research to treat the sounds and reflected as a possible bridge to movement. The sound effects I use are mainly built-in audio effects in Ableton (considered a DAW, Digital Audio Workstation), therefore digital audio effects. There are other types of audio effects that do not deploy digital technology, using architectural strategies or through analogue technologies of sound recording and reproduction. In this research a majority of the sounds have been treated with digital audio effects, though in some instances I took advantage of the environment, for example recording in the bathroom.

In the following I describe the digital audio effects I used the most and referred to throughout the thesis. The intricacy of their functioning, physical, analogue, or digital, and their complex history and development escape my expertise, therefore the descriptions are introductory, synthetic, and not exhaustive.

The audio effects built-into Ableton Live have a multitude of parameters (synchronization, stereo/mono, band-pass filters, dry/wet knobs...) allowing nuanced changes in tempo, pitch, frequency, volume, dynamics, and texture (depending on the effect). I will not enter into detail when describing the audio effects, but they can be found in Ableton's website as a downloadable manual in different languages under:

https://www.ableton.com/en/live-manual/11/live-audio-effect-reference/ (Ableton, 2024)

Reverberation

Reverberation is the smooth dying away of sound after a sound source has stopped (Cox, 2015, 27). It is largely depent on the environment and is possibly one of the first audio effects, commonly considered in acoustic architecture. I made recordings in the bathroom precisely to take advantage of this feature, as they are accessible spaces with considerable reverberation due to the reflective surfaces of the walls and objects within it.

Digital reverb relies on reverb plugins, parameters of which are decay (how long it takes for a reverberation to fall by a certain level), early reflections (first reflections occurring when a sound wave hits nearest surface), pre-delay (amount of time it takes for a sound to leave its source and create its first reflection), high/low frequency attenuation (band-pass filter to attenuate frequencies emulating surface properties of walls), mix (adjusting balance between original and reverberation signals) (Shimazu, 2022).

Echo

Echo occurs discretely as a clearly distinguishable repetition of sound, after the sound source (Cox, 2015, 27), for example when clapping hands in front of a large flat wall outdoors (Smith, 2010).

In digital audio effects, is a modulation delay effect letting set the delay time on two independent delay lines, controlled over envelope and filter modulation (Ableton, 2024).

Delav

Delay effects, such as phasing, flanging, chorus or artificial reverberation are built using delay lines, and unit modelling of acoustic propagation delay to introduce a time delay between input and output (Malinverno, 2019).

In software this is generally achieved using a circular buffer analogous to a tape loop, storing the incoming audio signal and playing it back after a certain amount of time. In Ableton the delay effect has two independent delay lines, one for each channel (left and right), resulting in the possibility of providing the effect through a timing difference between channels.

Delay originated in the early 20th century in the world of magnetic tape recordings through length adjustments in the tape machine, deployed by avant-garde composers such as Pierre Schaeffer and Karlheinz Stockhausen. This effect became popular, eventually making its way into recordings studios in dedicated machines such as the roland space-echo, nowadays commonly used in digital plugins, that emulate this effect (Malinverno, 2019).

Gain

Gain is the amount of audio signal (ratio between input volume and output volume) increased by an amplifier, expressed in decibels. Unlike volume, with gain one adjusts the tone of the sound before it gets processed. Gain changes the waveform of an audio, allowing to increase distortion levels (2023, Antares).

Distortion

"Anything that changes a waveform in a non-linear way can be described as distortion." (Raman, 2020). In sound production that means altering or deforming the original waveform of an audio signal, which can be done through various effects such as EQ, compression, time-stretching, among others.

Overdrive

Is a particular form of distortion caused by "pushing" an amp past its capability for producing a clean tone. In Ableton the overdrive effect is based on classic pedal devices commonly used by guitarists, allowing for hard drive without sacrificing dynamic range (Ableton, 2024).

EQ

EQ, is the short form for *equalization*, term used in music production as "the process of adjusting the level or amplitude of specific frequencies in an audio signal, mostly to achieve a clear and balanced mix" (Messite, 2024). I used the Ableton's EQ eight, a three-band EQ, to fine-tune the different frequencies of a majority of my audio material and live voice.

Compression

Compression is used in music production to even out the volume of an audio automatically, based on its settings, reducing the overall dynamic range of the signal input, by detecting when exceeds a specified level, and then attenuating it by a specified amount, narrowing the difference between the loudest and softest parts of a track so that it's more consistent in level (Shimazu, 2022).

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