What Makes You Move? Affordances for Movement Research Facilitation in Installation Art and Dance

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Abstract

This thesis studies artistic practices which facilitate movement research, building on the idea that they contain significant embodied knowledge which is not traditionally studied within academia, as it is non-propositional. This approach is situated within an epistemology of practice, a theory which advocates for the introduction of tacit knowledge in academic discourse and the development of appropriate research methods.

Through this research I explore how artistic practices of movement research facilitation in dance and installation art can be theoretically explicated and developed through the theory of affordances, a perception theory with action at its centre. Employing embodied and autoethnographical methodologies, the research begins with my own engagement in movement research in two cases: the inflatable artworks *Thick, Tree (wt)* and *Awa* by Ludmila Rodrigues and movement classes by OFFprojects.

My experience in the case studies is analysed through mainly Rietveld and Kiverstein's theory of affordances. I adopt their view of affordances as simultaneously material and social and enrich them with critical remarks related to embodiment, to apply it to the case studies' analyses. This way, the different types of affordances for movement research employed by the artists are detected, as well as the ways the audience is solicited to engage with them. This results in the compilation of a "toolbox", a theoretical framework of affordances for movement facilitation. This framework is intended to contribute to the explication, transfer and development of embodied knowledge on movement research facilitation in artistic practices.

i

Preface

This research is about things that, to me, appear to be self-evident.

These convictions come from my experience in dance; I have had ballet and contemporary dance classes, next to a few other dance endeavours, since early childhood. They also come from my experience in architecture; I have learned to design for bodies, to determine how they should move in and interact with built space, and I have also studied, through theory and design, how to combine the body and the space, learnt about the senses and attempted to address them. Also, from my experience of working with an installation artist who is so determined to address the body of the audience that she has turned this phrase into her artistic pseudonym. And, finally, from my studies in Arts and Society, becoming part of the academic discourses around embodiment and looking for the place of my own material body in them.

This thesis is a result of my determination to put body movement in the spotlight, to express how and why I find it valuable. Finally, it is my attempt to put into words what it is that I have come to know through my body in the above-mentioned experiences about how to *move* people.

Table of Contents

Abstract	i
Preface	ii
Table of Contents	iii
Table of Figures	iv
1. Introduction	1
Methodology	2
Case Studies	5
[Case 1] - Inflatable Installations by Ludmila Rodrigues	5
[Case 2] - Movement Classes by OFFprojects	6
Research Questions	7
Chapter Outline	8
2. Theoretical Framework	9
Movement Research	9
Tacit Knowledge	12
Theory of Affordances	14
Conceptual Summary	19
3. [Case 1] Inflatable Installations by Ludmila Rodrigues	19
Affordances and Installation Art	20
Encountering the Inflatables	24
Material Affordances for Movement Research	27
Skills Affordance Solicitation	29
Discussion	31
4. [Case 2] Movement Classes by OFFprojects	32
Affordances and Dance Improvisation	33
Participating in the Movement Classes	36
The Body's Affordances for Movement Research	38
Social Affordances for Movement Research	41
Instructions Affordance Solicitation	43
Discussion	45
5. Collation Bringing the cases together	46
Tools Summary of Case Studies' Affordances and Their Solicitation	47
Application Cross-analysis and Tool Combinations	48
Discussion	51
6. Conclusions	52

Reference List	56
Appendix – Case Study Reports	59
[Case 1] Inflatable Installations by Ludmila Rodrigues	59
[Case 2] Movement Classes by OFFprojects	67

Table of Figures

Cover Image: Exploring movement with Awa. Photograph by Ludmila Rodrigues. 2023.	
Figure 1 Visitor experiencing Thick.	5
Figure 2 The artist testing out Tree (wt) for the first time.	5
Figure 3 Exploring movement on top of Awa.	5
Figure 4 OFFprojects collective in a moment of practice.	6
Figure 5 Visitors exploring different working positions inside The End of Sitting.	18
Figure 6 Lying on one of the blobs created for Second Landscape by Ludmila Rodrigues.	24
Figure 7 Trying out Thick during its creation.	26
Figure 8 Visitor experiencing Tree (wt).	26
Figure 9 Becoming entangled with Awa.	26
Figure 10 Immobilisation inside the fully inflated Thick.	27
Figure 11 Trying to move the enormous volume of Awa.	28
Figure 12 Tree (wt), in its semi-inflated state.	30
Figure 14 Dancer moving along with installations in Interval.	37
Figure 15 Doing and Undergoing.	51

1. Introduction

What makes you move?

With this simple question as its starting point, this thesis discusses movement research and its facilitation through artistic practices. However, the definition of movement research requires the posing of yet another question: *What can a body do?* In their almost homonymous book, Ben Spatz poses this question as an entry point to an open-ended research, one whose subject takes on the form of embodied knowledge or, as Spatz refers to this type of knowledge, technique (Spatz 2015, 16). Going back to the original question, this thesis focuses on exploring how artistic practices can *make you move*, that is, how they facilitate movement and its research. The analysis of these practices' expertise is situated in a wider epistemology of practice. This is a line of thought which advocates for the validity and value of the tacit knowledge inherent in practices and the idea of practice as epistemic; as a site of knowledge development and dissemination. This, in turn, aligns with urgent concerns around the role of the body in science and academia, especially in the humanities. It also aligns with propositions for the questioning of disembodied ideas which dominate academic research, such as objectivity, generalisability and the propositional nature of knowledge. Hence, this thesis presents an embodied, situated study of how movement research is facilitated in certain artistic practices and attempts to express this study in theoretical, academic terms.

It cannot be contested that movement research could be studied through a wide range of practices, from yoga and martial arts to competitive sport and dance therapy. However, drawing from my own experiences, having practiced dance since childhood and, later, collaborated with installation artists, I choose to focus this research on the artistic disciplines of dance and installation art. Therefore, I analyse the case studies of Ludmila Rodrigues' inflatable artworks *Thick, Tree (wt)* and *Awa* on the one hand, and of the weekly movement classes by the performance collective OFFprojects on the other, assessing both cases as territories for movement research. These case studies present two distinct approaches to movement research and its facilitation through artistic practices, thus creating a more comprehensive notion of movement research as a research subject. Attempting to articulate these approaches' know-how as accurately as possible in the scope of this thesis, I analyse them through the theory of affordances. In recent developments of this theory, affordances are defined as the characteristics of an environment which provide possibilities of action for an agent within it (Rietveld and Kiverstein 2014, 325). This is a perception theory which weaves together the material and social nature of the individual's environment. Affordance theory's focus on the possibility of action, which directly corresponds to the notion of movement in this research, makes it particularly suitable for the study of movement research and its facilitation. Through its application on my own experience of the case studies, I explore the ways these artists create affordances for movement research and how they invite the audience to engage in them.

Methodology

Having presented the topic of this research, it is made clear that its subject is movement research itself. Its aim is to verbalise the experience of movement research, thus expressing the knowledge inherent in the practices of the artists under study. This is knowledge located within the body and conveyed through embodied practices and, therefore, its research method needs to be embodied as well.

Embodied research, as opposed to other methods of qualitative research, focuses on the "nonverbal, physio-emotional elements of an experience", which offer a more nuanced viewpoint on the latter (Frank Tantia and Kawano 2019, 173). While it was popular as a mode of research mostly in disciplines such as drama, dance or physical education, in the past decades it has also gained popularity across the humanities (Leigh and Brown 2021, 1). In its application, embodied research does not entail

specific methodological tools, but is rather defined by its emphasis on the body as the tool and object of research (Spatz 2017, 6).

However, the process of putting embodied experience into words is not at all straightforward. One of the basic premises of embodied or, generally, tacit¹ knowledge is that it cannot be precisely translated. Once its nature from a "knowing how" changes into a propositional "knowing that", it is no longer what it was, a practical ability (Adloff, Gerund, and Kaldewey 2015, 13). Some research methods are, nonetheless, more suitable for the study of tacit knowledge than others, as they can secure the most direct access to the experience under study itself; one of them is autoethnography. Through its use, the problem of "verbalisation" (ibid, 148) which is encountered in methodological tools such as interviews, can be overcome. In an interview setting, the researcher gains access to an embodied experience through the sayings of the interviewee, in which the embodied experience has already been translated into words, inevitably losing some of its aspects. In autoethnography, the researcher gains access to vital aspects of human experience through the actual performance of specific practices in real time and space and is thus able to make direct associations with the theoretical concepts they wish to employ in their research. This way, the distance between embodied experience and its theoretical analysis is minimised, allowing for a larger congruence between the two.

This relation between lived experience and theory is the key working mechanism in autoethnography. According to Stacey Holman Jones, a key writer in critical autoethnography, the combination of theory and personal story manages to present theoretical insights "in context, in practice, and performance, in people's lives" (Holman Jones 2016, 5). This theoretical framing, namely, "looking at experience analytically", is what makes autoethnographic narratives academically relevant (Ellis, Adams, and Bochner 2011, 276). On the other hand, what distinguishes autoethnography from other qualitative

¹ Embodied knowledge is an area of tacit knowledge. It refers to somatic knowledge, bodily know-how. Other types of tacit knowledge include relational and collective knowledge, according to a classification by sociologist Harry Collins (Collins 2010).

research methods is that, apart from the analysis of lived experience, autoethnographers must also consider ways in which these experiences and their understanding can be conveyed to the readers. In fact, the focus of autoethnography shifts from the accuracy and generalisability of analysis to the production of accessible texts that have an impact on their reader (ibid, 283).

Taking into account the above-mentioned characteristics of embodied research and autoethnography, they are selected as suitable methodologies for the fieldwork, analysis and expression of this research. My methodology, borrowing from both embodied research and autoethnography, begins with my bodily engagement with each case study, experiencing and analysing it simultaneously. This is followed by the composition of evocative reports, conveying each experience as fully as possible. Then comes the analysis of the case studies through the theory of affordances, which is finally presented in the form of an amalgam of my personal experiences and relevant theoretical observations. This follows an autoethnographic idea of academic writing which presents, next to the conclusions of the research, an insight into my embodied understanding and experience of movement research in the case studies.

Case Studies

[Case 1] - Inflatable Installations by Ludmila Rodrigues

(link to artist's website)



Figure 1 Visitor experiencing Thick. Ludmila Rodrigues. Thick. 2020. From the artist's website. https://www.tinamustao.com/2021/02/27/thick/



time. Personal photograph. 2021.



Figure 2 The artist testing out Tree (wt) for the first Figure 3 Exploring movement on top of Awa. Photograph taken by the artist, Ludmila Rodrigues. 2023.

Ludmila Rodrigues is an artist deeply interested in the body and the senses. During my internship with her in 2020-2021, I participated in the development of three inflatable installations, two of which are included in my case study: *Thick* and *Tree (wt)*. These installations are meant to inflate around the visitor's body, applying gentle pressure to it and recreating the physical conditions of a hug. The third artwork in this case study, *Awa*, is what the artist calls a "blob", a large, semi-inflated, concave inflatable created for movement. All three artworks are included in the case study, as they allow the detection of different affordances for movement research in inflatable installations through their different designs but also their use of the same primal matters: ripstop polyester textile and air. Engaging in movement research with these inflatables, I explore the potential of facilitating movement through installation art, something which is not usually pursued in this discipline.

[Case 2] - Movement Classes by OFFprojects

(link to classes)



Figure 4 OFFprojects collective in a moment of practice. OFFprojects. From the collective's website. <u>https://offprojects.nl/practice/</u>

The second case study of the weekly movement classes by OFFprojects, is researched here as indicative of movement research in the field of dance improvisation. The fact that these classes are open to non-dancers allows for movement research that exceeds the boundaries of dance techniques, aligning with my research's intended focus on movement research as the creation of new movement

technique, rather than the practice of existing ones². On the other hand, my affinity with contemporary dance and improvisation already grants me a solid embodied knowledge foundation in the field of dance, which allows me to examine more deeply the happenings during the classes as well as my reactions to them. While a lot has been written about dance and improvisation in the past decades, an analysis of movement improvisation through the theory of affordances can contribute to the creation of a concrete theoretical framework to express the field's tacit knowledge. According to Christian Kronsted, practice scholar and dancer, this concrete framework is much needed to overcome the mystical language which surrounds dance practice and theory (Kronsted 2021b, 172).

Research Questions

Therefore, the research focuses on the following question:

How can the theory of affordances help with the articulation and development of embodied knowledge of movement research and its facilitation in installation art and dance?

and sub-questions:

How can the theory of affordances be informed by embodied practice studies, in order to correspond better to the subject of movement research?

Which affordances for movement research can be traced in the cases of Rodrigues' inflatable installations *Thick, Tree (wt)* and *Awa* and which in the weekly movement improvisation classes by OFFprojects?

How are the visitors/participants solicited to engage in the aforementioned affordances for movement research in each of the case studies?

² The difference between the creation of new technique and the transfer of an existing one is further discussed in Chapter 2.

Chapter Outline

After this introduction, Chapter 2 presents the theoretical framework of this thesis. It starts with the definition of movement research in this thesis, framing it through Ben Spatz's epistemology of knowledge. It goes on, introducing the discourse around tacit knowledge and the difficulties in its research and explication, and closes with an elaboration of the theory of affordances, its main discussions and concepts, as well as some of its applications in the artistic disciplines under study. Chapter 3 focuses on the inflatable installations Thick, Tree (wt) and Awa. Initially, an overview of RAAAF's approach to artistic installations and affordances is presented, and complimented by some critical remarks on embodiment. It is followed by the presentation and analysis of the case study, focusing on the material affordances of the inflatables for movement and how they solicit the visitor through skill-affordance loops. Chapter 4 focuses on the weekly movement classes by OFFprojects. In its first part, Christian Kronsted's application of the theory of affordances in dance and improvisation teaching is presented. This is followed by the analysis of classes, locating their bodily and social affordances for movement research and the ways these are made relevant to the participants through instructions. Then, Chapter 5 presents a combined view of the two case studies' analyses, compiling a "toolbox" of affordances for movement research facilitation and illustrating its application in a crossanalysis between the case studies and two more examples of artistic practices facilitating movement research. Finally, this research's conclusions are presented in Chapter 6. A brief summary of the abovementioned observations is presented and followed by an invitation for the expansion of this theoretical "toolbox" and some critical notes on the subjective nature of this research and its topic.

2. Theoretical Framework

In this chapter I ground my research in the academic discourses of practice studies, tacit knowledge and affordances. This framework is presented with the aim of clarifying and deepening this thesis' definition of movement research as an embodied practice, to understand the nature of the knowledge it develops or transfers, as well as the value and difficulty of the explication of this type of knowledge. Finally, my understanding of the theoretical framework of affordances is presented as a way into my analytical process. Filtering the vast discourse that has been developed on affordances, I introduce the aspects of this theory which are more relevant to my experience of the case studies, as well as to the conceptualisation of movement research introduced in the first sub-chapters.

Movement Research

"What can a body do? It is a practical question, a question of doing. It provokes not one answer but hundreds, thousands, millions of answers." (Spatz 2015, 9)
The term of movement research, as employed in this thesis, refers to an embodied, personal exploration of one's own body movement, its limitations and abilities. It can be defined as practical research responding to the question of what a body can do. While this is a topic quite central to performance studies as well, I find it more suitable to ground my research in practice theories and, especially, in the epistemology of practice elaborated by Ben Spatz.

Since the 1970's, a part of the humanities and social sciences have shifted their interest towards practices, that is, "towards everyday ways of doing things that are limited in time and space" (Leezenberg and de Vries 2019, 269). This shift has come to be known as the practice turn. Practice theories have their origins in linguistics, particularly the philosophies of Ludwig Wittgenstein and John

L. Austin, and have largely been developed by sociologists, a major contributor being Pierre Bourdieu³. The entire practice turn came as a response to both structuralism and subjectivism in the social sciences, with the former supporting that human action is defined by large-scale social structures and the latter supporting that it relies on the individual's agency and judgement (Schatzki, Cetina, and von Savigny 2001, 10). The study of practices was introduced as a compromise and combination between these two approaches, and considered embodiment as an important dimension of the human experience. "Whereas philosophers and social investigators once cited mental entities such as beliefs, desires, emotions and purposes, practice theorists instead highlight embodied capacities such as know-how, skills, tacit understanding, and dispositions", Theodore Schatzki notes in his introduction of practice theories (Schatzki, Cetina, and von Savigny 2001, 16). It is within this discourse that embodied practices such as movement research can be studied as socially, academically and epistemically valid and relevant topics.

This epistemic dimension of practice is one of the main concerns in Ben Spatz's work. Spatz is a scholar and practitioner of contemporary theatre, dedicated to the development of new artistic and embodied research methods. Their work belongs to the field of practice theory, with a strong orientation towards embodiment. In their book, *What a Body can Do*, Spatz presents an elaborate conceptual framework for the epistemic dimensions of practice. In it, the concepts of technique, practice and research are defined in a way that represents the complexity of embodied knowledge. These concepts allow for a clear definition of what movement research is in the context of this thesis, what its subject is and how it manifests itself in the artistic practices of the case studies.

In Spatz's epistemology of practice, one of the fundamental propositions is the epistemic relation between technique and practice. Technique, on the one hand, is registered as a form of embodied

³ For more information on the history and development of practice studies see: Leezenberg, Michiel, and Gerard de Vries. 2019. "The Practice Turn." In *History and Philosophy of the Humanities : An Introduction*, 269–88. Amsterdam: Amsterdam University Press B.V.

knowledge, the "transmissible and repeatable knowledge of relatively reliable possibilities afforded by human embodiment" (Spatz 2015, 16). On the other hand, they use the term practice to refer to any particular instance of body movement which is "structured by knowledge in the form of technique" (ibid, 40). So, for example, ballet can be considered an area of technique, while my performance in yesterday's ballet class is considered a practice. In this sense, practice becomes ephemeral and situated while technique is repeatable and not bound to any place, time or person. As a form of knowledge, technique can be developed and transferred from person to person through the repetition of concrete practices. Training, which is the transfer of technique from a person or a community to another, is one of the major elements of technique. However, the main focus of this thesis will not be on the transfer but, rather, on the creation of technique; what Spatz refers to as research on embodied technique.

Movement research in this thesis constitutes research on embodied technique, as it refers to the development of new embodied knowledge of movement through concrete practices of investigation and exploration in the encounters with the inflatables and the movement classes. Research on embodied technique, generally, has an at once relative, material and social nature, as its topic "involves a detailed and context-dependent negotiation between socially defined or symbolic meaning and the concrete possibilities offered by the material world" (Spatz 2015, 63). Considering that practice theories conciliate the subjective and social (structural) views on human activity, this research acknowledges how individual practice reflects and influences collective practices and social structures. However, it focuses on the study of movement research from the viewpoint of the individual's (my own) embodied experience.

Another central concern of this thesis is the position of the body in embodied movement research. Within the practice turn, handicraft and scientific experiments have been extensively studied as practices of skilled engagement with the emergent properties of materials (Spatz 2021, 258). While Spatz's epistemology of practice applies to such cases as well, they point out the importance of prioritising the body itself as a research object, and not only as a means for interaction with the environment. They advocate looking into human materiality before looking into our engagement with the material world, supporting that "it (the body) is the first site at which the dialogue between agency and materiality takes place" (ibid, 261). The research presented here embraces the idea of embodiment as the first affordance and, therefore, it investigates movement research from the perspective of the body.

Tacit Knowledge

"Imagine that you wanted to study what it feels like to walk through a forest. You gather all your equipment, find the right time of year, time of day . . . then sit next to the forest and *talk* about it. [...] you would still not know what you actually *feel* as you are walking through the forest." (Frank Tantia and Kawano 2019, 175; emphasis added)

The knowledge gained from walking through a forest, from taking dance classes or from riding a bike is tacit, meaning it can only be gained through experience, not through words. Tacit knowledge, despite its allusion in philosophy since antiquity, was not introduced as a term until the mid-twentieth century, by Michael Polanyi. "I shall reconsider human knowledge by starting from the fact that we can know more than we can tell" (Polanyi 1966, 4), he mentions in his 1966 book, *The Tacit Dimension*, which paved the way for the study of tacit knowledge. The term is used to denote the necessary skills for bodily performances like swimming, playing music or woodworking, but also refers to culture-specific, unconscious tendencies or habits which structure our interaction with our environment, material or social (Adloff, Gerund, and Kaldewey 2015, 7). Since the 1970s-80s, tacit knowledge has been integrated in various fields such as sociology, performance studies, psychology and more, widening the discourse around it and currently rendering it a "wide semantic field of meanings rather than a concept with a widely agreed-upon, unequivocal definition" (ibid, 12). What is more, apart from its extensive integration in the humanities, tacit knowledge has also been largely employed (and

contested) in practice theories for its bodily and social connotations (Schatzki, Cetina, and von Savigny 2001, 123-125).

The clearest outline of tacit knowledge can be drawn through its juxtaposition with explicit or propositional knowledge. Considering the concept of knowledge throughout the history of western philosophy, propositional knowledge has been prioritised, due to its methodological rigor and its validation potential through truth-apt sentences. On the other side of the same coin, the prominence of explicit knowledge has cast doubt on the validity of tacit knowledge, as the latter can only be verified through experience. In an attempt to steer away from these dichotomies between explicit and tacit knowledge, Alexis Shotwell has proposed four types of "implicit understanding", which are distinct but remain interwoven. The first is "practical, skill-based knowledge", such as being able to swim, the second "somatic or bodily knowing", signifying the connection between the bodily and conceptual systems, the third "potentially propositional but currently implicit knowledge" and the fourth and final one, "affective or emotional understanding" (Shotwell 2011, xi).

While it would be quite accurate and perhaps easier to support that the type of tacit knowledge which will be analysed through this thesis research falls under the first category, viewing movement technique as practical, skill-based knowledge, the interlocking of the different types of tacit knowledge becomes evident in the analytical process. In this research, I conduct a tacit inquiry on two levels. Firstly, I analyse movement research (research which is conducted in an embodied manner, with tacit knowledge as its outcome) in the cases of Ludmila Rodrigues' inflatables and the movement classes by OFFprojects. Following this and through its observations, I analyse how movement research is facilitated in each case study, examining the way in which the respective artist approaches the audience and its engagement. This way, I aim to access the tacit knowledge (practical knowledge or somatic knowing, respectively). Finally, in the process of putting the above into words, the tacit

knowledge inherent in these case studies is inevitably conceived as adhering to the third type of potentially propositional but currently implicit knowledge.

Theory of Affordances

Having situated this research in the epistemology of practice and located its aim in the explication of the tacit knowledge of both the case studies and their artistic practices, it would be beneficial to elaborate on the theoretical framework through which their analysis will take place. I have chosen to analyse the case studies under the lens of the theory of affordances. As mentioned before, affordances denote the characteristics of an environment, whether material or social, which provide possibilities of action for an agent within it. As a theory, it enables the perception of an environment as reliant on both its objective, material qualities, as well as on the (potential) action of the perceiving agent, which justifies its deployment in design disciplines (such as architecture, industrial design, human-computer interaction design) to explore the influence of designed objects or environments in their users' behaviour; to look at how specific affordances can be designed. In this thesis' analysis of the cases of inflatable installations and movement improvisation, the theory of affordances is being employed for the examination of each case's characteristics as affordances for movement research. In a parallel way to design practices, I look at the practice of each artist (installation maker and improvisation leader) as the "design" of affordances for movement research and attempt to point these affordances out.

The theory of affordances was first developed in the late 1970's by James J. Gibson, in the context of his work on ecological psychology. His definition of the term described the affordances of the environment as "what it *offers* the animal (agent), what it *provides* or *furnishes*, either for good or ill" (Gibson 1979, 119; italics in the original). Since then, the term has been employed in various disciplines, such as cognitive psychology and neuroscience, but also in architectural design, artificial intelligence, human-computer interaction, ergonomics and more. Because of the theory's popularity

and widespread application in different disciplines, there is no longer a single definition of affordances and their conception seems to gradually steer away from Gibson's original idea (Chong and Proctor 2020, 120). Browsing through different iterations of the theory, we can trace how subsequent ontologies of affordances came as a response to Gibson's definition of them as physical characteristics of the environment. For example, Don Norman's theory of perceived affordances, coming from the field of design, conceived of affordances as "the visible properties that could communicate an object's canonical use" (quoted in Parchoma 2014, 361). As a response to this and other affordance ontologies⁴, Anthony Chemero introduced one of the most popular ontologies of affordanecs, defining them as "relations between the abilities of organisms and features of the environment" (Chemero 2010, 189). The notion of relativity that he introduced paved the way to broader definitions of affordances, inclusive of social parameters.

An approach to affordances which builds on Chemero's relativity is the one of the philosopher Erik Rietveld and his frequent co-writer, Julian Kiverstein. Rietveld is a professor and senior researcher in the University of Amsterdam and, since 2006, a founding partner of RAAAF (Rietveld Architecture-Art-Affordances), "a multidisciplinary and experimental studio that makes site-specific art installations at the crossroads of visual art, architecture and philosophy" ("Bio Erik Rietveld" n.d.). Rietveld and Kiverstein's writings are directly connected to artistic practice, often sharing insights from the creation of artworks by RAAAF. As a result, even though it can be contested that their academic work is biased towards RAAAF's professional activity and success, they provide a rare combination of a theoretical and practical approach on the topic of affordances in art.

In their conceptualisation of affordances, the latter are presented to have at once a material and sociocultural status. Extending Chemero's definition, they define affordances as "relations between

⁴ For an elaboration of various ontologies of affordances, see: Parchoma, Gale. 2014. "The Contested Ontology of Affordances: Implications for Researching Technological Affordances for Collaborative Knowledge Production." *Computers in Human Behavior* 37: 360–68.

aspects of a material environment and abilities available in a form of life⁵" (Rietveld and Kiverstein 2014, 335). By switching Chemero's "abilities of organisms" to "abilities available in a form of life", they introduce the skills and normative behaviours shared in human societies as determinants of the existence and perception of affordances. An example of this social dimension of affordances would be that, even though a public urinal may materially afford urinating in for a woman, she is not expected to urinate in public space and, therefore, this affordance does not exist for her. What is more, this switch in the definition allows Rietveld and Kiverstein to distinguish between the existence and the solicitation of an affordance. According to them, an affordance exists as long as the ability to act on it is available in an entire form of life, independently of the abilities or desires of any particular individual to act on the affordance or not (ibid, 337).

The abilities available in a form of life, however, are not set in stone; they develop through skilllearning. Rietveld and Kiverstein point out that, the more an individual develops a skill, the more they open up to the affordances provided by the environment to practice this skill (Rietveld and Kiverstein 2014, 341). At the same time, they argue that "the development of a skill only happens through an active exploration of the possibilities afforded by the environment" (ibid, 331). So, the affordances perceived as relevant by an individual change according to the individual's skills and their skills develop according to the affordances present in their environment, thus creating a never-ending skillaffordance loop. In addition to this, Rietveld and Kiverstein also comment on the normative character of skills and, by extension, of affordances. In the process of acquiring a skill, they comment, the novice's performance is subjected to normative assessment as better or worse, more or less correct according to the situation (ibid, 332).

⁵ The term "form of life" is borrowed here from the philosophical writings of Ludwig Wittgenstein. It is used by Rietveld and Kiverstein to denote an animal's relatively stable and regular ways of doing things. In the case of humans, it "is not just the biology we share but also our being embedded in sociocultural practices: our sharing steady ways of living with others, our relatively stable ways of going on" (Rietveld and Kiverstein 2014, 329)

Skill, in the theory of affordances, corresponds with Spatz's notion of technique as a form of embodied knowledge which is dependent simultaneously on material, social and symbolic conditions. Looking at body movement as a skill, we can immediately implement the theory of affordances on the case studies and start analysing with which material or social affordances they provide individuals and how these affordances' active exploration constitutes movement research. Simultaneously, when perceiving the skill of movement as a technique according to Spatz's terminology, its epistemic nature comes forward and it arises as a valid field of research.

The theory of affordances has also been employed in the context of art, often with the purpose of introducing innovative approaches. A relevant example is RAAAF's 2014 work, *The End of Sitting* (Fig. 5). Through the development and exhibition of this installation, the artists challenge the traditional affordances for sitting, inviting the visitors to "explore different standing positions in an experimental work landscape" (RAAAF 2014). Their ambition is to invite the installation visitors to explore and expand the embodied sociocultural practice of sitting. Similar ambitions are shared by Rodrigues, the inflatables' creator. In both the cases of *The End of Sitting* and the inflatables, the manipulation of materiality for the creation of innovative affordances is central in the creative process and it is what enables the exploration of embodied practices such as standing or moving.



Figure 5 Visitors exploring different working positions inside The End of Sitting. RAAAF and Barbara Visser. 2014. The End of Sitting. Installation photograph. From RAAAF's website. <u>https://www.raaaf.nl/en/projects/927 the end of sitting/952</u>

In the field of dance improvisation, the theory of affordances has been employed, among other ways, as a means to break free from the strict forms of dance technique (Lavender 2019) and as a way to enhance the creativity of dance students and to enrich their processes of movement exploration (Kronsted 2021b). Christian Kronsted, through his research on teaching dance improvisation using the theoretical framework of affordances, has shown how the vocabulary of affordances helps to transcend the, usually, mystical language used in dance improvisation and replace it with concrete possibilities and potentialities for his students' movement. He claims that "teaching a student to improvise well is also teaching the student how to perceive the environment" (ibid, 170) and so, in his classes, he presents the student with various affordances for movement, highlighting elements of the environment or bringing them to unconventional spaces for dance improvisation. At the same time, his theoretical argumentation on the topic provides an example of translation of the tacit knowledge of improvisation to an explicit expression of it, by framing improvisation as a sensory exploration of the environment (ibid, 173) and examining the social affordances at play in (vernacular) dance (Kronsted 2021a).

Conceptual Summary

Situating my research in the lineage of practice theories, I define, in the beginning of this chapter, its topic using the framework of Ben Spatz's epistemology of practice. In the context of this thesis, movement research is analysed as research on embodied technique, defined as the development of new embodied knowledge of movement through practices of investigation and exploration. Consequently, the type of knowledge under study is tacit knowledge. Through a mapping of the field of tacit knowledge, I recognise the different forms of tacit knowledge which are at play in the process of this research. This also allows me to locate its aim in the explication, not of the knowledge resulting from my movement research during the fieldwork, but of the knowledge inherent in the artistic practices which facilitate it.

To do this, I have chosen to analyse the case studies through the theory of affordances and especially the approach of Rietveld and Kiverstein. The main ideas of their approach which inform this research are the following: the ontology of affordances as material and relative to sociocultural conditions at the same time, the distinction between the existence of affordances and their solicitation for action and the central role of skill in the development of our landscape of affordances which is expressed through the notion of the skill-affordance loop. Taking into consideration that the theoretical framework of this research is necessarily broad, touching upon topics such as the nature of knowledge, epistemology and perception theory, parts of the theory of affordances have been further elaborated in the following chapters, in correspondence with the case analyses.

3. [Case 1] Inflatable Installations by Ludmila Rodrigues

This chapter contains a combination of theory and experience, presenting fragments of my reports of engaging with the inflatable installations *Thick, Tree (wt)* and *Awa*, along with their analysis through

relevant aspects of the theory of affordances. It begins with a theoretical elaboration of affordances with regard to installation art, which is followed by the description and analysis of the inflatables, with the aim of tracing the inflatables' material affordances for movement research, as well as the role of skill in their solicitation of the visitors.

Affordances and Installation Art

A significant number of publications employ the theory of affordances for the analysis of art installations, with regard to either the particular medium they employ and its modes of engaging the audience (Keylin 2020; Senkpiel 2021; Raz 2019) or the relation between participant and exhibit in media art exhibitions (Langill and Muller 2016; On Jeong and Park 2013), to name a few topics. However, there does not seem to exist a large, coherent discourse in the theoretical or the artistic world concerning the employment of the theory of affordances in the creation of installations. Nor is there widespread interest in the further development of the theory of affordances through insights gained from the practice of creating installation art.

An exception to this is the discourse initiated by Rietveld and Kiverstein's writings. In several of their writings they present the installation making practice of RAAAF as a means to explain the potential of installation art for societal impact (Rietveld 2022), as an example to illustrate the skilled embodied engagement of makers with materials (Rietveld 2023) or as the field of application of affordance related theories (Novak, van Lierop, and Rietveld 2022). What is more, Rietveld's 2022 inaugural lecture as Socrates professor, titled "The affordances of art for making technologies", was published in a special issue along with a variety of responses by fellow philosophers, psychologists and cognitive scientists and has given rise to a small but lively discourse involving different approaches to the topic of affordances and installation art.

Before diving into this discourse, it is useful to delve a little deeper into Rietveld and Kiverstein's views on the relation of skill and affordances, as well as the latter's normative and socio-material status.

As mentioned in the previous chapter, one of the main contributions of Rietveld and Kiverstein to the theory of affordances is their framing as simultaneously relative to sociocultural factors and as available material resources of the environment (Rietveld and Kiverstein 2014, 327). They do so by linking affordances to skills, framing the latter as the abilities available in a form of life or to a specific person. Considering what was mentioned in the previous chapter, that the affordances perceived by an individual depend on the skills they possess, while the skills are developed by an individual in accordance with the affordances present in their environment, the scheme of the skill-affordance loop comes forward. The skill-affordance loop is not a term used by Rietveld and Kiverstein. I introduce it to denote the above-mentioned cyclical phenomenon which they describe in their seminal article "A Rich Landscape of Affordances". In a few words, it means that, the more an individual engages with a specific affordance (for example climbing a tree), the more skilled they become in this activity (tree-climbing) and, as a consequence of becoming more skilled in it, more relevant affordances appear as relevant to them (more plants, objects or buildings appear to be "climb-able").

However, Rietveld and Kiverstein make it clear that the relevance of an affordance to an individual is not a prerequisite for the affordance's existence. Going back to their definition of affordances, Rietveld and Kiverstein claim that the existence of an affordance does not depend on an individual's skills and activities, but rather on the abilities inherent in a form of life (Rietveld and Kiverstein 2014, 338). Seeing that the acquisition of these abilities (skills) happens through the process of normative assessment of an individual's performance in an established practice as good or bad, Rietveld and Kiverstein claim that the affordances existing within a certain form of life also acquire a normative character (ibid, 332). What is more, since the practices inherent in a certain form of life are developed in direct conjuncture with its available material environment, they also gain a socio-material status (ibid, 333-335). This socio-material status of cultural practices, and, by extension, skills, leads to the assumption that affordances have a dual nature. They are conceived at once as relative to sociocultural conditions and as material characteristics of an environment.

Rietveld's account of the relation between installation art and affordances stems from these two characteristics of affordances; their normative and socio-material status. For installation art, the entry point in this theory is the affordances' material dimension. By the manipulation, the shaping and the playing with materials, installations can be created to afford new, unconventional, anti-normative actions. Along with Julian Kiverstein, Rietveld sees in the engagement with installations the potential of "transforming ourselves and the socio-material practices we live in" (Rietveld and Kiverstein 2022, 489). This can be done by inviting visitors to reflect on their "habitual ways of living and what they take for granted" and by having them actually "experience what it would be like to live by a different set of rules" (ibid, 496-497).

There are, however, two aspects of Rietveld and Kiverstein's approach to affordances and installation art that do not fit seamlessly in this thesis' exploration of the discipline's potential for movement research. Firstly, their emphasis on the normativity of affordances and skills stands awkwardly in the face of innovation and the development of new skills. Their account of the development of skill, based on the normative assessment of the novice's performance, closely resembles what was introduced in the previous chapter as the transfer of technique, eschewing the topic of development of new technique. The writers admit that there is a need for further research in this direction and fill a large part of this theoretical gap by referring to innovation that comes from "applying existing skills to different aspects of the environment" (Rietveld and Kiverstein 2014, 339). However, they still fail to fully account for the development of new skills, particularly in the sense of Spatz's notion of new embodied technique, which movement research, the subject of this thesis, explores.

The second point of Rietveld and Kiverstein's theory that falls short when it comes to movement research is their emphasis on what they refer to as "higher" cognition and the application of the theory

of affordances to it. With the term "higher" cognition, they refer to complex cognitive abilities such as making correct perceptual judgements (Rietveld and Kiverstein 2014, 343). Their intention of introducing "higher" cognition processes to the framework of affordances results in placing extreme focus on reflection, instead of action. This emphasis on a mental instead of an embodied idea of action also permeates their description of both the creation of RAAAF's installations and their impact on visitors.

A valuable response to both of the above-mentioned topics was given by Duarte Araújo in his response to Rietveld's inaugural lecture. Araújo is an academic working on the topics of sports expertise and affordances for physical activity. Therefore, he brings an embodied approach to the discussion of affordances and the development of skill through installation art. "It (skill) does not have to be based on instructions, previous conventions, or detached memorization and reflection. On the contrary, these skills are learned by bodily engaging in socio-material practices" (Araújo 2022, 513). In his response, Araújo presents a model of skill-learning on the basis of the individual's performance's gradual attunement to the material conditions of their environment. His response critically complements Rietveld's approach to the relation between installation and affordances, by emphasising the discipline's bodily engagement of the visitor in the creation of new socio-material practices, rather than the mere reflection on existing ones (ibid, 515). With his additions, the notion of skill in the theory affordances becomes a useful tool for the analysis of research on new embodied technique and the way it is facilitated in artistic installations.

Overall, Rietveld and Kiverstein's approach to affordances as dependent on socio-material practices and skills available in a form of life presents a valuable way of looking at how installation art is capable of movement research facilitation, and corresponds directly to Spatz's conceptualisation of research on embodied technique as at once relative, material and social. For it to better accommodate the analysis of movement research, it can be complemented by Araújo's approach, which regards the development of skills through bodily attunement to a particular material environment. After integrating these remarks, the skill-affordance loop can become a valuable tool for the analysis of how installations can provide their visitors with relevant affordances for movement research and introduce them to new socio-material practices.

Encountering the Inflatables



Figure 6 Lying on one of the blobs created for Second Landscape⁶ by Ludmila Rodrigues. Photograph taken by the artist, Ludmila Rodrigues. 2020.

My history with Thick (and inflatables in general) began in December 2020, during my internship with Ludmila Rodrigues.

She presented me with the idea of creating an inflatable which would inflate around the body, something that could create an artificial embrace.

I first encountered Ludmila Rodrigues and her inflatables during my six-month internship with her, in 2020. Before the start of my internship, Rodrigues had already created several inflatable installations. At some point during my time with her, she invited me to experience them. She wanted to share with me the amazing movement qualities that these inflatables have, and include me in the concept development, design and fabrication of more inflatable installations. So, while I was there, we developed two of the three inflatables under study: *Thick* and *Tree (wt)*. The third one, *Awa*, was created after my internship and I encountered it for the first time during this research.

Rodrigues' artistic practice is torn between commissioned works for theatre and dance and selfinitiated projects. In both cases, she is interested in activating the senses and negotiating relations of

⁶ For more information on the work, see here: <u>https://tinamustao.com/2020/04/26/second-landscape/</u>

trust and agency with the audience. The inflatables that are included in my case study are characteristic examples of her work on "creating open-ended, situational relations with the public, [...] revealing more about the visitors, their gestures, latent desires and conditionings, than about the art object itself" ("About - Ludmila Rodrigues" n.d.). "My works should be stepped on, held, felt, turned inside out" (Rodrigues 2022) she proclaims, highlighting the active role of the body of the audience in her work.

Thick is an inflatable installation that the visitor lies in with their arms and legs spread, and which inflates around the body, often provoking the sense of sinking. It is meant to create an artificial embrace, applying gentle pressure to the whole body, which causes the release of oxytocin, the hormone of hugs. After its creation and testing by several studio visitors during my internship, *Thick* was presented in the context of a visual art exhibition and, more recently, was employed in the research process of a performance laboratory, which "investigated touch as potential channel in theater, music and dance experience" ("Thick - Ludmila Rodrigues," n.d.). As objects meant for interaction, Rodrigues' works often jump between the disciplines of visual art and performance, without significantly altering their function or identity.

Tree (wt) was also created to convey a sense of pressure around the entire body, but, this time, in a standing position. Its design has pockets for the arms, with two alternative positions for each, which allows for a firm pressure on them, as well as the visitor's torso and legs. *Tree (wt)* has not been formally presented to the public yet, but was also part of the performance laboratory mentioned above.

Finally, *Awa* was created in a different context, but still with the body of the visitor in mind. It was initially conceived for the purpose of practicing kung fu on it. Having the different movement qualities of kung fu forms in mind, Rodrigues created this large inflatable with the purpose of materialising the normally invisible energy transfers which shape these forms. It was later employed in an improvisation dance duet performance. In its neutral position, *Awa* looks like an enormous yellow pillow. All of Rodrigues' inflatables, including these three, are made of ripstop airtight polyester fabric, with variations in thickness, grip and colour.



Figure 7 Trying out Thick during its creation. Photograph by the artist, Ludmila Rodrigues. 2021.

Figure8Visitorexperiencing Tree (wt).Photographbytheartist,LudmilaRodrigues. 2021.

Figure 9 Becoming entangled with Awa. Photography by the artist, Ludmila Rodrigues. 2023.

In my interaction with the inflatables in the context of this research, I engaged with them in the artist's studio, moving in, with, against and on them. I researched, through my body, the similarities they bear with respect to their shared materiality, as well as each inflatable's unique affordances for movement, depending on their design and degree of inflation.

In my encounter with *Thick*, I had the familiar experience of feeling the air flow and its pressure on all members of my body, giving me a sense of relaxation. This time, I noticed how it was limiting my movement, responding with equal pressure as I tried in vain to make my limbs meet. I was also surprised to find out how, with a more powerful inflation than that of two years ago, the installation could support the entire weight of my body and lift me from the ground. This sense of support, as well as the one of protection, were also prominent in my encounter with *Tree (wt)*. Even in its semi-inflated mode, where it allowed for much broader movement, I found that the inflatable could support my weight entirely, allowing me to reach positions which would normally not have been accessible to me. Another aspect that came about in my interaction with *Tree (wt)* was the way it behaved as if it was

an extension of my body, responding to each of my movements and often magnifying them. Finally, both the elements of responsivity and support, or, otherwise, pressure, were predominant in my interaction with *Awa*, too. *Awa*, being lighter and bigger, made the transfer of my movement visible in its materials, becoming very responsive to my own movement but allowing me to tune the latter to the installation's movement properties as well.

Material Affordances for Movement Research

As presented in the description above, several material characteristics of the inflatables, some consciously designed and some arising unexpectedly, determined the affordances for movement research in my interaction with them. One such affordance was the degree of movement each of the inflatables allowed or encouraged, whether it meant my body being completely confined or entirely free to move through space. In the case of *Thick*, the inflatable is designed for complete immobilisation, with the body lying inside the installation, and its arms, legs and head positions already determined.

It (Thick) got filled up to the point of my arms and legs being lifted from the ground, giving me a relaxing sense of sinking in a thick embrace. It limited my movements almost to the extent of keeping me totally still.



Figure 10 Immobilisation inside the fully inflated Thick. Photograph by the artist, Ludmila Rodrigues. 2021.

Tree (wt) also provides a similar immobilisation experience when it is fully inflated. However, when the installation is worn semi-inflated, it bears different material characteristics and, thus, affords different, more extensive movement. In this state, while moving in the installation, I noticed its

characteristic delay, which encouraged me to develop a particular type of two-phased movement, in

order to attune myself to it and reach the installation's maximum mobility.

When jumping while Tree (wt) was semi-inflated, the delay in the installation's reaction to body motion resulted in my jumping and landing at the moment when the inflatable started moving upwards and, therefore, blocking its motion. Only when lifting the inflatable first and then jumping could I reach the maximum jump height.

Even then, when I leaned on the installation or compressed it until the remaining part of it reached its full inflation, the pressure of the inflatable could still support my weight and allow me to reach balance in strange positions.

The positions I could reach were deeper, not exactly sitting, not exactly standing, and, most of all, not easy to get up from. It was like learning to stand and sit, but with new rules.

Finally, *Awa*, as it has no dedicated position for the body of the visitor, does not limit their movement at all, becomes harder to grip and provides no support. However, the responsiveness and the size of the inflatable provide particular affordances for movement, movement that corresponds to the

inflatable's qualities.

Synchronising with its rhythm of rippling motion allowed for more effectively timed pushes and pulls, which mobilised the inflatable even more, making it seem as if it was gaining a life of its own. In fact, it reminded me of the sea.



Figure 11 Trying to move the enormous volume of Awa. Personal photograph. 2023.

So, as a result of their design, textile and degree of inflation, when moving with the installations the dipole between tension and release, immobilisation and transference of movement, support and responsiveness arises. These are particular material characteristics of the inflatables which define their affordances for movement research. This corresponds to the observation made in the theoretical part of this chapter, that installation art primarily addresses the material aspect of affordances. The fact that these material properties of the inflatables are expected to remain relatively stable throughout and in each encounter with them also allows for their systematic embodied research, resulting in the development of new embodied technique of moving with the inflatables, which, in the vocabulary of affordances, constitutes a skill.

Skills | Affordance Solicitation

Behind this development of new skills of movement there lies a complex system of the application of existing skills, acquired both within the process of making and engaging with these or similar installations, but also in different areas of technique. Some of the skill-affordance loops at play in these encounters with the inflatables are presented in order to illustrate how skills shape the perception of affordances for movement research and the engagement in them. What is more, they illustrate how this process feeds back to the skill of creating installations that engage the audience in movement research successfully.

One prominent area of expertise which shaped the landscape of affordances for movement research in my encounter with the inflatables is my dance and movement experience. As elaborated in Rietveld and Kiverstein's account of affordances, being skilled in movement made me more sensitive to the affordances available in the environment of the inflatables, which allowed me to put this skill into practice. Therefore, my interaction with the inflatables included a lot of dance qualities or techniques already learnt through my body. In order for it to be mobilised in its entirety, Awa required very large body movements and travelling through space. This fact reminded me of instances of dance and improvisation classes, during which I have often received the prompt to extend or magnify my movement, continuing with the flow and direction of a sequence and following through with it.

In a later stage of the skill-affordance loop, since I engaged in movement with the unconventional material characteristics of the inflatables, and through the gradual attunement of my performance to them, I was able to further develop my movement skills towards new areas of technique. This became particularly evident in moments where I engaged in movements that I had never experienced before, and which were made possible (physically and cognitively) by the inflatables.

Standing upright, I tried first turning my body a bit and then right away swinging my arms in the direction of turn. This resulted in an effortless, big spin due to the inflatable's (Tree (wt)) inertia.



Figure 12 Tree (wt), in its semi-inflated state. Photograph by the artist, Ludmila Rodrigues. 2021.

By getting to know more about the movement affordances of the inflatables, I became increasingly more able to tune my own movements to them, even in the short time span of the few hours I spent with them.

From a different perspective, when looking at the skill-affordance loop from the point of view of the creator⁷, my experience in designing and fabricating these installations, as well as my architectural background, allowed me to reassess the designed material properties of the inflatables. These, along with the experience of embodied engagement with the inflatables, create valuable knowledge for

⁷ Still, I use my own experiences and skills as reference, as I cannot fully perceive the artist's embodied experiences, skills or thoughts.

their further development in order to correspond to my performance with them and the points where it felt well or badly attuned.

This time (during my encounter with Thick for this research), because of different technical conditions, when I was trying out the inflatable, I was entirely lifted from the ground, which gave me a very impressive bodily sensation of total abandonment and utter relaxation. (Therefore, let's get a stronger fan for its next presentation!)

This is my understanding of the relation between the maker's skills, existing or developed during the making and testing of installations, and the affordances they create. Existing skills from different disciplines enrich the maker's ability to imagine latent affordances for movement, as, for example, the original use of *Awa* for kung fu practice that Rodrigues imagined before creating it. On the other hand, skills developed through the attunement of the artist's performance with the installations also inform the creative process. They enable the artist to distinguish how, not only a visitor's performance can become attuned to the installation, but also how the installation itself can be developed to better accommodate this process. The first set of skills is the one Rietveld and Kiverstein attribute innovation to, while the second one matches Araújo's approach.

Discussion

In summary, I have traced in this chapter affordances for movement brought about by the material characteristics of the inflatable installations, as well as the way these work with existing skills of the visitor or the artist in skill-affordance loops. The affordances for movement research of the inflatables can be located in their characteristic potential for tension, expressed in the immobilization of the body or its support, as well as responsiveness, expressed in the transference of movement by the inflatable through time and materials. These become topics of embodied research, whose expected result is the creation of new embodied knowledge (technique, skill) of movement, facilitated by the inflatables.

The solicitation of the visitor to engage with these affordances is interpreted through the notion of skill-affordance loops. In them, movement skills, both existing ones and those acquired through engagement with the inflatables, make the visitor perceive the above-mentioned material affordances for movement as relevant. Consequently, the visitor is prompted to engage in the affordance, therefore further developing their skill through the attunement of their movement with the inflatables and, consequently, perceiving more affordances for movement with the inflatables as relevant.

Linking the analysis of my experience of the inflatables back to the discourse around affordances and installation, the topics of the physical properties of the inflatables and of the skills employed in and developed through the interaction with them correspond directly to the at once material and social essence of affordances that Rietveld and Kiverstein advocate. What is more, the embodied dimension lacking in Rietveld's account of installations but found in Araújo's approach applies very clearly to the field of movement research, as skills are developed in this case without any prior social conceptions of correctness. Rather, they emerge from the attunement of one's movement with the unconventional material setting of the inflatable. Finally, coming back to Rietveld and Kiverstein, the way skills from different areas of expertise can feed the skill-affordance loop of experiencing but, also, creating installations for movement research is made evident, through examples of mine and Rodrigues' seemingly unrelated expertise.

4. [Case 2] Movement Classes by OFFprojects

In a similar manner as that of the previous chapter, this chapter presents empirical accounts and a theoretical analysis of my engagement in the movement classes by OFFprojects. The first part of the chapter focuses on aspects of the theory of affordances which relate to dance improvisation and the analysis of its facilitation. It is followed by the description and analysis of the movement classes. In the process of answering the same research questions, I pinpoint the bodily and social affordances for

movement research which arose during the classes, as well as an interpretation of the way participants were solicited to engage in these affordances through instructions.

Affordances and Dance Improvisation

While affordances and dance are extensively discussed in literature as separate topics, their combined discourse seems to be limited and fragmented. Other relevant to dance topics have been studied more extensively in conjunction with the theory of affordances. Examples of these are practices in general (Fayard and Weeks 2014; Roe 2006) or embodied movement practices such as sport (Araújo and Davids 2009) or martial arts (Hristovski, Davids, and Araújo 2006; Kimmel and Rogler 2018). The former tend to introduce a sociological approach to affordances, connecting it to practice theories, while the latter present a focus on expert body performance. In the field of dance, there are several studies which analyse specific dance phenomena through affordances, such as disability (Dokumaci 2019) or interaction in tango dance (Kimmel 2013). One approach which is relevant to this research, due to its systematic theorisation of dance improvisation through affordances, is Christian Kronsted's.

Kronsted, a practice scholar and competitive break-dancer, combines the sociological and the embodied sides of the discourse discussed above. His area of expertise is the philosophy of mind with a focus on embodied cognition and the philosophy of dance ("About Me - Christian Kronsted" n.d.). Particularly relevant for this research is his 2021 article, "Using Affordances to Teach Improvisational Dance", which presents his ambition to "demystify the improvisational process by using the language of affordances" (Kronsted 2021b, 172). This closely resembles the main research goal of this thesis: the explication of movement research and its facilitation, using the theory of affordances. His main theoretical argument on dance improvisation can be roughly summarised in its conceptualisation as an exploration and interaction with the dancer's environment. In his words, "stimulating improvisational growth in a student is not a matter of teaching more movements, but rather teaching the student to perceive (and respond to) different affordances" (Kronsted 2021b, 168). As a result, in

his teaching practice, he employs affordances to enhance the creativity of his students, either by drawing their attention to latent affordances, such as the musicality of a track and the quality of movement it invites, or by placing them in unconventional environments such as art galleries, providing them with entirely different landscapes of affordances.

One of the main points in his analysis of dance improvisation is that many affordances for movement are highly dependent on their social context. To define this type of affordances, Kronsted adopts Chemero's ontology of affordances as relations between an organism and its environment, seeing the latter as also culturally constituted (Kronsted 2021a, 147). He defines social affordances as "possibilities for action that are provided to us by other agents and taught through socialization" (Kronsted 2021b, 170). Kronsted draws from his expertise in breaking to present characteristic examples of culturally generated affordances. In this context, he mentions, specific gestures or poses (such as standing with arms crossed and legs wide open) carry a specific meaning and afford specific actions (such as allowing another dancer to slide through the dancer's legs to spite them) (ibid). Therefore, these social affordances are shaped according to the context, the dancer's intentions, but also the intentions of the other dancers involved in improvisation, which are directly perceived and responded to.

However, from the point of view of embodied research in particular, the framework of Chemero's ontology is problematic in a number of ways. Firstly, the distinction between environment and agent is not straightforward. The inadequacy of the distinction between internal (belonging to the agent) and external (belonging to the environment) properties becomes evident, for example, when trying to isolate the sociocultural practices at play in the context of dance classes from the participant's own disposition. Could my intimidation before the improvisation instructor be noted independently from the hierarchies inherent in dance teaching practices? What is more, the coupling between features of the environment and abilities of the self appears rather simplistic. In practice, not only two, but many abilities of the self and features of the environment, social and material, relate to each other at once

to allow for the emergence of an affordance for movement research. Finally, this scheme does not fully comply with this thesis' focus on movement research as an exploration of the possibilities of the body, exploring its own materiality and not seeing it as solely a means to relate to a particular environment.

This last critical stance is none other than Spatz's view of embodiment as first affordance, as introduced in their homonymous article. In it, Spatz renounces the "clear physical distinction between human agent and nonhuman material substrate" with which most studies of skilled practice are infused (Spatz 2021, 259). He advocates the study of the body's materiality together with the environment's and conceives of embodiment as "the zone of ontological engagement in which the dynamic interplays mentioned above—between perception and action, resistance and accommodation, and problem-solving and problem-finding—occur in the absence of any clear physical distinction between agent and substrate" (ibid, 261). While Spatz's approach does not propose a new ontology of affordances, I use it as a basis to propose one more type of affordances for movement research, the affordances of the body itself. This way, by seeing the body's materiality as not distinct from the dancer's material substrate, the former's physical characteristics provide possibilities for action which can be studied as material affordances for movement research. After all, this is one of the main points of improvisation classes and movement research in general; to treat the body, our most familiar material entity, with the investigative attention that is usually paid only to novel objects.

In order for this to happen, for the participants to be drawn to explore and engage with the available affordances for movement research, the latter need to become part of their concerns or, else, intentions. In their elaboration of affordances, Rietveld and Kiverstein discuss the difference between the existence of an affordance and the affordance's "demand character", its ability to solicit action. They note that the second is dependent on the agent's "dynamically changing abilities and concerns" while the first one is not (Rietveld and Kiverstein 2014, 342). In a similar way, Kronsted discusses intention as "the process in which an agent re-adjusts their embodied processes so that the agent as a whole will be solicited to a different group of affordances" (Kronsted Motsenigou 2021, 163). This scheme is quite pertinent to the facilitation of dance improvisation, as, in this practice, the improvisation instructor does not normally have the option to create or alter their students' available affordances for movement. As a rule, they manipulate the students' concerns/intentions to engage in the available affordances through the use of instructions.

Overall, Kronsted's approach to affordances in dance improvisation provides valuable insights from both theory and practice. Coming from vernacular dance, he stresses the role of social affordances in improvisation, showing how the actions and intentions of other agents can provide a dancer with possibilities for action. His approach can be complemented with Spatz's conception of embodiment as first affordance, which regards improvisation as focused on discovering the possibilities of one's body, instead of the study of the body's relation to a social or material environment. Finally, the motivation of the participants in improvisation classes to engage with the above-mentioned types of affordances, social or bodily, can be interpreted through the manipulation of their intentions or concerns through instructions.

Participating in the Movement Classes

The setting of dance studios, the social context of dance and improvisation classes and the processes of dance learning, teaching and performing are all very familiar to me. Since early childhood, I have been involved consistently with ballet and contemporary dance, including, occasionally, improvisation. That is to say, I was not unaware of what I would experience when I first took part in the movement classes by OFFprojects. What is more, having taken movement classes at Korzo theatre before, I was also aware of their openness to all bodies, ages and abilities, which was reflected in the group of participants. An older man with experience in capoeira, a mother with her young daughter, a few regulars of these open movement classes and experienced dancers were among them. This openness is also reflected in the official description of the classes, inviting every participant to "explore (their) own movement" through "(their) own skill and imagination" ("Saturday Movement with OFFprojects - Korzo" n.d.).



Figure 13 Dancer moving along with installations in Interval. OFFprojects. Interval. 2021. Interdisciplinary dance and architecture piece. From the collective's website. <u>https://offprojects.nl/projects/interval/</u>

Additionally, coming to the class, I was already familiar with OFFprojects and Amos Ben-Tal, who usually gives the classes. Having worked with them before in a small project and loosely followed the development of their work *Interval*, I was already introduced to their practice. OFFprojects is a collective of artists who create interdisciplinary works, mainly focused on dance, but also incorporating music making, image and words ("About - OFFprojects" n.d.). They are gathered around the work of Ben-Tal, who is a choreographer and musician. Although their practice is always interdisciplinary, the part of it which is shared in this class is only related to movement and its research.

Before moving on to the analysis of the classes, a brief description of their structure is presented below. The classes I attended began with an introduction of the improvisation instructors and their role in the OFFprojects collective, as well as an introduction of the class. The first of the three classes was given by Luca Cacitti, a dancer with OFFprojects, and the others were given by Amos Ben-Tal, their choreographer. In their introduction to the class, they both encouraged us to make our own choices regarding how or whether to follow the instructions given by them during the class, to explore our movement as much as possible and to not pause throughout the class.

The movement sessions began with a warm-up, a slow mental and bodily introduction. We were encouraged to stand with our eyes closed and focus on our breath, the space inside our own body, and the way that this space enables mobility in our body parts. Smoothly, we transitioned to a session of limb-led improvisation, exploring various ways of initiating our movement with one or more parts of the body. We were then given social prompts, directed to pay attention to other people's positions and movements, and to move accordingly. Next, there came the climax of the entire improvisation session, where the instructors asked us to reach our top energy levels, maximising our speed, mobility and transportation throughout the studio. Finally, we reached the point of cool-down, instructed to gradually decrease our energy levels and increase our awareness of the environment around us and the sensations in our body until we were no longer moving. All of the above-mentioned sections of the classes made up a coherent improvisation sequence with smooth transitions and no pauses.

The Body's Affordances for Movement Research

During the warm-up and the limb-led improvisations, me and the other participants were prompted to investigate, reflect upon and engage in various of our bodies' affordances for movement. This type of affordances is quite unique, as the engagement in them does not entail interaction, but merely action. They are completely subjective, as differentiated as each participant's body is. Their discovery does not rely on the encounter of the appropriate conditions for the respective affordance to arise as relevant, but in the mental and embodied realization that these affordances exist within the body; the realization of what my body can do.

We began slowly, by finding our verticality, standing up consciously. Amos instructed us to try and feel our bones, sitting on top of each other, defying gravity. As a starting point, following the warm-up prompts came the realisation of what my body was already doing. I could understand its every-day, mundane movements and stances and the way they were performed by my muscles, skin and bones. In this case, I was confronted with my body's affordance for standing up. In a similar way, following other warm-up prompts, I realized my body's affordance for expanding and contracting according to my breath, a movement which was done unintentionally before, but intentionally during the classes.

Amos encouraged us to imagine space in our ankles, allowing them mobility. We moved up to our knees, thighs, harmstrings and pelvis. Along with this realization of mobility came minor movements in the respective body members that actualized the imagined mobility.

The naming of and focus on different parts of my body and imagining them moving practically enabled the detection of these affordances for movement. At times they remained latent, while other times they were actualized in micro-movements, merging the mental understanding of the affordance with the embodied.

However, having defined movement research as the development of new technique in the beginning of this thesis, the affordances of the body for movement research need to relate to the discovery of unconventional, novel ways of moving.

Introducing our pelvis, we explored its movement through space; smaller, bigger, twisting, diving, drawing imaginary lines through space.

One way of soliciting unconventional movement, quite common in movement improvisation classes, is limb-led improvisation. It is directed towards challenging the participant's habits of movement, questioning natural behaviours such as the usual hierarchy of movement (starting from the top of the body and followed by the bottom) or the verticality of the human body. In it, the participant is prompted to create a sequence of movement led by one or few of their body members; a hand, the pelvis, the head, a rib, etc.

This time, I tried to further explore my movement patterns. Could I only reach my lowest point of sinking with the open-leg squatting pose? How does rotating work for my movement?

Movement research, however, does not only entail engaging in unconventional movement. Unconventional movement could also be part of training in existing technique⁸. Movement research necessarily demands that I and the other participants try to discover ways of moving which were previously unknown to us, exploring uncharted areas of embodied knowledge on movement.

We had reached a point where Amos was regularly prompting us to increase our energy levels by 5%, yet I felt I was already giving a lot of energy, and kept my energy level stable.

Finally, through these improvisation prompts, a participant can also learn a lot about the affordances that their body does not have, either temporarily, because of fatigue or injury, or permanently. Attempting to actualize the instructors' prompts or my own ideas of movement and failing creates significant knowledge on movement, too, thus making the absence of bodily affordances for movement also relevant for movement research.

Summing up, a large part of the movement sessions of the classes was dedicated to the discovery of the body's own affordances for movement. This exploration ranged from the realisation of already actualised body movements and stances, to the constant discovery of new techniques of moving. Each step of this embodied movement research revealed more knowledge of what my body can (and what it cannot) do according to its own physicality. This type of bodily affordances blurs the boundaries between the agent and the environment and places the body in a liminal position between them, following Spatz's notion of embodiment as first affordance. As a result, even though bodily affordances do not clearly adhere to the traditional definition of affordances as relations between

⁸ Learning how to do a pirouette is not movement research, even though it certainly qualifies as unconventional movement.

agent and environment, through the practice of movement improvisation, it becomes clear that the material dimension of the body on its own affords movement research.

Social Affordances for Movement Research

Another part of the classes which revealed a type of affordances for movement research was the one of social prompts for movement. Social prompts refer to any instructions which directed us to engage with the other participants around us, interact, connect or relate with them and their movement in any way.

At that point, I was changing levels and trying to move more extensively, yet I felt quite limited in space because of the many bodies moving around me.

In practice, relating to the people around me and adhering to social conventions unavoidably happens during any group movement class. My experience is that being in the same room with other people necessarily affects my improvisation process. I always look at them, often imitating their type or degree of movement, making sure that we participate in the respective session together, moving in relative harmony. This relation is also ensured by our shared context. In the case of the movement classes by OFFprojects, the environment of Korzo theatre and the background of the instructors are both situated within the field of contemporary dance, implicitly urging us towards this style of movement. Finally, the material aspect of sharing the same room with a number of moving bodies also requires the adherence to basic logical rules, such as allowing other people adequate space to move, without hitting or getting hit by anyone.

Then, Amos encouraged us to start connecting with other people. One such prompt was to pass through the space between two different people, considering it a gate. Developing this prompt, he asked us to do the same thing faster, or, later, to try and not allow people to pass through our gate, causing more tension and friction and, thus, communication, between our movements. One social prompt which was introduced in all three classes was the direction to pass between two people in the class. This led me to relate to the other participants' bodies in space with regard to their position, treating them as moving elements of the room. While this prompt also has a material dimension, the direction we were given by the instructors to be attentive to others and communicate with them through our movement rendered it primarily social. Expressing mine and perceiving others' intentions to stop, move or change direction allowed for the development of a code of communication and, by extension, attunement to the group's configurations in space. Therefore, it contributed to the development of knowledge on how to communicate your intentions for and through movement, in the particular social context we built.

After a while, he prompted us to take inspiration and react to other people's movement, imitate it or make movement suggestions. This seemed to me to work quite well, as it gave us more input on what we could be doing or avoiding.

Apart from relating to other participants' positions, we were also urged to explore ways of relating to their movements. This prompt facilitates movement research in two different ways. On the one hand, it develops into a dialogue between two or more participants, enabling them to build reciprocal communication through movement. Trying to follow someone's movement, to respond to and interpret it, corresponds to what Kronsted describes as engaging in a social affordance for movement and in turn creating more social affordances for my dance partner (Kronsted 2021b, 170). On the other hand, being attentive to another person's movement and trying to imitate or alter it through my own leads to an embodied understanding of their way of moving. Therefore, it enriches my own embodied knowledge of movement and, thus, significantly contributes to my movement research.

Building on the previous prompt, Amos asked us to connect to two bodies at once, creating a triangle of communication and maintaining that triangle, even if our partners were not aware of it. Admittedly, that was a point of confusion, as most people seemed not to be aware of the triangles they were a part of, including myself.

The great role of effective communication and coordination of collective movement becomes evident when it fails. When connection is lost, there is a loss of flow, an asynchrony between moving bodies which often leads to accidents. This is also a valuable part of movement research with regard to social affordances, as it reveals its boundaries and weak spots.

Overall, the role of social affordances as conceptualized by Kronsted as possibilities for action provided to us by other agents and taught through socialization, can definitely be traced in the facilitation of the movement classes by OFFprojects. Even though this case's social context is relatively neutral, not linked to an entire cultural system, as in breaking that Kronsted studies, social prompts given by the improvisation instructors call for the development of new embodied communication codes between the participants. This development is done through and for movement, and enriches our embodied knowledge on it, both in terms of learning how to move with other bodies, but also in terms of learning how to move by understanding the movement of others.

Instructions | Affordance Solicitation

Instructions are the main tool used in movement improvisation facilitation in dance. During the movement classes by OFFprojects we were given various instructions, also referred to here as improvisation prompts. They would sometimes direct us to follow specific actions, refrain from them, create mental images of our bodies or combinations of the above, to name a few prompt types. By giving us these prompts, the instructors raised a concern or created an intention in each of us, which encouraged us to engage in the affordances for movement research they refer to.

He warned us that the movement session would last the full fifty minutes of the class and asked us not to stop moving throughout. If we became tired or overwhelmed, we should take our time, slowing down, but never to stop unless absolutely necessary.

At the beginning of the classes, the instructors set our general intentions for the duration of the improvisation sessions; namely, exploring movement through our own personal choices and not pausing during this improvisation session. As Kronsted notes about dancers setting distal intentions, these do not imply something rigid, such as performing specific dance movements. On the contrary, they are a form of self-attunement of the dancers' embodied processes to a specific set of affordances, both detecting them and engaging in them (Kronsted 2021a, 163). For example, when I was given the prompt to pass through the space between two other bodies, because of having the distal intention of exploring movement, I did not simply walk between them as I would do on the street. Rather, I explored the possibilities of crawling, running, turning and more.

In between these alterations, Luca would encourage us (who were already caught up in our movement) to make tri-part sequences of body members leading our movement and repeat them at will. I particularly enjoyed creating sequences led first by my forearm, then my head and, finally, my pelvis.

Many of the instructions that were given in the classes were clear and concrete. In the case of the tripart sequences mentioned above, the framework of what I was asked to do seemed very specific and understandable, while, at the same time, it allowed for great creativity and exploration. This type of instructions, being clearly defined yet open to exploration, proved to be very helpful for movement improvisation, as if they provide the equivalent of a well-articulated research question for movement research. After a while, Amos introduced the mental scheme of our legs being two tubes and our torso a third tube, and encouraged us to move from it and move it, drawing lines in space. He then encouraged us to start movement from all three tubes without a hierarchy.

On the other hand, many instructions were more abstract. I refer mainly to the ones that involved mental images of our bodies, their internal space or structure. In my experience, these prompts, when they are effective, facilitate the transfer of tacit sensations or qualities of movement which cannot be fully conveyed through literal descriptions or directions. In the case of the tube scheme, picturing both my legs and my torso and head as tubes helped me to overcome the feeling of structural differences between these members and, consequently, to move them in a non-hierarchical way. However, the interpretation of these prompts can often be very loose and heavily dependent on the participant, to the point of disengaging them from the process of improvisation. This type of instruction is part of what Kronsted refers to as the "mystical language of improvisation" (Kronsted 2021b, 172).

Discussion

In summary, I have presented how the second case study of movement improvisation classes by OFFprojects focuses mainly on the exploration of the participants' bodily affordances for movement, as well as of the movement afforded by their social interrelation. The warm-up and limb-led improvisation parts of the class were directed towards the realisation of the actualised or latent affordances of our bodies for movement and their further exploration. The social part of the improvisation was directed towards the development of new communication modes between our bodies through movement. We engaged in arising social affordances for movement and, thus, created even more, participating in a constant flow of communication. What is more, besides the embodied knowledge of moving with others that this part of the improvisation helped us develop, I also found myself gaining a bodily understanding of the other participant's way of moving, this way enhancing

my own. The engagement with both the bodily and the social affordances for movement research was solicited by the instructions given by the facilitators, ranging from concreteness or abstraction.

The affordances for movement research traced in these improvisation classes can be directly attributed to the elements of affordance theory presented in the beginning of this chapter. Initially, bodily affordances focus on the moving body as the primary field of affordances for movement, echoing, this way, Spatz's ideas of the body as first affordance. Social affordances, on the other hand, follow Kronsted's approach to dance improvisation as a dynamic social process, even though his writings refer to long-existing sociocultural frameworks, while in this case the improvisation focused on the construction of a new social code of communication through movement. As a means of soliciting the participant to engage in the above-mentioned affordances, instructions work to manipulate the students' intentions (as employed by Kronsted) or concerns (as employed by Rietveld and Kiverstein). With new intentions in mind, the participants become aware of specific sets of affordances for movement, which correspond to the instruction's more concrete or abstract indications.

5. Collation | Bringing the cases together

In the two previous chapters, my encounters with the inflatable installations *Thick, Tree (wt)* and *Awa*, created by Ludmila Rodrigues, and my participation in the movement improvisation classes by OFFprojects have been presented and analysed through the theory of affordances. As a result, these artists' approaches to movement research facilitation have been expressed in terms of different types of affordances and methods to encourage engagement with them. In this chapter, these conclusions are juxtaposed with the aim of putting together a "toolbox", a shared theoretical framework which can contribute to the practice and discourse around movement research and its facilitation.

Following the analysis of each practice's distinct affordances for movement research, their juxtaposition also provides valuable insights. Initially, the fact that the cases are intrinsically different in their nature, with the inflatable installations being material objects and the movement classes taking the form of social events, allows for a more spherical view of what movement research as a subject looks like and how it can be approached. Through their juxtaposition, movement research arises as a common area of technique between them, and can be distinguished from the specific characteristics of the two different practices. What is more, by looking at the two cases together, it becomes evident that the theoretical tools emerging from them are also relevant for other practices of movement research facilitation. This can be seen in their cross-analysis, examining how each case's movement research facilitation is indirectly affected by the types of affordances that are employed in the opposite case.

To present this combined view in this chapter, I first briefly summarise the insights gained into each case's of affordances for movement research and also the ways in which participants are drawn to engage in them, compiling these ideas into the above-mentioned theoretical "toolbox". Following this, I point out their influence in the respective opposite case study, as well as their combination in two other artistic practices, to showcase the versatility of this "toolbox". Concluding, I refer to the epistemic value of this theoretical framework and its potential contributions to the theory and practice of movement research facilitation in art.

Tools | Summary of Case Studies' Affordances and Their Solicitation

In the case of the installations by Rodrigues, the inflatables mainly provide the visitor with material affordances for movement, dependent on their design, their textile and degree of their inflation. In this case, through their interaction with the inflatables, the visitor gradually attunes their behaviour to the material properties of the inflatables and slowly becomes skilled in movement with them. Due

to the development of this skill, the visitor is indirectly prompted to further research movement with the inflatables, therefore becoming constantly solicited to new affordances for movement in this skillaffordance cycle.

In the case of the movement improvisation classes by OFFprojects, there are two main types of affordances for movement research. The first is bodily affordances, with the participants exploring how the body itself can move in different ways. The second is social affordances, denoting how the participants can develop their movement in relation to other people, their position, movements and intentions. The participants are encouraged to engage in these affordances for movement through instructions by the improvisation facilitators. Seen through the theory of affordances, these instructions manipulate the intentions of the participants, thus revealing to them new, unconventional affordances for movement (Kronsted Motsenigou 2021, 163).

To sum up, the material, bodily and social affordances for movement research and their solicitation through skill-affordance loops and instructions comprise the theoretical "toolbox" of affordances for movement research facilitation in the scope of this thesis.

Application | Cross-analysis and Tool Combinations

The essence of these theoretical tools is that they do not refer only to the practices from which they emerged; they are also relevant to other instances of movement research facilitation, becoming part of an overarching technique of movement research facilitation. This is showcased in a cross-analysis of the cases, applying the tools originally detected in one case study in the respective other, as well as in their combined application in two other examples of movement research facilitation through art.

Initially, I look at the inflatables using the tools which come from the movement classes: bodily and social affordances and the manipulation of the participant's intentions through instructions. These are elements that are not directly employed in Rodrigues' practice. The lack of the social element in this

case is evident, given that the visitor encounters them alone. It is also clear that the inflatables do not actively manipulate the intentions of the visitor, as they do not involve any form of instruction. Finally, since the inflatables are designed to facilitate all kinds of movement, from the most mundane to the most extraordinary, I infer that they do not explicitly invite the visitor to explore the range of their bodily abilities. The interaction of the visitor with them could be limited to a simple push or touch.

However, the fact that the above-mentioned affordance tools were not employed in the artist's practice does not signify that they do not play a role in the exploration of movement with the inflatables. During my exploration, I engaged in various affordances of my own body's movement. Because of my intention to greatly engage with the inflatables and interact with them in as many ways as possible, I was inclined to explore the limits of my body's abilities in certain cases, as, for example, when trying to maintain my balance while walking on *Awa*. So, my body's affordances for movement and my intentions greatly determined my experience of researching movement with the inflatables and, thus, the case's analysis can be extended through the use of these theoretical tools.

Next, I look at movement research facilitation in the classes with OFFprojects and its relation to material affordances and skill-affordance loops; the tools detected through the inflatables' analysis. In this case, too, the improvisation facilitators did not explicitly employ these tools in their practice. On the one hand, the material setting of the improvisation class was a conventional dance studio, to which no significant references were made during the classes. On the other hand, the development of movement skills over time was not prioritised, given that each of the classes was intended to be open to individuals without any prior experience in movement.

Still, these elements affected my process of movement research. An example of the effect of the studio's material characteristics on my improvisation was the limitation of my movement during the third class I attended. In it, the number of participants was larger than the previous ones, making the room crowded and, as a consequence, my movements smaller. The development of movement skills

over time also affected my movement research process as, even only in my second class with Ben-Tal, I was already familiar with his instructions and could develop the qualities of movement I had discovered in my first class with him further. Both the material features of the space and the development of movement skills over time affected my process of movement research during the improvisation classes, making these theoretical tools applicable to their analysis.

In the crossover between these case studies, it becomes clear that the tools coming from one practice of movement research facilitation are relevant to the other. It is also shown that they can be used as analytical tools to examine circumstantial factors that affect the movement research process but which the artist or facilitator does not explicitly address. However, the tools from the different practices studied here are not necessarily employed alternatively; there are cases where these tools are combined in order to facilitate movement research.

One such example is the teaching approach of Christian Kronsted, as was described in previous chapters. Kronsted undoubtedly employs social affordances in his improvisation classes, as his writings on the subject indicate. What is more, as an improvisation or, generally, dance teacher, he unavoidably uses instructions in order to direct his students' intentions and to reveal to them new sets of affordances for movement. Additionally, acknowledging the material affordances of the improvisation's environment as important elements of movement research, Kronsted often brings his students to unconventional settings (such as a gallery or museum), in order to enrich their improvisation process (Kronsted 2021, 173). Therefore, his practice of movement research facilitation employs social affordances, instructions and material affordances altogether, without them conflicting.

50



Figure 14 Doing and Undergoing. Forsythe, William. 2016. Installation, choreographic object. Artist's website. https://www.williamforsythe.com/installations.

Another example, this time from the field of installation art, is William Forsythe's installation *Doing and Undergoing* (2016). As can be seen in Fig. 15, the choreographer and installation artist presents to the visitor the particular material affordances for movement of a heavy chain. Despite their different qualities (lightness and heaviness), the materiality of this work functions in the same way as the materiality of the inflatables, inviting the visitor to attune their movement to the characteristics of the installation. In this case, Forsythe also includes instructions in his work. He uses them to set the intention of the visitor to moving the chain with their feet and not their hands, revealing new sets of affordances for unconventional movement. Here, too, the tools detected in the case studies are combined, with Forsythe using material affordances for movement and instructions to enhance his process of movement research facilitation.

Discussion

Summing up, I bring the two case studies together in this chapter in order to assemble a theoretical "toolbox" of affordances for movement research. These are the material affordances and the skillaffordance loop, coming from the analysis of the inflatable installations, and the bodily and social affordances and instructions, coming from the analysis of the movement classes. Juxtaposing the two cases draws a clearer outline of movement research as their common study subject, which clarifies the elements in each case study that are bound to the particular practice and the elements which are overarching factors related to the broader technique of movement research facilitation. What is more, it showcases the nature of this "toolbox" as a shared theoretical framework whose tools can be used alternatively or combined to analyse any practice of movement research facilitation.

Therefore, this framework transcends the limits of each separate embodied practice. As a shared theoretical framework, it can facilitate the communication of the tacit knowledge embedded in each practice of movement research facilitation, for example, by expressing the approaches of dance, sport or woodworking practices in a common language. What is more, it can support the epistemic validity of tacit knowledge around movement research, by providing insights into it in a systematic and theoretically supported way, thus contributing to this topic's assimilation of and integration into relevant theory.

Evidently, the "toolbox" presented here is incomplete. The analysis of these two case studies merely showcases the existence of valuable tacit knowledge around movement research and its facilitation in artistic practices and its capability to become theoretically structured. Overall, this thesis calls for further systematic research of movement research facilitation practices under a common theoretical framework, such as the introduced "toolbox" of affordances for movement research.

6. Conclusions

This thesis has focused on practices of dance and installation art to study how their inherent tacit knowledge of movement research facilitation can be articulated and developed through the theory of affordances. I have used embodied and autoethnographic methodologies to study two case studies: the inflatable installations *Thick, Tree (wt)* and *Awa* by Ludmila Rodrigues and movement classes by

OFFprojects. The analysis of both cases through the lens of affordances has led to the creation of a theoretical "toolbox" to enable the explication and analysis of movement research facilitation practices.

Before going into the case studies, I located the research's main subject, movement research, within the epistemology of practice and framed it as research on embodied technique, technique denoting here a form of tacit knowledge. To address this knowledge, I have employed the theory of affordances, specifically Rietveld and Kiverstein's approach, which defines affordances as "relations between aspects of a material environment and abilities available in a form of life" (Rietveld and Kiverstein 2014, 335). While their approach incorporates many facets of human activity, such as its social and material dimensions, it still remains relatively disembodied. For it to reflect the subject of movement research more closely, I have complemented it with critical remarks from embodied practice studies.

Applying this enriched theoretical framework of affordances to the case studies, I have traced in them types of affordances for movement research and the ways the artists invite the audience to engage in them. In the case of the inflatables, movement research primarily arose through their material affordances, such as their ability to support the body of the visitor and respond to its movements. This directly corresponds to the original definition of affordances as physical properties of an environment (Gibson 1979, 119). The solicitation of the visitor to engage in these affordances happened through skill-affordance loops, meaning that, by engaging in movement with the inflatables, the visitor becomes skilled in it thus perceiving more of their affordances for movement as relevant and continuing to engage in them. In the case of the movement classes, the participants were presented with social and bodily affordances for movement research. Social affordances here refer to the development of movement in relation to other participants, corresponding to Kronsted's definition of them as possibilities for action provided to us by other agents (Kronsted 2021b, 170). Bodily affordances, on the other hand, are introduced in this thesis to denote the body's own capabilities for movement, following Spatz's proposition for studying the body's materiality in itself, and not only in

relation to material characteristics of its environment (Spatz 2021, 259). The solicitation to engage in these affordances happened through the use of instructions, which manipulated the participants' intentions/concerns and therefore revealed certain sets of affordances as relevant to them.

By bringing these two analyses together, a theoretical "toolbox" of affordances for movement research facilitation was shaped, which includes material, social and bodily affordances, as well as their solicitation methods of skill-affordance loops and instructions. These tools were not intended to be practice specific, but, rather, to refer to the general technique of movement research facilitation. This was showcased by their swap in a cross-analysis of the case studies and also by their combination in two other cases of movement research facilitation in art. To sum up, the capability of the theory of affordances to analyse and explicate specific practices of movement research facilitation is illustrated in the case studies. What is showcased in their collation is the capability of this theory to explicate, through the formulation of a "toolbox", the technique of movement research facilitation in a structured, theoretical manner.

For this "toolbox" to develop into a substantial framework for the theoretical articulation of movement research practices, further research is needed. Through the study of more cases, this framework can be enriched with the introduction of more theoretical tools from the discourse of affordances, but also with the development of a better understanding of the relations between the existing tools. In addition, further research is required to thoroughly inform the existing discourse of affordances with observations regarding the role of the body and its tacit knowledge in embodied practices, a theoretical endeavour which exceeds the scope of this thesis.

The integration of embodied research and its findings into theory is a methodologically taxing task; it has been the greatest challenge of this research. Initially, its endeavour to explicate the tacit knowledge of movement research facilitation renders the research incomplete by definition, owing to the inexplicability of tacit knowledge. The adoption of embodied research and autoethnography with the purpose of approximating its explication as closely as possible also contributes to the subjective, open-ended and situated character of this research, attributes which are often depreciated within the realm of academia. However, many researchers have advocated for this type of research in the past decades. Autoethnography now stands as an academically valid methodology, suitable for bringing embodied practices into theory due to its ability to combine theoretical analysis and evocative accounts of embodied experiences of practice. The latter present to the reader the closest written approximation of the site where the embodied knowledge under study is developed, understood and transmitted and where, eventually, its theoretical analysis should be verified.

This combination of theory and practice, in the context of this thesis, has resulted in the proposition of the above-mentioned "toolbox" which, in turn, is intended to contribute back to both fields. As a theoretical framework for the explication of movement research facilitation practices and their inherent knowledge through affordances, it is intended to facilitate a meaningful exchange between the theory of affordances and embodied practices, enriching the one with critical observations from the other. In conclusion, this thesis constitutes a pilot study showcasing the feasibility and usefulness of a combined analysis of movement research facilitation in dance and installation art practices through affordance theory, and contributes to the field of movement research facilitation in both discourse and practice.

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Appendix - Case Study Reports

Light blue is used to indicate preliminary analytical comments.

[Case 1] Inflatable Installations by Ludmila Rodrigues

Report 1

Saturday, February 11th, 2023 - Quartair, artist's studio, The Hague

Thick (2021) (https://www.tinamustao.com/2021/02/27/thick/)

My history with *Thick* begins in December 2020, during my internship with Ludmila Rodrigues. It was quite early on in the COVID pandemic, but not too early for people to have experienced an extended lack of human contact. Ludmila had created other inflatables before, in 2020 for *Second Landscape*, a dance piece by choreographer Marina Mascarel, as well as in 2019, when she made the installations *Comprehend* and *Nhemu*, that invited the audience to interact with inflatables.

She presented me with the idea of creating an inflatable that you would lie lie-ability in, and which would inflate around your body, making you feel as if you were sinking sink-ability? in it. She was thinking of something that could create an artificial embrace, applying gentle pressure to the whole body, which would cause the release of oxytocin, the hormone of hugs hug-ability. After taking pictures of our different sized bodies in the Vitruvian man pose and trying to measure their different proportions, I designed the pattern for *Thick*, trying to make it comply with different body types. How to design affordances for different bodies? After a long process of cutting and sewing the – admittedly large – black inflatable, it was ready to be experienced.

I remember being inside it as it slowly inflated for the first time, with the whistling sound of fans in my ears and the coldness of the floor underneath me damped by a yoga mat. The sensation of cold air blowing towards my legs, seeing the black volumes next to my face growing and gradually blocking my vision limitation of vision, the material slowly inflating and becoming full, gently pressing my entire body. It got filled up to the point of my arms and legs being lifted from the ground, giving me a relaxing sense of sinking in a thick embrace. After it had been fully inflated, I remember particularly enjoying squeezing the empty (or full of air) space between my legs and arms, pushing the inflated parts as they pushed me back equally. It limited my movements almost to the extent of keeping me totally still and, as it blocked my sight and most of my hearing, it imposed a feeling of relaxed stillness.

The days after that, we had other people testing the installation as well. Some of them seemed to find it claustrophobic, others relaxing and soothing, but all of them found it playful different affective affordances depending on the participant. (One of the funniest elements of it was the static electricity caused by the material of the inflatable, which made all the participants' hair look extraterrestrial!)

When presented to an audience, the piece was introduced by the artist, who made sure that the audience was placed correctly, that the inflation was gradual and not excessive, that the person inside it was feeling comfortable and not panicking, but also, that the inflatable was regularly scented with citric and eucalyptus smell, so that it did not carry the smell of previous people's breath or sweat. After all, artworks that are created to be touched always entail friction, damage or degradation. the tangible consequences of interaction affordance (opposite to the "sterilised" reflection process)

Engaging with *Thick* again after two years, memories were brought back, of how <u>the air is felt</u> materiality as if it is passing through materials. But also, of my experience designing, cutting and stitching its parts together. <u>This time, because of different technical conditions, when I was trying out</u> <u>the inflatable, I was entirely lifted from the ground, new affordance: support</u> which gave me a most impressive bodily sensation of total abandonment and utter relaxation. The pose in which the body is designed to lie ensures there is contact made only between the inflatable and the members of the body, but of no body member with each other constraint / limitation, creating a sense of muteness of tactile stimuli except for the pressure of the inflatable. Or, when limbs attempt to touch each other, their pressure is transmitted -and altered- by the inflated part between them not just limitation, but mediation. The degree of inflation of the installation is directly felt in the force applied by the muscles of the arms or legs when trying to change their positions. limitation of movement but not of force application | limitation leads to exploration of possibilities of movement in the imposed position, exploration of object reaction to attempted movement

Report 2

Saturday, February 25th, 2023 - Quartair, artist's studio, The Hague

Tree (wt) (2021)

Tree (wt) was the last of three inflatables we created during my internship with Ludmila Rodrigues. It was developed as the evolution of an inflatable kimono / haori, which was meant to also create a soft pressing sensation, as *Thick* was, but this time in a wearable wear-ability variation. With *Tree (wt)* we tried to embrace the entire body in a standing stand-ability position, while also creating two alternative positions for each arm explicit affordance design. When fully inflated, it results in an intense limitation of movement, pushing your legs together and applying pressure to the arms as well, making the change of posture from difficult to impossible. For people of around my height (1.60-1.65 m) it also blocks the vision of your surroundings, allowing you to see only the inflatable and the ceiling limitation of movement and vision.

Wearing *Tree (wt)* again, I was fascinated by the different modes of interaction one can have with it. Its fully inflated mode has very different sensations and potentials for movement than its semiinflated. different affordances based on degree of inflation

When fully inflated, the fact that it hinders my vision allows for extraordinary interactions with the environment. Having other people touching, scratching or moving the inflatable without me seeing them created strong sensory experiences. The fully inflated installation mediates touch, sound and motion, operating as an extension to my body. At the same time, the blocking of my vision results in these experiences, as well as the experience of direct touch, being much more prominent and unexpected. Direct touch was possible with others touching my hands that popped out of the inflatable or reaching to my torso from the second set of the inflatable's armholes. social skills implemented in new context lead to new, unpredictable affordances

The fact that my body was squeezed still in the centre of a large inflatable also created a sense of total protection. I (and most others who tried it) had the urge to topple and start rolling around, bouncing off walls and columns. potential affordance for movement To our disappointment, we did not. I was, however, able to bounce off walls while wearing it, exploring the potentials and movement qualities of this protective layer of air which surrounded me movement affordance only available while wearing the inflatable. Finally, another prominent property of the fully inflated Thick (wt) installation was its physical support support-ability. Trying to move within it, to go out of my axis or simply drop to the floor, my weight was supported by the inflatable's tendency to retain its shape, which contributed even more to the aforementioned sensation of protection movement affordance only available while wearing the inflatable.

When semi-inflated, *Tree (wt)* allows for <u>more extensive movement</u> less limitation and, thus, exploration. In this state, it was more reactive react-ability? to my body movements, especially of my arms, acting as an extension to my body. It had a characteristic effect of delay and momentum in

its reaction, which calls for the development of specific two-phased movement to reach its maximum mobility. development of know-how (technique) of movement with the inflatable

This became obvious in the comparison between jumping in the fully inflated installation and in the semi-inflated. When fully inflated, the body of *Tree (wt)* quickly follows the movements of my body, with the exception of a sucking effect which makes the effort for jumping significantly larger less jump-ability?. However, when jumping while semi-inflated, the <u>delay</u> in the installation's reaction to body motion resulted in my jumping and landing at the moment when the inflatable started moving upwards and, therefore, blocking its motion. Only when lifting the inflatable first and then jumping could I reach the maximum jump height, without tension between the inflatable and my body after the initial lift. exploration of movement affordances, leads to new movement technique WITH the inflatable because of my concern to jump with it

That is one example of a two-phased movement which responds to the inflatable's properties. Another such example would be turning. Standing upright, I tried first turning my body a bit and right away swinging my arms in the direction of turn. This resulted in an effortless, big spin due to the inflatable's inertia. While this is a movement sequence that I had repeated, without the inflatable, many times in the past, trying it out with *Tree (wt)* magnified the movement by tuning into the inflatable's properties. development of existing dance technique through new affordances for movement

Moving on with this process of exploration, I repeated my attempts to move out of my axis or to reach the ground, while in the semi-inflated version. In this state, the range of my motions was significantly larger, as was the number of positions I could place myself in. The installation could still <u>support</u> my weight, not easily allowing me to reach the ground with anything but my feet. However, the positions I could reach were deeper, not exactly sitting, not exactly standing, and, most of all, not easy to get up from. It was like learning to stand and sit, but with new rules. challenging my embodied knowledge and habits by changing the material landscape of affordances <u>This deeper</u> movement, resulting in the full compression of the air inside the inflatable, appeared to me as the actualisation of dance prompts that call for tension at the end of each movement (a classical one of them being *and reaaach*, with the dance instructors prolonging the syllable as if actually reaching for something). development of existing dance technique

Finally, the relation between the installation and the human body feels peculiar. The body seems to have an at once internal and external position to the inflatable. It is internal, as it is located in its middle, swallowed and protected by it. However, the body is also external, as it can compress the inflatable and rest its weight upon the latter. This state of being inside/outside the inflatable allows for the visitor to manipulate the installation as part of the body, as it inevitably moves every time a body part moves and its movement can be controlled, increasingly with practice. development of new movement technique

Report 3

Saturday, March 3rd, 2023 - Quartair, artist's studio, The Hague

Awa (2022) (https://www.tinamustao.com/2022/03/20/awa/)

My relationship with *Awa* is different than the one to *Thick* and *Tree (wt)*, as I was not there when it was conceived, designed, made or presented. It is one of the many blobs that the artist has made; inflatables which have various, convex shapes, and are usually experienced and interacted with in their semi-inflated state. All of them were created for interaction with moving bodies; designed to afford interaction and movement *Awa* was originally conceived for the purpose of practicing kung fu on it Ludmila's embodied knowledge fed the imagination and design of this installation and was later employed in a dance duet unintentional affordances. I first came in contact with the various blobs during my internship and before developing the inflatables with

Ludmila. She introduced me to their playful behaviour and kinesthetic qualities and was kind enough to <u>let me experience them in any way I could imagine (even from their interior!)</u>. exploration of affordances for movement

Returning to the blobs two years later, I interacted with *Awa*. This was the first time I saw it. It is an enormous blob, made of a golden, very light and slippery textile. When semi-inflated and in its neutral position, it looks like an enormous pillow. In the beginning, I started moving around it and pushing push-ability it, observing the movement of the air in the inflatable, made visible by its changing shape but also, the ripples of the material. After a while, I also started grasping grasp-ability and pulling pull-ability the inflatable, which was admittedly difficult, given the fact that it was so slippery. Pulling proved more effective in disturbing the neutral state of *Awa*, mobilising it to a greater extent. exploration of affordances leading to embodied knowledge Synchronising with its rhythm of rippling motion, first towards the direction of my pull/push and then back to its original state, allowed for more effectively timed pushes and pulls, which mobilised the inflatable even more, making it seem as if it was gaining a life of its own.

Due to Awa's big size, I could see the transference of movement through the materials movement qualities (air and polyester fabric), which was now, not two-phased, as it was in the case of *Tree* (wt) when semi-inflated but formed sequences of ripples which lasted much longer. As a result, I would characterise its movement as that of an element of nature. In fact, it reminded me of the sea, which was a very positive association for me, linked with affections of happiness and familiarity. The inflatable was extremely responsive to my input and its response response-ability appeared as the extension, magnification and prolongation of my movement. With every push and pull, the rippling impact would react with the traces of previous impact, magnifying or smothering the latter. diffraction Also due to the inflatable's size, and despite its responsiveness to each interaction, in order for it to be mobilised in its entirety, it required very large body movements and travelling through space. tuning in the inflatable This fact reminded me of instances of dance and

improvisation classes, during which I have often received the prompt to prolong, extend or magnify my movement, continuing with the flow and direction of a sequence and following through with it beyond our comfort zone. In my encounter with *Awa* and because of my intention to interact with it entirely, this instruction became a practical necessity, which I followed without the awkwardness that I have had when trying to follow it in a class. development of existing dance technique

Another way of moving with *Awa* that I tried was while being on it, sitting, lying and standing. different ways of relating to the installation means different affordances When sitting or lying on the inflatable, the sensation was completely different than the one when moving around it. It felt as if I was enclosed in it, especially since the range of my vision was limited by the inflated volumes around me. The inflatable also felt more fragmented, as, because of my weight, its volume was divided to different inflated areas around me. In this state, I could apply more pressure to the inflatable, by using my entire body weight and surface. When I did that in a quick way, it caused parts of it to inflate more abruptly and to move towards me, giving me a sense that they would swallow me. exploration of inflatable's properties, tuning in I explored this interaction for a while, feeling as if the hierarchy of my body and the inflatable had changed. Now we were having a dialogue, it was not me manipulating it from its periphery anymore. When standing on top of the inflatable, the hierarchy felt reinstated and, even, accentuated, as I was stepping on it and elevating myself in relation to it. Standing and walking on *Awa* was a very difficult task, as its material is extremely slippery and, from my experience playing with it, I knew that the inflatable would not support me if I fell. bad attunement because of material properties

Overall, the nature of the inflatable, the way air and fabric behave under these conditions, is very interesting, movement-wise. I could see the air responding to my movements, my actions, in an equal and opposite way. If pushed, it pushed back, if struck abruptly, it stroke back. *Awa* when interacted with, resembles a living organism, with its own agency and boundaries. This reminds me of what my volleyball coach used to say: "The wall is your best practice partner. It can never miss a pass". The

inflatable can be considered, in a similar way, the most accurately responsive dance partner. It responds with precision and consistency to the stimuli given to it. This consistent behaviour allows for the development of a particular way of moving with it, which constitutes the mover's embodied understanding of the behaviour characteristics of the inflatable, that vary depending on its material, its design and the degree of its inflation. Relatively stable physical properties allow for embodied learning through attunement

[Case 2] Movement Classes by OFFprojects

Report 1

Saturday, February 11th, 2023 - Korzo Kerkstudio, The Hague

Instructor: Luca Cacitti, dancer with OFFprojects

It was Saturday morning and, after having travelled for more than an hour from my home in Utrecht, I reached Korzo theatre, just in time for the class. I quickly showed the receptionist my ticket and went up the stairs to change into my dance clothes and enter the Kerkstudio. This was a process with which I was already familiar, having taken a few movement and contemporary dance classes in this studio before. What is more, because of my long (over twenty year) <u>experience skills in dance context</u> in dance, I tend to feel at home in dance classrooms and this one, the Kerkstudio, feels quite pleasant concerns / emotions, both because of its fine, warm architectural elements as well as my fond memories of the classes I attended there before, the last one being another Saturday movement class with OFFprojects in December, given by Yvan Dubreuil, their dramaturg. I also feel connected with the OFFprojects collective, as I have worked with and come to know their choreographer, Amos Ben-Tal, and one dancer, Milena Twiehaus, in the context of a small, three-day, artistic experiment, two years ago and was then invited to attend one of their rehearsals, for their work named Interval. With these in mind –and in my body-, I entered the studio and lied down to stretch and warm up for the forthcoming session, recognising some familiar faces from previous classes and <u>happily noticing the</u> wide range of ages and physicalities of the bodies in the room. openness of class

The class's instructor, Luca, started talking and, with this prompt, we formed a circle around him social affordance. At first, he introduced himself and talked to us about the session to follow. He told us that he is a part of OFFprojects and that, normally, he is not the one who facilitates these classes (normally Amos gives the classes). He said he would share the OFFprojects movement practice with us and that, as he is also experienced in Countertechnique¹, this might also be come up during the improvisation session. Luca warned us that he would introduce situations with multiple sets of directions for movement and encouraged us to freely follow as many of these directions as we want, or possibly try to work with them altogether, in a form of multitasking. personal agency / making personal choices / personal exploration

After this introduction, he led us through a session of warming up our bodies. Initially, he instructed us to start rubbing our palms, to start warming up. Personally, after having almost run to make it to the class on time in my full-on winter clothing on a surprisingly sunny and warm day, I felt averted to warming up and proceeded somehow unwillingly. circumstances and personal concerns affect my will to engage in affordances We then paused the rubbing and held our palms across each other, almost touching, to feel a tingling sense given by the energy left from the rubbing. Then he prompted us to expand this rubbing to the rest of one of our hands, forearm, upper arm, to move it across the chest to the other upper arm, forearm and hand. At that point, I was already warm enough to remove my sweater and stay with a sleeveless top. Then, we went on to squeezing the back of our necks, corresponding to the different nature of the muscles there. After that, we started our trip through pain. He prompted us to raise our arms and then let them drop, with our fingertips hitting our heads. We were all a bit hesitant towards hitting ourselves, chuckling and quietly objecting. typically non-existent affordance: hitting myself However, we obeyed. Luca encouraged us to focus on how our arms bounce off naturally after hitting the top of our heads, then the rest of our heads and our faces. We went on to gently tapping our necks with our fingers and then started moving down to the rest of our body, forcefully slapping our torso's sides, our bellies and then hitting our fists against our own lower backs and glutes while bending. After that, we started simultaneously slapping with both hands our thighs, calves, ankles and feet of each leg, with Luca almost ironically mentioning how painful this was.

After concluding the previous "hitting" session, we were invited to close our eyes and focus on our breath block out interaction / focus on body. Luca's directions, which I tried to follow as closely as I could, had me locate my breath in a sequence of places on my body. It started with inhaling between my shoulders, expanding this area, and exhaling in my arms. Then inhaling in my arms and exhaling in my hands. This type of sequence went on to my chest, my belly and pelvis, my thighs, my knees, my feet and back up all the way to my chest again and then my head, the space between my ears. He insisted on this idea of inhaling and exhaling as blowing up and deflating, expanding and contracting our inner space body affordances. Also, he at one point mentioned picturing a stream of water flowing from the bottom of our feet to our head mental image instruction, which reminded me of my favourite relaxing technique in our contemporary dance classes when I was a child. When we got to the head, he created this other mental image of a small ball being in the space behind one of our eyes, even told us to give it a colour (in order to make it more tangible, I presume). Mine was orange, like a ping-pong ball. mental image instruction We were to imagine that this ball started moving, back and forth, up and down, inflating or deflating and we were told to move, following this sensation. At first a little bit, and then with the expansion of the movement of the ball, our own movement was to expand as well. abstract instruction At that point, I started opening my eyes during my slow, round movements of the head and spine, to see what other people were up to,

how expanded their movement was. It was indeed larger than mine, so I felt free to start increasing my movement as well. unintentional social affordance for movement

From that point on, Luca took us on a journey of flow-based improvisation, instructing us to focus on leading our movement from one or another part of the body; creating intentions starting with the ears, the neck, the head and moving on to bigger movement, led by the shoulders, elbows, hands. After that, we started experimenting with the torso and various positions it could take and then moved on to movement led by the thighs, knees, feet. In between these alterations, Luca would encourage us (who were already caught up in our movement) to make sequences of body members leading our movement and repeat them at will. He prompted us to also change levels, move on the floor or medium level, too. I particularly enjoyed creating tri-part sequences of body movement, led first by my forearm, then my head and, finally, my pelvis. I felt free in the creative repetition which was constrained by these specific rules. creating intention by rules / instructions worked for my personal movement exploration

At some point during the improvisation when we had been absorbed in our movement exploration, Luca prompted us to be open to the other people around us social prompt. First, he prompted us to try to pass between two people while still improvising as we were, and to pay attention to that, be aware of the moment we were crossing between them. specific, almost material, affordance of passing through This caused a havoc, moving people from the outer circle of the room to the middle, while attempting to cross between two others. It was quite confusing also, trying to cross between two people who were, at the time, most likely to be crossing between you and another person. After a while, he prompted us to, while continuing to move as we were, take inspiration and react to other people's movement, imitate it or make movement suggestions. social interaction movement affordance This seemed to me to work quite well, as it gave us more input on what we could be doing or avoiding and invoked my memory of a previous improvisation class direction, one of doing the same or opposite movement of the person you are relating to..skill / familiarity After being in extended mobility for a long time, Luca started giving us instructions as to how expanded our movement should be; "You are moving with 80% of your energy". Then 50%, then 25, 10, 5, 2%. We slowed down and returned to minor movement which, according to Luca, contained all the possibility of actions we had been performing before, but did not complete them.

And then we stopped. And as I was waiting for our next instruction set to begin, I slowly realized that our class had finished. It was the first time that I had attended an improvisation class where there was only one, long, movement session and not several different ones, focusing on different areas or techniques of improvisation. habitual way of improvising and how it was challenged Judging from the people who kept on dancing after the end of our class, I would say they shared my sense of nonfulfillment but also of enjoyment of the movement and appetite for more. I stayed and stretched for a little while, then changed to my regular clothes and left.

Report 2

Saturday, February 18th, 2023 - Korzo Kerkstudio, The Hague

Instructor: Amos Ben-Tal, choreographer with OFFprojects

A week after my first class, I arrived again on Saturday morning at Korzo. I entered, showed my ticket to the receptionist, went upstairs, got changed and entered the Kerkstudio, happy to see Amos again after a long time. I felt a bit nervous, as he had never seen me dance before and, at the same time, intrigued to see his approach on improvisation. affective state / concern

Amos started by rounding us up in a circle and introducing himself, the OFFprojects collective and the upcoming movement session. social and content introduction / preparation In his words, OFFprojects is a collective that produces mainly dance pieces, but they also produce sound, installations, images and more. Each Saturday they share their (movement) practice at Korzo. He then

went on to present the upcoming session as a free, personal exploration that each person should interpret and procure in the way they want. agency / responsibility In a way, he described it as if it has no particular aim, other than the process of exploring and enjoying movement. framing as exploration of movement He warned us as Luca had done a week ago, that he would be constantly giving us prompts and that we should not feel obliged to work with all of them at once, but rather use them in the way that feels best for our movement. We were not meant to follow his, or anyone else's lead, however we were to be responsible for what we choose to do, how we choose to move. However, Amos encouraged us to try to expand our movement as much as possible, to try new, different ways of moving. Finally, he warned us that the movement session would last the full fifty minutes of the class and asked us not to stop moving throughout. If we became tired or overwhelmed, we should take our time, slowing down, but never to stop unless absolutely necessary. He explicitly asked us, clear instruction before starting the session, not to become spectators. Preparing myself for this long movement session, I took off my sweater and fastened my sweatpants; I was ready to start.

We began slowly, by finding our verticality, standing up consciously. Amos instructed us to try and feel our bones, sitting on top of each other, defying gravity. Being rather tired, I embraced this feeling of contained relaxation, centring and finding the minimum effort for standing up. Then, he told us to focus on our feet and how they come in contact with the ground, remaining active (reminding me of the active feet sensation of previous dance improvisation sessions, in which we were asked to move with resistance, as though we were sunk in honey). Amos encouraged us to imagine space in our ankles, mental image instruction allowing them mobility. We moved up with similar prompts for imagining space which allows for mobility in our knees, thighs, harmstrings and pelvis. Along with this realization of mobility came minor movements in the respective body members that actualized the imagined mobility. potential affordances for movement My body parts felt lighter and more agile. We then continued to imagine (and create and move) space within our body moving upwards to our belly, lungs, between our collarbones and behind our eyes. At that point I was not yet sure to which degree I was expected to be moving my body and/or its parts, or rather micro-moving them, focusing on the sensation. This time I chose not to open my eyes, but to focus on my own, inner sensation and the movements it invited. social affordance vs agency

From then on, Amos instructed us to feel our body expanding with each inhale we take (filling up our lungs to the fullest) and the pull of gravity with each exhale. We continued with this oscillation between inhale-stretching and exhale-sinking to the ground, paying <u>attention</u> first to our feet, their <u>relation to the ground minimum material affordance</u> and variations of position and movement, and then introducing our pelvis, exploring its movement through space; smaller, bigger, twisting, diving, drawing imaginary lines through space. I embraced these instructions with curiosity, as I had never received them before. treating my body with investigative attention I was also quite puzzled, as if trying to coordinate different tasks for my body, which did not always align (breathing in and out while expanding, while also responding to gravity, while also navigating my pelvis through space). multi-tasking forced me to make choices of which prompts to follow, to do my own exploration By this point, I had opened my eyes and I was actively moving my entire body, slowly, reaching its full extension with each breath.

After a while, Amos introduced the mental scheme of our legs being two tubes and our torso, from our pubic bone to the top of our head, being the third tube mental image instruction and encouraged us to move from it and move it, drawing lines in space. He then encouraged us to move from all three tubes without a hierarchy, not placing the torso on top of the legs or developing its mobility more than the legs. breaking habits of movement Somewhere at this point we all started slowly moving through the space of the room and defying our verticality. Afterwards, he introduced another tube to our scheme, the one of our vision. affordance of the body revealed Directing our vision towards a specific point, direction or moving it consciously as part of our movement. First, initiating movement, guiding the rest of our body, and then, following the movement of the rest of the body. This prompt seemed very creative to me and appeared to solve one of my main problems in improvisation; my connection with the surroundings and my being present. By this point, we were all very actively moving our entire body, transporting it through space, but not reaching our highest speed of the session.

Then, Amos encouraged us to start connecting with other people. social instruction One such prompt was to pass through two different people, considering them a gate. That caused, as in the previous class, a heightened mobility in the classroom, people moving together, next, and opposed to each other. material bodies moving in material room create particular affordances Developing this prompt, Amos asked us to do the same only faster, or, later, to try and not allow people to pass through our gate, the affordance of blocking the previous affordance causing more tension and friction and, thus, communication, social affordance made relevant between our movements.

Reaching the climax of our session, we were encouraged to increase our energy levels to the fullest and use falling and momentum to reach maximum mobility for a specific time in our class. I really enjoyed investigating fall and recovery (one of my favourite schemes in contemporary dance, with a strong presence in one of the classes I most frequently attend when I am in Athens). existing skill and interest / concern I was so taken by this that I felt I lost contact with the people around me and the instructions of Amos, or at least tried to loosely incorporate them to my own game. concern change

Then, gradually, he instructed us to decrease our energy levels and increase our consciousness, communication and openness to other bodies in space. We moved on from 100% of our energy to 50%, 20%, 10%, 5%. We lingered there, becoming aware of our surroundings, the room around us, the bodies in the room, responding to their movement and proposing a new one. Amos prompted us to take some time to feel the space we couldn't see, the space behind us. To feel its shape through our

memory of it and shape it with our movement and its intentionality. mental image instruction, abstract language Then we lowered our energy levels even further to 1%, 0.9, 0.8 to 0.1%. At that point, there was a funky piece of music playing in the background, which made it very hard to not increase my level of energy and start dancing to its tune. Becoming aware of the sounds of our surroundings, the sensations of our body. musical affordance

He then thanked us and prompted us to find our own ending to the session. And so, I slowly descended to the floor, to cool down and stretch. After a short while and some brief chatting, I left, feeling relieved that I had made it to the end of the class.

Report 3

Saturday, March 4th, 2023 - Korzo Kerkstudio, The Hague

Instructor: Amos Ben-Tal, choreographer with OFFprojects

That Saturday, two weeks after my last movement class, I was not feeling my best before reaching the theatre. I was hoping that dancing and moving around would make me feel better, as it has done repeatedly in the past. affective state and concern independently of the class And indeed, from the moment I first lied on the dance floor, I started releasing the tension of the previous days.

This class was held by Amos again, which allowed me to have a better understanding of the methods he uses for improvisation. From the moment he started giving the same speech as in the last class, I understood that we would be following the same routine, we would receive the same prompts as last time. I was slightly disappointed. Amos introduced himself, the OFFprojects collective and the upcoming session to a room that was notably fuller than it was in my last two movement classes. When he reached the point of telling us that what would follow was a continuous 50-minute movement session, I was already physically and mentally prepared for it. He once again asked us to keep moving, no matter what. introduction

From the centre of the circle we had formed, Amos prompted us to stand up straight, in a relaxed manner, to find our verticality. To feel our bone structure supporting us, defying gravity, to relax our jaw and tongue, to sit calmly, still. affordance of the body to stand Given my emotional condition (I was very stressed at the time), I felt it very hard to relax my muscles, especially my jaw and tongue, as well as remain still. I was constantly changing weight, swaying, trying to release my inner tension. I often get this sensation when I am introduced to grounding practices, focused on stillness and on breathing, while being stressed. I feel the need to decompress through force and movement, and when my tension is suppressed in stillness, it just grows. affective state undermines affordance of standing still Thankfully, Amos slowly started introducing movement through the "waking up" of different joints of our bodies, imagining space inside them and realising their mobility. potential affordances for movement This sequence started, like the last time, from our ankles and went all the way up to the inside of our heads.

After that, we moved on to the inhale-exhale, expand-sink sequence. This time, I tried to further explore my movement patterns. personal intention of exploring Could I only reach my lowest point of sinking with the open-leg squatting pose? How does rotating work for my movement? Being more familiar with the instructions about focusing my attention on my feet actively touching the ground and then my pelvis shifting sides and positions, I was able to explore more individually, interpret them more loosely. affordances of my body for movement

Slowly, we started expanding our movement more and Amos introduced the mental scheme with the tubes (our legs and torso being three independent, yet equal tubes). At that point, I was changing levels and trying to move more extensively, yet I felt quite limited in space because of the many bodies moving around me. He went on to introduce the fourth tube, the one of our vision, yet I felt compelled

to focus more on not hitting other people rather than freely direct my movement with my vision tube as its starting point. socio-material conditions for movement We had reached a point where Amos was regularly prompting us to increase our energy levels by 5%, yet I felt I was already giving a lot of energy, and kept my energy level stable, yet high affective state undermining affordances for extensive movement (I was moving my limbs extensively, but I was not running).

By that time, I was moving non-stop, however not transporting my body through space a lot. The class was quite crowded, and it felt quite limiting, as I had to contain my movements to not hit anyone. At this point, Amos encouraged us to start moving through space more, to reach a part of the room we hadn't before. He once again gave us the instruction of passing through the space between two random people in class. This created even more havoc than the previous times, due to the number of participants. The centre of the room was practically always full. Another prompt was to relate to one other body in space, respond to its movements, propose more movements and, generally, create a link of communication between them. Building on that, he asked us to connect to two bodies at once, creating a triangle of communication and maintaining that triangle, even if our triangle partners were not aware of it. multiple social instructions Admittedly, that was a point of confusion, as most people seemed to not be aware of the triangles they were a part of, including myself. failure to incorporate the intention I tried to move through space to create even distances between me and two others, in vain, as they seemed to constantly shift and move on their own. We had, in fact, stopped paying so much attention to our quality of movement, and focused on running, swirling, rushing through space to achieve the goal of this "game".

Abandoning this triangle prompt, Amos encouraged us to increase our energy levels to the fullest, take advantage of our tiredness (I was already feeling so tired that I could not correspond to the prompts to my fullest) and use it to reach maximum mobility for a specific time in our class. Diving into movement. I pushed myself to do that, knowing that I could use up my last bits of energy, that the end of the class was near. physicality of the body / tiredness as affordance for specific movement quality

I was relieved to hear him instruct us to gradually slow down, decrease our energy levels and increase our consciousness. He instructed us to go from 80% of our energy to 50%, 20%, 5%, 2%, making micromovements with the same intentionality but a smaller actualisation as the previous ones in our 100%. He also told us to feel the other bodies in our space, feel the space that we can't see, move with it, shape it. We lingered in our lower energy levels for long, and I could feel the "inner" parts of my body asking to lead movement; the inner sides of my forearms, my ribs, my adductors, hinting at potential movements and then retreating. recently embodied knowledge of movement exploration, new skill

Finally, Amos thanked us for the class and asked us to find our own ending. I slowly turned to the floor, as always, to relax and stretch. dance habit / convention I felt that the class had really changed my emotional state or, rather, shifted my focus. After a while, I left.