Participatory sense-making in physical play and dance improvisation: drawing meaningful connections between self, others and world

Hermans, C.

Participatory Sense-making in Physical Play and Dance Improvisation: Drawing Meaningful Connections Between Self, Others and World

Carolien Hermans

Participatory Sense-making in Physical Play and Dance Improvisation: Drawing Meaningful Connections Between Self, Others and World

ter verkrijging van
de graad van doctor aan de Universiteit Leiden,
op gezag van rector magnificus prof.dr.ir. H. Bijl,
volgens besluit van het college voor promoties
te verdedigen op 1 december 2022
klokke 11.15 uur
door
Carolien Hermans geboren te Oss
in 1969

Promotores:	Prof. dr. H.A. Borgdorff
	Prof. dr. E. Anttila (University of the Arts Helsinki)
Promotiecommissie:	Prof. dr. A. Haarmann
	Prof. dr. S. deLahunta (Coventry University)
	Prof. dr. V.L. Midgelow (Middlesex University London)
	Dr. C. Svendler Nielsen (University of Copenhagen)

Table of Contents

Artistic Work

My artistic work comprises three phases: 1) the living archive, 2) the re-enactment of physical play events through dance improvisational practice and the Touch Project and 3) the Re-Play/Re-Move toolkit.

The living Archive
Over a period of five years (from 2013 to 2018), I have collected images of the physical play of my own children, with their friends and neighbor kids. The living archive consists of more than a hundred photographic sequences and stand-alones that all serve as kinetic markers/traces of the original physical play event. See: https://www.researchcatalogue.net/view/1580666/1580667

Re-enactment of physical play events and Touch Project
In this phase of my artistic work, the archive becomes a source for the creation of new work. A selected set of imagery is handed over to a professional dancer or a group of professional dancers who try to grasp the affects, intensities, and forces that are still present in the imagery. The improvisation sessions with the professional dancers are also captured with the camera. Three re-enactments have taken place: 1) the re-enactment of rough and tumble play of four boys by first-year dance students at the University of the Arts in Amsterdam, 2) the re-enactment of animal becoming of my daughter, re-enacted by me, at the Conservatorium of Amsterdam and 3) the re-enactment of a hotel dance by professional dance artist Paula Guzzanti based in Ireland/Malta.

Re-enactment of R & T Play:
https://www.researchcatalogue.net/view/592032/592033

Re-enactment of animal becoming:
https://www.researchcatalogue.net/view/592694/592695

Re-enactment of hotel dance:
https://www.researchcatalogue.net/view/592346/592347

In addition to the re-enactments, I also initiated the Touch Project:
https://www.researchcatalogue.net/view/591404/597959

Re-Play/Re-Move toolkit:
The third phase of my artistic research consists of the development of the 'Re-Move/Re-Play Toolkit', an educational toolkit for children in the age of 4 -10 years old. The 'Re-Move/Re-Play Toolkit' is made up of two elements: a creative card deck and three workshop sessions. See:
https://www.researchcatalogue.net/view/1291603/1291604

For insights into the artistic process (the frameworks I offered as well as concrete exercises and instructions):
Photo diary of R&T Play of the four boys:
https://www.researchcatalogue.net/view/1741927/1741928
Photo diary of re-enactment MTD students:
https://www.researchcatalogue.net/view/1742770/1742771

Acknowledgements

The accomplishment of this thesis required significant support from many generous people around me. I take this opportunity to express my gratitude to everyone who supported me throughout this work. It is a genuine pleasure to express my deep sense of thanks and gratitude to my supervisor and mentor, Prof. Henk Borgdorff. He took me along on my first artistic research journey when I just graduated with a master of Choreography, at a moment and a time that artistic research in the Netherlands was still in its infancy. His dedication to artistic research, and his strong belief that artistic research deserves its own place within academia, have been a driving force for many. I thank him for his timely advice and suggestions, his meticulous scrutiny and his belief that I could bring this to a good end – especially at moments when I was full of doubt. I am also profoundly grateful to my co-supervisor Prof. Eeva Anttila for her expertise, guidance, and support. Her innovative approach to children and dance has influenced and inspired me in many ways. I hope that we will keep on collaborating in the near future.

I would also like to thank Dr. João Cerqueira da Silva Jr. for his kind support and for sharing his plentiful experience in dance improvisation during the first phase of my research. My sincere thanks to Dr. Malaika Sarco-Thomas for hosting the Touch Workshop at the University of Chester's Department of Music, Media and Performance. I am also grateful to Angela Linssen, artistic director of MTD (Modern Theatre Dance Department at the Amsterdam University of the Arts) for helping me out on several occasions and providing me the opportunity to work with first-year students of MTD.

In addition, I would like to thank the dance and play experts for their invaluable input and for sharing their thoughts on physical play and dance improvisation: Laura Kool, Sanne Wichman, Petra Beers, Sophie van Heeswijk, Marina Kaptijn, Miranda van Toor and Matteo Tangi. Even more, my research would have been impossible without the dancers that participated in my artistic projects: Sofie Hub, Paula Guzzanti, Alberto Quirico, Björn Bakker, Lian Frank, Lucie Rutten, Oriane Gidron, Simon Lelièvre, Fons Dhossche, Catarina Paiva, Laura Costa, Oscar Valenza, Hannah Kelly, Malaika Sarco-Thomas, Richard Sarco-Thomas, Ha Young, Pierre Alexandre Bouvery, Annika Lübbert and Sean Fitton.

I am most indebted to all the children that participated in my research, for sharing their informal moments of play with me. I owe the most to my two children, Luuk and Lisa Scheers, who have taught me the incredible fun of play and who took me along in the small adventures of life. Finally, I thank my partner, Benjamin Scheers, for his support and critical mind.

Figure 1. Hide and Seek © Carolien Hermans

Provenance and outline of chapters

> Wanderer, your footsteps are the road, and
> nothing more;
> wanderer, there is no road, the road is
> made by walking.
> By walking one makes the road,
> and upon glancing behind one sees the
> path that never will be trod again.
> Wanderer, there is no road,
> Only wakes upon the sea.
>
> Antonio Machado (as cited in Varela,
> 1987, p.63)

This thesis consists of a compilation of texts that are written between 2019 and 2022. However, my artistic research has a much longer history, since it is a coming together of my experience for many years as a dance maker on the one side and my motherhood on the other side.

The birth of my first child in 2004 marks not only the start of my motherhood but also my transformation as a maker – from that moment on I slowly moved away from the professional dance scene. My research-practice became something that was deeply embedded in my daily life, a personal journey that took place in and around my home in the direct immediacy of my children. My life became small and big at once. I became absorbed by daily occurrences, the routine of everyday life. Yet, at the same time, this was life. It was big because it entailed all the big themes, such as life and death, sickness and health, love, transition, personal value, freedom, and the loss of freedom.

As probably most mothers would agree, it was a tiresome and exhausting period soaking all the energy out of me, yet incredibly rewarding as well. Motherhood turned out to be all-encompassing, demanding, loud and boisterous. It was there all the time, in the foreground and it pushed my artistic work to the back, until it was barely present anymore, more a desire than reality. But it never really disappeared, it was there although in a vague, indeterminate way.

I became intrigued by what I refer to as micro-adventures, the small little things in daily life that happen spontaneously and that trigger a playful state. My children, walking with boots through small puddles of water on a rainy day, collecting stones and letting them splash in the water, molding clay, jumping over a fence, balancing on a fallen tree, etc. Tactile-kinaesthetic experiences that awaken the body-mind and that draw immediate attention to the experiential dynamics of a movement, of a play event – in many ways similar to what I experienced in an earlier life as a dancer and a performance artist. These micro-adventures brought me back to my artistic work as I started to capture these small play events with my camera, a digital SLR (Single Lens Reflex Camera). This could be anything: from a snow fight, rough and tumble play to a circus act or a spy game. Wherever we would go, I would take my camera along and at home, I always had it at hand. I first and foremost was interested in the physicality of their actions, in capturing the physical play as an event through a sequence of images.

I saw some striking similarities with dance improvisation – specifically how meaning is shaped through the kinetic/kinaesthetic[1] and affective dimensions of our interaction with the world. I position myself as a researcher, an instigator, a facilitator, a thinker, a mother, and an artist of a practice that stays close at home. You could call it a home practice, a personal journey that starts in and around my own home and gradually brings the professional dance community back in.

This thesis describes bits and pieces of this journey. The chapters do not follow a chronological order. The middle part (the re-enactments) was written first and from this middle part, I worked back to the introduction. To provide more coherence, I decided to complement published papers with unpublished chapters, since written material on the living archive (chapter 5) and on re-enactment as artistic practices (chapters 6 and 9) was missing. This way a narrative started to emerge, one that explains and provides insights into the different phases of my artistic research.

The published papers are included in their original form, with only some minor edits to support the line of reasoning throughout the thesis. For this reason, some overlap can be found, especially in the middle part when I discuss the re-enactment of the physical play events through dance improvisational practice. Repetitions and doublings may occur, and I hope this will not be too disturbing or distracting. Each chapter is preceded by a small prelude in which I briefly look back, and recapture the most important insights that will be taken along in the next chapter. It's a journey in the true sense of the word, a path laid down by walking – in the words of Francisco Varela, one of the founders of the enactive account of embodied cognition.

The thesis consists of 12 chapters. Four chapters have been published previously:

- Chapter 7: Hermans, C. (2018). Joint action and joint attention: dance improvisation and children's physical play as participatory sense-making activities. *Choreographic Practices*, 11(2), 157-175. https://doi.org/10.1386/chor.9.2.311_1
- Chapter 8: Hermans, C. (2019). Becoming Animal: Children's Physical play and Dance improvisation as Transformative Activities that Generate Novel Meanings. *Journal of Dance & Somatic Practices, 11*(2), 157-175. https://doi.org/10.1386/jdsp_00003_1
- Chapter 9: 'Let's play: re-enactment of affective traces through dance improvisation' has been submitted to and accepted in *Capacious, Journal for Emerging Affect*.
- Chapter 10: Hermans, C. (2021). To Touch and to Be Touched: Interconnectedness and Participatory Sense-making in Play and Dance Improvisation. *Journal of Dance Education*, pp. 1-12. https://doi.org/10.1080/15290824.2020.1836647

Chapter 1 starts with a description of my own research interests. I point to the intimate relation between physical play of children and dance improvisation, as both can be seen as ways of relating in a meaningful way to self, others and world. Consequently, I introduce the enactive account and Hanne De Jaegher and Ezequiel Di Paolo's concept (2007) of participatory sense-making, followed by the three phases of this artistic research, the research question and sub-questions. I furthermore discuss three female artists that combine motherhood with their artistic practice. Finally, I outline ethical issues specifically when it comes to including (your own) children in the research process. I look into informed consent, concerns about privacy as well as potential conflicts of interest.

[1] Kinaesthetic refers to *kinaesthesia*, while kinetic refers to *kinesis*. Kinaesthesia is the ability to sense one's movement of joints and limbs. It stands for the awareness of movement. It is primarily influenced by muscle spindles and secondarily influenced by skin receptors and joint receptors (Smyth, 1984). Kinetic refers to the motion of material bodies and the forces and energy associated therewith. Kinetic refers to movement, while kinaesthetic refers to the (internal) sensing of our movement.

In chapter 2, I further elaborate on the two main phenomena of this artistic research: physical play and dance improvisation. The aim is to give a general overview of the theoretical landscape of both (physical) play and dance (improvisation), as well as some of its most pronounced landmarks. I thereby focus on a phenomenological perspective on physical play and dance improvisation. The lived body itself is considered here as the vital source of experience and sense-making processes. Physical play and dance improvisation are therefore seen as creative practices where bodies and worlds are in constant dialogue with each other. The first part of the chapter is dedicated to play. I first introduce ideas presented by prominent authors of play (Huizinga, 1995; Caillois, 1961; Bateson, 1972). Subsequently, I discuss the difference between play and game and introduce two perspectives on play, an evolutionary (Fagen, 1981) and a developmental perspective (Piaget, 1962; Vygotsky, 2016). In addition, I offer a contemporary viewpoint on play by discussing the writings of Flemming Mouritsen (1998) and Helle Karoff (2013). The second part of this chapter is dedicated to dance improvisation. In this second part, I discuss the following notions of dance improvisation: spontaneity and being present in the moment (Ravn, 2020), real-time decision making (Kimmel, Hristova & Kussmaul, 2018), improvisation as a tool to release habits (Midgelow, 2012), and dance improvisation as a relational and attentional practice (Little, 2014; De Spain, 2014). At the end of the chapter, I provide a preliminary definition of both physical play and dance improvisation.

Chapter 3 provides an introduction to the enactive approach, with a specific focus on the creation of meaning through dynamic interactions between an autonomous agent and its environment. I further elaborate on the concept of participatory sense-making (De Jaegher & Di Paolo, 2007) in relation to physical play and dance improvisation. In this chapter, I develop a first conceptual model of physical play and dance improvisation that uses the enactive approach as a theoretical backdrop. The model consists of five elements: decision-making-in-action, kinaesthetic pleasure, rhythmic coordination, creative potential, and its ambiguous, open-ended nature. In chapters 11 and 12, I return and re-shape the model in accordance to new insights and research findings.

Chapter 4 describes the artistic research method. First, I discuss the role of the artistic researcher as someone that is both an outsider and an insider. Subsequently, I discuss the type of knowledge that is produced and the role of documentation and visual ethnography as an artistic research method. Michael Schwab's notion of exposition (2019) is introduced as a way of overcoming the traditional distinction between theory and practice. Finally, I discuss how artistic research can be seen as a methodology-to-come, i.e. a methodology that does not seek to close but to open up things (Ingold, 2016).

In Chapter 5, I discuss the living archive. First, I dive conceptually into what an archive is, what kind of archives there are and if and in what way a living archive can be defined. Second, I relate the archive to the arts, specifically to dance/play. The Dancing Museum of Boris Charmatz, and two other examples of dance archives are discussed - Shioban Dance Replay and Double Skin/Double Mind (DS/DM) interactive installation - followed by an analysis of the Playing the Archive Project. Third, I discuss the complex relationship between photography and documentation. Auslander's valuable work on the performativity of documentation (2006) is used to understand how the photographs co-construct and co-create the original play event. Finally, I describe different ways of ordering and organising the photographic material, in singular as well as sequential way - very much in line with Muybridge's work. I close the chapter off with some final thoughts on the archive as an open-ended, transformative system that does not only have evidential value but is a creative artwork in and of itself.

Chapter 6 takes re-enactment as its central theme. Re-enactment is used in diverse practices, but this chapter is dedicated to the artistic practice of re-enactment in dance and the performing arts. I argue that re-enactment is not a re-production of the past in the strict sense of the word but a re-activation of the creative potential that is still lingering in the work (Lepecki, 2010). In addition, I

discuss how the body can be used to re-enter and re-articulate the archive. The body, as a living entity, has the potential to access the archive in an experiential and affective way. I introduce Mühlhoff's notion of affective resonances (2015) to explain how affects can travel in-between bodies. The aim of the three re-enactments – discussed in chapters 7, 8 and 9 - is to unlock and grasp the virtual forces that are present and still at work in the imagery. I close the chapter with some final thoughts on re-enactment as a double-folded process, an affective doubling without appropriation. Re-enactment is a process in which experience is re-experienced.

In chapter 7, I discuss the artistic outcomes of the first re-enactment. The original play event consists of a rough-and-tumble play of four 13-year-old boys at the Conservatorium of Amsterdam. The play event is then re-enacted by first-year students of the Modern Theatre Dance department, Amsterdam University of the Arts. Dance improvisation and children's physical play events are considered organisational practices (Noë, 2015). Both activities organise and reorganise our lived experience. Even more, both activities are socially shared and culturally shaped – and thus highly relational. According to the enactive approach, sense-making evolves out of self-organisational processes in which the brain, body, and environment are linked. In this chapter, the concept of participatory sense-making serves as an underlying theoretical framework to explore the shared elements of physical play and dance improvisation. The main focus lies on joint action and joint attention. I will specifically look at the co-constitution of meaning through coordination of action, interaction rhythm and shared intentionality.

In Chapter 8, I discuss the artistic outcomes of the second re-enactment. The original play event consists of a spontaneous play event of my 12-year-old daughter in our living room that serves as an entry point to examine animal becomings as transformative forces. In an improvised dance solo, I re-enact the animal becomings of my daughter. The second re-enactment explores the transformative potential of children's physical play and dance improvisation. Using the enactive approach as a theoretical framework, I argue that play and dance improvisation trigger novel sense-making capabilities by a deep engagement with the environment (Di Paolo, 2007). Both activities give rise to transformative forces, ways of becoming that create openings and passages through which one re-engages and re-connects with the environment.Throughout the chapter, I will discuss how transformative forces in both physical play and dance improvisation can open-up new registers of meaning-making.

In Chapter 9, I discuss the third and final re-enactment. The original play event is a spontaneous hotel dance of my 12-year-old daughter (at the Brittania Hotel in Coventry). The hotel dance is then re-enacted by a professional dancer. The third re-enactment focuses on affective resonances, i.e. how affects and intensities that were once felt in a spontaneous play event can be re-lived and re-organised through dance improvisational practice. I use Helle Karoff's model (2013) on play practices and play moods to better understand the role of affects in the sense-making process of both physical play and dance improvisation.

Chapter 10 addresses the notion of touch and its constitutive role in the participatory sense-making process (De Jaegher & Di Paolo, 2007) of play and dance improvisation. Touch is considered a relational activity that continuously changes the contours of self, other(ness), and world(ing). It is therefore surprising that touch traditionally has received little attention in philosophy. Phenomenology and the enactive account however do hint to the vital role of touch in the interaction dynamics. The first part of the chapter consists of a discussion of key concepts, such as the duplicity and ambiguity of touch in relation to the enactive account and participatory sense-making. A short research overview is provided on the role of interpersonal touch in daily life. In the second part of the research I shift to artistic practice. I discuss the Touch Project, a dance improvisation project that is part of my artistic research and that explores the notion of touch in a creative and experimental setting. Through bodily inquiry, I explore how touch contributes to relational knowing. The chapter concludes with some

practical suggestions on enhancing body-mind awareness and encouraging playfulness through the use of interpersonal touch. It offers touch exercises that can be used in an educational setting to promote interconnectedness and a sense of community.

In Chapter 11, I present the Re-Play/Re-Move toolkit, an educational toolkit for children between the age of 4 -10 years old that consists of two elements: a creative card deck and three additional workshops. In this chapter, I discuss the background, objectives and ttheoretical context of the Re-Play/Re-Move toolkit. The enactive account and the concept of participatory sense-making form the backbone of the Re-Play/Re-Move toolkit. I first return to the conceptual model that was introduced in chapter three. A sixth element is added to the model: qualitative movement dynamics with three parameters (time, space, and force). Then, I introduce the Re-Play/Re-Move toolkit with the different categories, the pedagogical framework, and its main objectives. In addition, I discuss other examples of creative toolkits within the field of play, dance, and performing arts: Sensorium Toolkit for Dance developed by ICK (Internationaal Choreografisch Kunstencentrum, 2016), Play as Radical Practice developed by Albert Potrony (2016-2018) and Playing Up, A Live Art Game for Kids and Adults by Sibylle Peters (2016). I close the chapter with some final thoughts on the role of creative movement exploration in the lives of young children.

Chapter 12 is the final chapter. First, I return to where it all started: close at home, with the spontaneous play events of my children. I describe physical play and dance improvisation as fluid practices where rhythm is intensified and experienced in the flesh. From here, I move to enactivism and the concept of participatory sense-making. I revisit the two research goals that I formulated in chapter one and I reflect on the possible contributions this research study has made on articulating the kinship between physical play and dance improvisation. I then return to the subquestions that I formulated in the first chapter, and I critically reflect on the three different phases of the research process: the living archive, the re-enactments, and the Re-Play/Re-Move toolkit.
I close the chapter with some suggestions for future artistic research.

General notices:

- I use APA as the general referencing system. In the original articles, other referencing systems are used (such as Chicago and MLA) but for reasons of coherence I decided to convert them to APA style (in the text as well as the reference list).
- Throughout the thesis, I use female pronouns to refer to researchers, children, dancers, and persons in general. Unfortunately, I was not able to write in a gender-neutral way due to existing guidelines (such as APA) and reasons of readability.
- The introduction paragraph on enactivism in chapter 3 (page 43 to page 45) is borrowed from Hermans (2018).
- Chapters 7, 8, 9 and 10 are published previously. The articles have a similar structure: a first part that describes the research context, the enactive approach and De Jaegher and Di Paolo's (2007) concept of participatory sense-making, and a second part that consists of the artistic research. To avoid repetition, I have skipped the paragraphs on enactivism in the four published papers. Even more, I revised the abstracts of the published papers, made some adjustments in the text to increase readability and added some footnotes. I have carefully looked at these adaptations and I have tried to honour the original version (the published article) as much as possible.
- Throughout the thesis, I use cross-references that link text elements to related information elsewhere in the same document. The cross-references form a network structure of relations existing between the different parts of the thesis.

Chapter 1. Introduction

My research in a few sentences:

In this artistic research, I start with exploring the kinetic/kinaesthetic[1] dimensions of physical play activities of my own children (including friends and neighbour kids). I capture these physical events, which often spontaneously occur but that are also sometimes staged, with my camera, and after an intense process of selecting, ordering and arranging, they become part of a living archive. The living archive then becomes a creative source for dancers, who re-enact the play events based on a set of images. The aim is to transmit initially felt forces/affects that were once present in the physical play events of my children, and that are then re-lived in dance improvisational practice, to gain insight into basic elements of both play and dance improvisation. I use the enactive account and the concept of participatory sense-making as theoretical reference points (De Jaegher & Di Paolo, 2007). Finally, these insights are used for the development of Re-Play/Re-Move, a creative toolkit for children between the age of 4-10 years.

How it started

There is no clear starting point, only many beginnings. Tracing back the origin of my interest in both physical play and dance improvisation is like looking in a family album and trying to make a coherent (and often imaginary) story out of the incomplete fragments of childhood. There are many traces: like my interest in dance from a young age (I was five years old when I started my first dance class) and the fact that movement itself has been a vessel for me to express feelings and to find shelter in turbulent times. Going through major life changes, my deep interest in movement remained. Still up today, I can enjoy simple movements of the body that serve no purpose and that are only done for the sake of enjoyment. Raising my arm in the air for example, softly and gently, following its trajectory, and engaging with what presents itself in the moment.

Besides my personal interest, I also have a long-term professional interest in dance, creative movement exploration, play, children, and pedagogy. I studied dance/choreography as well as pedagogy, and teaching university students has been one of my great pleasures in the past ten years. The same is true for young children. I am fascinated by the way children move through the world. For them, the body is close-at-hand (maybe because they are smaller) and their attention is naturally directed to the sensorial-tactile aspects of their surroundings. Tim Ingold and Jo Vergunst (2016, p.4) state that children focus "on the near-at-end" and they possess "a boundless curiosity in everything in the vicinity – which they want to reach out and touch as well as look at". For young children, movement itself is the vehicle for exploring the world.

I am intrigued by the excessiveness of children's movements (especially in play). It still has fringes and frayed edges as their movements are still *a work in progress*. Not too polished. Not so refined yet. Daily movements easily merge with the imaginary, and children often can find great joy just by moving and playing around. It is not easy to give words to, but I think that 'pleasure in the flesh', 'sense of aliveness', and 'movement as a primary source for delight and joy' come closest to what I try to grasp. I am indebted to the writings of dance scholar and Professor of Philosophy Maxine Sheets-Johnstone here. Not only because she connects movement/dance to phenomenology but also because she tries to find the roots of our bodily being in the world. Sheets-Johnstone (2015a) considers dance as the continuation of children's bodily play, both take the kinetic/tactile-kinaesthetic experience as vital for sense-making processes. She states that "movement produces a high, an elevated sense of aliveness, a delight in the kinetic dynamics that is underway" (2003, p.416). Even more, play and dance improvisation require a readiness for surprise, flexibility and an openness to engage with the possibilities that arise in the moment. Both activities "open up corporeal-kinetic

possibilities and thereby open up space for innovation, a field in which creative energies can surge" (2003, p.418).

I am aware that I sketch a rather romantic image of (physical) play and dance improvisation. However, play and dance improvisation do not always provide positive, or pleasurable experiences. Both can be demanding, there can be social and artistic pressure and it can potentially be risky (in terms of physical injuries). A power hierarchy might exist that excludes some children or beginners from participation. In the case of children's play, bullying might occur or social exclusion. Children who are bullied, more often play alone and they feel unsafe in the playground (Slee, 1995). Even more, unstructured and free play can be risky and dangerous especially when children play with found objects that are sharp, rusty, or that have fractures or splinters. Sometimes the environment is not safe or the action itself is risky (climbing in a very high tree, walking on thin ice, etc.). A young child may not always be capable of making the right decision about safety and group pressure may play a role here too. Some children may have coordination problems or motor problems and as a result, they may not enjoy physical play as much as other children do. Research (Gasser-Haas, Sticca & Seiler, Kennedry-Behr, Rodger & Mickan, 2011; Smyth & Anderson, 2000) shows that preschool children with motor problems significantly spend more time as onlookers, they are more involved in aggressive incidents and they experience more negative and disparaging reactions of their typically developing peers. They show more negative affect during play, and they have lower self-esteem and self-efficacy. Research also shows that children with a disability engage less in free, risky play because of major barriers such as accessibility and an over-protective attitude of the caregivers (Caprino, 2017).

Also, dance improvisation is not always pleasurable or positive. It can be a demanding practice, on a mental, physical as well as artistic level. This may result in injuries and psychological stress that in turn affect general wellbeing in a negative way (Van Winden et al., 2021). Although dance improvisation, and specifically contact improvisation, fosters ideas of democracy, tolerance, and equity by welcoming people of all experience levels, this doesn't necessarily mean that there is no power hierarchy involved. Beginners may look up to experts, and as a result, they only might move at the periphery of the performance space or not at all.

Both play and dance improvisation are creative practices where participants put their own vulnerability on the line. "We learn the vulnerabilities of being a body – our own vulnerabilities and the vulnerabilities of others in our movement interactions." (Sheets-Johnstone, 2003, p. 412). Also, Midgelow (2012, p.9) speaks of an intersubjective exchange that involves risk and ambiguity. The dancers need to "to be vulnerable to the process, open to the consequences and to the effect of each other's responses to the Other and one another". This vulnerability might evoke feelings such as anxiety, fear, and insecurity.

In order to offer the participants positive movement experiences, it is therefore important to create a safe pedagogical environment. For example, guided play or dance improvisation might offer a midway between direct instruction and free play. Guided play allows the teacher/facilitator to monitor and intervene in the social process when necessary (for example in the case of social exclusion and bullying). In free informal play, teachers/facilitators must at all times be aware of the potential risks of a play space (e.g. playing near the water) or a specific play event (e.g. balancing on a wall). Even more, it is important to explicate underlying values such as trust, mutual respect and care.

A safe and stimulating environment triggers the curiosity of children. Throughout this artistic research, the Reggio Emilia approach has been an important source for creating safe, pedagogical environments. In line with Reggio Emilia, I perceive the child (and any other participant) as strong, competent and knowledgeable. The child's contribution is not only honoured but also seen as central to the creative process (Sansom, 2009). I advocate a pedagogy of listening (Rinaldi, 2006) as it is listening that enables me to enter into a meaningful dialogue with the child. To listen is to actively

engage with the child, to be open and sensitive to their needs. Charlotte Svendler Nielsen (2009, p.87) speaks of embodied sensitivity as a necessary quality of anyone who engages pedagogically with children, i.e. "to listen with the whole body through kinaesthetic empathy".

Second of all, in my artistic research observation and documentation are used as pedagogical tools to create a safe and trusting environment. In the Reggio Emilia approach, teachers/artists spend considerable time in observing the child as close as possible. By observing, the teacher enters into a meaningful relationship with the child. Close observation allows the teacher/artist to make careful judgments about when (and when not) to intervene (Rinaldi, 2006). Empowering a child also means that the child needs to find her own solutions. Documentation is another pedagogical tool that is used in the Reggio Emilia approach. Photographs, video recordings, graphic arts, and transcribed conversations are used to understand the learning process of each child, as it "provides an inside view of the interests, needs, and experiences of children" (Yu, 2008, p.35). In this artistic research, I try to intervene as little as possible and in almost all cases I take up the role of observer. Therefore, observation and documentation play a crucial part in my artistic research (see also page 55).

Play, dance improvisation, and diversity

Both play and dance improvisation are cultural activities. They take place in and are an expression of culture. Already Huizinga (1955) stated that play is not an element *in* culture but an element *of* culture. In this artistic research, I started close at home by capturing and examining the spontaneous play events of my own children. As a result, my research on physical play limits itself almost entirely to white, middle-class children.

In my research on dance improvisation, I have collaborated with dance practitioners mainly from Europe but also from South Korea and South America. De Spain (2014) states that although there are many different viewpoints on dance improvisation, the community itself is quite homogeneous. The leading figures of postmodern improvisation are often European descendants, white and well-educated.

Diversity does not only involve cultural background but also gender, disability, and socioeconomic status (SES). Boys and girls, as well as male and female dancers, were involved in my research but no one with a disability or from a low SES. I am aware that this does not do justice to the diversity in our current society. In the future, it would be highly recommended to involve other cultural groups as well and to examine how physical play and dance improvisation takes place across race, gender, disability, and SES.

My artistic work: physical play, dance improvisation, and sense-making

As a mother/pedagogue and dancer/choreographer, I have noticed that children's play and dance improvisation share quite some commonalities. In both physical play and dance improvisation, movement itself is experienced as engaging, delightful, and meaningful. Maxine Sheets-Johnstone (2003, p.3) speaks of "kinetic fun in the flesh", i.e. movement itself is a motivating force and a source of pleasure.

Some authors explicitly draw analogies between physical play and dance improvisation. Play theorist Hector Rodriguez states that play consists of trans individual processes of action and reaction "which often takes on a to-and-fro quality reminiscent of dance" (n.d., p.2). Sheets-Johnstone likewise points to the intimate relationship between physical play and dance. She considers play as a "kinetic happening in which the sheer exuberance of movement dominates and in which a certain freedom of movement obtains" (2005, para. 29). According to Sheets-Johnstone, dance is intrinsically related to play: dance in fact can be seen as the continuation of children's movement-exploration. Even more important, communication in both physical play and dance improvisation takes place

through movement. Some verbalization may occur, but the primary instrument for sense-making remains the body.

In this artistic research, I am interested in the bodily and affective dimensions of play and dance improvisation – specifically in the dynamic entanglement of *moving* and *being moved*[2] (Parviainen, 1998; Sheets-Johnstone, 1999a; Massumi, 2002; Fuchs & Koch, 2014; Mühlhoff, 2015). I will argue, throughout this thesis, that in the intertwinement of the affective and the bodily, sense-making arises[3] Both physical play and dance improvisation are considered bodily practices, where sense-making processes are structured in and around movement. Meaning arises out of corporeality, it bypasses the linguistic, and it takes the intimate relationship between affect and movement as the starting point for the engagement with world, self, and others. The enactivist account of cognition and action serves as a theoretical backdrop for an analysis of both physical play and dance improvisation.

The enactive approach and the concept of 'participatory sense-making'

The enactive account serves as the theoretical backdrop from which I try to gain *an embodied understanding* of both children's physical play and dance improvisation. Embodied understanding or embodied knowledge is understood as the tacit knowledge that resides in the body, it is "a type of knowledge where the body knows how to act" (Tanaka, 2011, p.149). Embodied understanding doesn't require representation because of the pre-reflective correspondence between body and world. Understanding is embodied in "sofar as our conceptualization and reasoning recruit sensory, motor, and affective patterns and processes to structure our understanding of, and engagement with, our world" (Johnson, 2015, p.1).

The enactive approach of cognition and action challenges representational cognitive theories with the core idea that "cognition is an embodied, lived process, based on self-organising and recurrent sensorimotor patterns" (Read & Szokolszky, 2020, p.1). In the enactive approach, cognition is understood as embodied (inter-)action.

> […] by using the term embodied we mean to highlight two points: first that cognition depends upon the kinds of experience that come from having a body with various sensorimotor capacities, and second, that these individual sensorimotor capacities are themselves embedded in a more encompassing biological, psychological, and cultural context. By using the term action, we mean to emphasize once again that sensory and motor processes, perception and action, are fundamentally inseparable in lived cognition. (Varela et al., 1993, pp. 172-173)

Cognition, in this perspective, is not about passive information processing that is then translated into internal representations, but cognition requires an active engagement with the environment. Enactivism uses insights from biology, dynamic systems theory and phenomenology (De Bruin & De

[2] With this, I mean that movement and emotions/feelings/affects are closely linked to each other. According to Sheets-Johnstone (1999a) the kinetic and affective are dynamically congruent. Massumi (2002, p.1) describes the relationship between movement and feeling as follows: "When I think of my body and ask what it does to earn that name, two things stand out. It moves. It feels. In fact, it does both at the same time. It moves as it feels, and it feels itself moving. Can we think a body without this: an intrinsic connection between movement and sensation whereby each immediately summons the other." Movement unfolds in feeling and, vice versa, feeling spreads out in movement. Or, as Fuchs and Koch (2014, p.1) put it: "One is moved by movement and moved to move".

[3] In this thesis, sense-making and meaning-making are used interchangeably. Although conceptually distinctions can be made between the terms, I have decided to use them as equivalents which is in line with how the enactive approach uses the two concepts.

Haan, 2009) to explain that cognition is embodied and situated. Five highly intertwined ideas constitute the basic enactive approach: autonomy, sensemaking, emergence, embodiment and experience (see also page 42).

Human beings (and living organisms in general) make sense of the world by interacting with the world. Sense-making is not a solely individual activity but a shared process in which not only all participants and all their dynamic interactions but also (sociocultural) contexts play a role. Sense-making is thus context-sensitive and always situated. According to De Jaegher and Di Paolo (2007), participatory sense-making is an interactional process where meaning is generated through the (rhythmic) coordination and synchronization of actions and behaviour. In sum, participatory sense-making can be described as the process of meaning generation between two or more relatively autonomous agents through dynamic and rhythmic coupling.

Enactivism has been criticized for not being able to account for more remote, higher-level cognitive activities such as imagination, counterfactual thinking, or reflective problem solving – in other words, cognitive activities that transcend the here and now. This is also sometimes referred to as the 'scaling-up' problem (Gallagher, 2019, p.805). According to Shaun Gallagher, complex cognitive processes are also embodied processes. The challenge for enactivism is to explain how meaning-making takes place in higher-order cognitive activities. One major problem here is that abstract thought often has no locus, it is detached from the concrete situation and the generation of meaning is fluid and ambiguous[4]. Ezequiel Di Paolo, Eleanor Rohde and Hanne De Jaegher (2010) argue that, in order to face this challenge, enactivism therefore should examine activities that are 1) highly embodied and 2) allow for ambiguity of meaning. Interestingly, they state that "dance, music, ritual and play" (p.37) are the best candidates for explaining ambiguous sense-making. Since physical play and dance improvisation are the key concepts of this artistic research, it might very well be possible that both can contribute and enrich the enactive approach when it comes to more complex cognitive activities.

Exploring the relation between physical play, dance improvisation, and the enactive approach might thus enrich our understandings in two ways:

1) First of all, the enactive approach can provide powerful new insights into the core elements of both physical play and dance improvisation when it comes to participatory sense-making.
2) Second of all, physical play and dance improvisation may in turn be considered exemplary creative practices that can deepen and extend the enactive theory.

Phenomenology and Process Philosophy

I use the enactive account and the concept of participatory sense-making (which are both profoundly influenced by phenomenology) as the main theoretical framework of this artistic research. Next to this, I am inspired by affect theory and process philosophy (Gilles Deleuze & Felix Guattari, Brian Massumi, and Erin Manning) specifically when it comes to terms such as affects, intensities, forces, becoming, actual/virtual. In chapter 8 (the second re-enactment) I use the writings of Deleuze and Guattari to understand the transformative forces that are at work in both physical play and dance improvisation. The transformative is here understood as the moment where new registers of meaning-

[4] According to Lakoff and Johnson (1980), image schemata play an important role in the bridge between concrete experience and abstract thought/mental representations. Image schemata can be described as recurring patterns that allow human beings to meaningfully structure actions and perceptions. Image schemata "operate at a level of mental organisation that falls between abstract propositional structures, on the one side, and particular concrete images on the other" (Lakoff & Johnson, 1980, p. 29). I will come back to this in the conclusion, see also note 81, page 165.

making become available through the actualization of virtuals. In chapter 9, I use affect theory of Massumi and Manning's writings on the not-yet and the interval to understand how affects can travel between bodies. Even more, I make use of the writings of both Erin Manning and Maxine Sheets-Johnstone, although they are somewhat at odds with each other. Manning's work is strongly based on process philosophy (Whitehead's metaphysics) and affect theory while Sheets-Johnstone's work is rooted in phenomenology (specifically Husserl)[5]. Although there are certainly differences between phenomenology and process philosophy/affect theory (specifically when it comes to concepts such as agency and intentionality), commonalities can be found too, for example when it comes to the role of the body and movement in our lived experience. I do believe that phenomenology and process philosophy can enrich each other. In several chapters (especially chapters 2, 8, 9 and 10) I will therefore intertwine these two philosophical strands.

Artistic research: three phases

The research I am undertaking is artistic research, in other words, the knowledge, insights and experience I am seeking are "articulated, expressed, and communicated through art" (Borgdorff, 2012, p.166). Knowledge is produced in two different but interrelated strands: the pre-reflective, tacit knowledge that is articulated in the artwork and the linguistic-conceptual knowledge that is articulated in the written component. The written thesis can be seen as both a verbal reconstruction of the research process as well as an attempt to interpret (and provide an academic context for) the findings.

Artistic research thus operates in two contexts: academia and the art world. As a result, my artistic research consists of two components: the written component and the artwork. The written thesis lies here in front of you. The artistic experiments, or at least the traces of these experiments, can be found in the Research Catalogue[6]. It is important to note that the artistic work is by no means a passive element of the research, but a doing that is at the same time a (pre-reflective and tacit way of) thinking. In line with Ingold (2017), the art materials are perceived as correspondences, as thinking in movement. The making not only *informs* the research process and outcome but it *is* the research. There is thus not a strict division between the academic and the artistic part of this research; the two parts merge, collide, join forces, diverge, split up, re-unite, double, multiply and become plural. In this constant movement, a dialogue starts to take place between different ways of knowing. Even more, artistic research sets thinking and knowing in motion. It finds itself on the edge of knowing, it is "unfinished reflection", a "not-yet knowing" that "lingers at the frontier of what there is, and it gives us an outlook on what might be" (Borgdorff, 2012, p.173).

My artistic work comprises three phases: the living archive, the re-enactment of physical play events through dance improvisational practice and the development of the Re-Play/Re-Move toolkit. The first phase of my artistic research consists of the archive of my children's physical play events (see Chapter 5, page 59). Over a period of approximately five years (from 2013 to 2018), I have collected photographs of the physical play of my own children, sometimes with their friends and neighbor kids. This has resulted in a living archive that consists of more than a hundred photographic

[5] In 'Wondering the world directly' (2014), Manning criticizes phenomenology for privileging the subject and processes of intentionality. In line with process philosophy and new materialism, she argues that experience is not tied up to the human subject. In the same issue of Body and Society, Manning's line of reasoning in turn is criticized by several phenomenologists, among which Sheets-Johnstone. Sheets-Johnstone questions not only the validity of Manning claims but also the "dazzling new metaphysical vocabulary" that makes her work hard to read (p.198). According to Sheets-Johnstone, Manning opposes phenomenology and Whitehead's metaphysics while in reality, they share substantive commonalities. For example, both are anchored in the relation between process and movement. Sheets-Johnstone (2014) suggests that it would be wise to recognize not only differences but also the substantive complementarities between Whitehead's metaphysics and phenomenology.

[6] https://www.researchcatalogue.net

sequences and stand-alones. Archiving itself can be seen as an iterative process that makes use of the following organising principles: capturing, selecting, and ordering. The process is open and unfinished – any adjustment or change can be made at any time.

The second phase of my artistic research consists of the re-enaction of the physical play events through dance improvisational practice (see Chapter 6, page 77). In this phase, the archive becomes a source for the creation of new work. A selected set of imagery is handed over to a professional dancer or a group of professional dancers who try to grasp the affects, intensities, and forces that are still present in the imagery. The goal is not to imitate or copy the original play event but to grasp the affects, intensities and forces that are still present in the work[7]. The body of the dancer becomes a resonating channel, a passage through which affects, intensities, and forces can travel that are then expressed in movement. Re-enactment is here understood as a performative practice in which the body, with its own movement history and experiences, becomes the frame through which the dancer can access affects, intensities, and forces that are still present in the selected imagery. The improvisation sessions with the professional dancers are also captured with the camera. This leads to the second set of images that is laid over the original set of images, in a process of doubling that never really becomes a doubling (since only differences are produced). I analyse the images in order to understand the participatory sense-making process in both physical play and dance improvisation. Visual analysis is used to expose and critically reflect on several aspects of participatory sense-making in both physical play and dance improvisation.

In this thesis, I discuss three re-enactments (see chapters 7, 8 and 9, page 88, 101, and 119). The first re-enactment explores the role of joint action and joint attention (e.g. synchronization and coordination of movements and intentions) in the sense-making process of both physical play and dance improvisation. The second re-enactment focuses on the transformative, how new values and meanings are generated through the bracketing of experience. The third re-enactment looks at affective resonances, specifically how affects, intensities and forces can travel in-between bodies.

In addition to the three re-enactments, I also discuss the Touch Project (see chapter 10, page 132). The Touch Project is a bit different than the re-enactments since it starts with my own artistic exploration which is then extended to a three-day workshop at Chester University. The three re-enactments have given me useful insights on different aspects of the participatory sense-making process in physical play and dance improvisation - specifically on how affect, attention, and action work together in order to make sense of self, others, and world. But I also feel that something is still missing. In the artistic process, I have noticed that touch seems to play a vital role in both physical play and dance improvisation. However, in the literature on embodied cognition and enactivism not much attention is paid to the role of touch in the participatory sense-making process. I thus feel the need to explore this area a bit more. Although I could have organised a fourth re-enactment, I decide at this point that working with dance experts will provide me with in-depth information on the deeper layers of touch and on how touch constitutes a we-space. In contact improvisation, there is much knowledge and expertise on interpersonal touch. I contact Malaika Sarco-Thomas at the University of Chester, an expert in contact improvisation, and I organise the Touch Project around it. Even more, the exercises and tasks in the Touch Project serve as input for the development of the 'Touch and Tactility' workshop for children (see the Re-Play/Re-Move toolkit, chapter 11, page 149).

The last phase of my artistic research consists of the development of the 'Re-Move/Re-Play Toolkit', an educational toolkit for children between the age of 4-10 years old that consists of a creative card deck and three additional workshops (see Chapter 11). In this phase, the process of re-enactment is reversed since children are now going to re-enact existing artworks (within the field of

[7] See Chapter 9, page 119 for a definition of affects, intensities, and forces.

performance art and dance). Each workshop has a different theme: one is dedicated to touch, the other to creative movement exploration and the third one to working with objects and materials. The goal of the workshops is not to copy or imitate the dance or artwork, but to use it as a creative source for movement exploration.

Given the above, I explicate the following research question:

> What are the shared elements of participatory sense-making within physical play and dance improvisation?

This research thereby focuses on three areas of investigation corresponding to the three phases of the research:

1) Photography as a medium to explore the elements of participatory sense-making in children's physical play.
2) The use of photographic imagery and re-enactment in exploring the shared elements of participatory sense-making through dance improvisation.
3) The application of the shared elements of participatory sense-making in a toolkit for creative movement exploration for children between the age of 4-10 years.

This artistic research aims to (better) understand the kinship between children's physical play and dance improvisation. The insights will be used to develop the Re-Move/Re-Play Toolkit, an educational package that uses principles of the enactive account to stimulate kinetic/kinaesthetic awareness of children between the age of 4-10 years old.

Related fields

My artistic work falls under a growing tradition of female artists that have incorporated motherhood into their artistic practice, ranging from Sally Mann's project 'Immediate Family' (1992) to Grace Surman's 'Film with Hope' (2016) and Sarah Black's 'Isabel Shoes' (2015). The three art projects are shortly discussed below.

'Immediate Family' is a photography book that was published in 1992, and features Sally Mann's children. The 'Immediate Family' project fits within the late twentieth-century focus in the art world on domestic life – most notable in the tendency of artists to recover old family albums and the revival of past photographic techniques (Goldoni, 2014). 'Immediate Family' consists of large-format, black-and-white photographs of her (often nude) three children. The photographs are taken in and around their summer home in rural Virginia (in between 1984 and 1991). Although the photographs have a glance of spontaneity around them, the depicted scenes are carefully staged (Williams, 2020). Immediate Family is a project that reveals the intimate aspects of childhood (Mann, 1992). The photographs caused quite some controversy with repeated calls for censorship. Sally Mann was criticized of violating the responsibility of parents to protect their children and abusing the power dynamic of mother-child. I will come back to this issue of ethics later on in this chapter when I discuss ethical issues of making art with/about your own children[8].

[8] It must be noted that Sally Mann published the photographs ten years after taking them, and her children gave permission for publication. Even more, the children held the right to dispute any of the photographs being published. Taking this into account, the question remains if young children can freely give permission. Given the parent-child power dynamics, children might feel that they cannot refuse to participate.

Grace Surman is another female artist that makes work with her children. I met Grace in Leeds at the conference 'With Children: The Child as Collaborator and Performer' in January 2017. There are quite some similarities between my artistic work and her work. Surman (2016) has a background in performing arts (new dance and choreography) and her work includes live performances, installation, and video art. She has made video works with her children (*I love my baby and my baby loves me*, 2010, *Film with Hope*, 2016 and *Games no Games*, 2021)[9]. Her interest in play and performance started already long before having children but intensified when she became a mother. In her artistic work, she explores the concept of playfulness in close collaboration with her own children. Surman's work resonates with my own work: we are both mothers/artists and we explore aspects of playfulness within our own homes[10]. There are however also differences. First of all, Surman uses foremost film/video and live performances while I use photography as a medium to capture the play events of my children. Second of all, Surman is foremost interested in exploring the mother-child relationship and her work often features her whole family. My artistic work is not concerned with motherhood, or parent-child relationships, but takes the physical play activities of my children as the main focus.

Finally, I want to mention the work of Sarah Black (2016)[11]. Her work can best be described as family art, i.e. the making of artworks in close collaboration with all members of her family (including her husband who is a sound artist, and their two children). Black explores the complex process of making art within a family context. She writes:

> This (my) research-practice was born out of motherhood, and as such I seek to make motherhood visible without embarrassment and without the anxiety of sharing personal and family experiences through a considered and ethical artistic practice. Through my mother-art practice I have revealed my own personal journey, my ever-changing and sometimes ailing body and the immediacy of my children. I have been driven by the smaller daily occurrences, interruptions, frustrations, boredom and observations which otherwise would not find a voice. I have dealt with my transient states of being a mother, at home with children, through tracking my ongoing, growing and shifting relationships. (Black, 2016, para.3)

My artistic work resonates with the work of Sarah Black (she also has a background in choreography and performing arts) in the way she combines motherhood with artistic practice, and also because her artwork is deeply embedded in daily life and the privateness of home. The main difference, however, is that Black defines her work as a family practice (in which she also explores her role as a mother and caregiver) and she co-constructs her artwork with her immediate family. My artistic practice is mainly concerned with the exploration of the spontaneous play activities of my children. I do not question or examine my role as a mother. Even more, co-creation (with my children) only happens on the level of spontaneous initiation of play. I find it specifically interesting that Sarah Black refers to her artistic practice as "an ethical concept of caring within a curatorial practice" (2016, para. 10). She is interested in curating/documenting the process of being at once a mother and an artist. Because her art practice takes place in and around her (family) home, she also encounters ethical dilemmas as well as questions about responsibility and care. Since my own artistic work has also raised some ethical

[9] See https://vimeo.com/193559144

[10] See https://www.researchcatalogue.net/view/1296945/1296946 and https://meettheneighbours.net/artists/grace-surman-gary-winters-children

[11] See https://www.researchcatalogue.net/view/562823/562824

questions, I will explore the notion of ethics about the involvement of children in research a bit further in the next paragraph.

Photographing my own children: some ethical considerations

As I already stated in the beginning, my own artistic practice has made an important shift from performative work to photography as a main tool to capture the affective/kinetic markers of physical play and dance improvisation. In this artistic research project, I have brought several aspects of my personal and professional life together: art, research, play, dance, motherhood, and childhood. More than anything, this project has been an attempt to intertwine my daily, personal life with the artistic.

As a consequence, the research process itself is it at once intimate yet also distant. I am both an insider and an outsider, and especially in the first phase of the research (the living archive), the artistic practice is a home practice. The personal (being a mother of two children) and professional (being a choreographer and a pedagogue) are deeply intertwined. See, for example, the photographs below (Figures 2 to 7). The photographs are taken during our summer holiday (in 2017) in France, Lisseuil, in the backyard of our water mill. In the first photograph, we see Luuk caught in mid-air, the body suspended in the fall, frozen into an eternal falling. The photograph is about movement, fluidity (of being/becoming) and falling. Yet, at the same time, it is a spontaneous gathering of children who are having a good time at the trampoline – and the picture also shows that they are at ease with each other and with me (none of the children is looking directly at the camera, they have forgotten about my presence).

Figures 2 to 8. Playing on the trampoline © Carolien Hermans


DOMYOS


Ziggo

In other words, the photographs can only be taken by someone who is an insider, by someone who is part of the community. In examining the play events of my own children, I am at once a mother, an artist, and a researcher.

The advantage of the parent-as-researcher is that it allows me to engage with my children's play in an everyday way. In this artistic research, this is particularly relevant because I am interested in the spontaneous play events of children: any other research set-up would have blurred this notion of spontaneity. Patricia Adler and Peter Adler (1996, p.36) argue that "parents can readily gain entree to the world of children through their own children" by making the community to which their children belong the focus of study. This offers many advantages (Adler & Adler, 1996; Abrams, Schaefer & Ness, 2020; Kabuto, 2008, Fitzgerald et al., 2010). First of all, the parent-as-researcher is naturally part of this community and as a result, the children are entirely familiar with the situation, with each other, and with me. Second, this type of research allows engagement in child research in a range of informal settings (home, playground, holidays, etc.). This allows the parent-as-researcher to engage in child culture in daily-life settings, i.e. to engage with children on their own terms and "to examine phenomenologically the lived experiences of childhood" (p.36). It provides tacit, holistic, and experiential forms of knowledge on childhood where children are not perceived as incomplete adults but as being part of child culture (Mouritsen, 1998, see also page 35). According to Adler and Adler (1996), parent-research offers many strengths such as depth immersion, triangulation, and the naturalness/dailyness of play situations that all contribute to and enhance the ecological validity of this research study. Also, Sandra Abrams, Mary Beth Schaefer, and Daniel Ness (2020) argue that examining meaning-making around the home, with your own children, can provide new knowledge that cannot be reached by more traditional forms of research.

However, there are also ethical arguments against parent-research. What is specifically at stake here, is the double role of being an artist/researcher and a parent at once. This might result in a role conflict since the research interest could undermine the obligation to protect the child's well-being (Resnik, 2009; Hackett, 2017). Even more, the child may also feel that she cannot refuse to participate or stop participating at any time (Resnik, 2009). Given the (possible) power imbalance between parent and child, it might be difficult for the child to decline or withdraw.

Veronica Lambert and Michele Glacken (2011, p.782) take the middle way. They state that in order "to ensure the best interests of children, research must be undertaken within defined parameters of ethical approval". This offers challenges to the research because of the potential friction between participation and protection rights. However, they also state that children are often perceived as vulnerable which might result "in a super-cautious approach to children's participation in research" (p. 782).

I am aware of the ethical considerations that come along when working with your own children, as well as with other children. I think that Lambert and Glacken (2011) provide a middle ground that acknowledges the potential risk of a child's participation, while at the same time they also foreground the strengths, capacities, and expertise of children. Involving children in research and art projects, can only be done within a supportive environment. This means that the agency of the child is valued and respected in all phases of the research. As a parent-researcher, my motherhood is partly overlapping with my role as a researcher. In line with Sarah Black (2016), I consider my artistic research as a practice of care, of being responsible for my children within an artistic research context. One way to do this is to be aware of my double role as parent-researcher, and to question at all times if I am still (as a researcher) making decisions in the best interest of my children. Even more, if role conflicts occur, I need to find a healthy balance between the needs of my children, myself as a mother, and the research needs (Adler & Adler, 1996).

Abrams et al. (2020) propose three ethical guidelines in parent-child research: consent-as-process, critical reflection and dialogical interaction. First of all, consent should be seen as an ongoing process, as "a way of ensuring at each stage that participants are still willing to be involved in the project and reminding them of their right to withdraw at any time" (Etherington, as cited in Abrams et al., 2020, p.22). Even more, when it comes to involving your own child in an artistic research project, the researching parent should not sign the content form, but the non-investigating parent. In this artistic research, I checked the voluntariness of participation of my own children on multiple occasions (from photographing the spontaneous play event to selecting and publishing images). Even more, permission was obtained via a written consent form that was signed by the non-investigating parent (their father) and my children[12]. The consent letter included information on the purpose of the project, how it would be carried out, how data would be safely stored, the right to get insight to the photographs that were taken, the use of images for publication, the use of personal names, and the right to withdraw consent at any moment until the publication of articles about the project. Informed consent was not only obtained from my own children, but from all children, dancers and dance teachers that were involved in this research (see Appendix II, page 199).

The second and third ethical guidelines that Abrams et al. (2020) propose, is critical reflection and dialogical interaction. Again, this is an ongoing process, where both child and parent critically reflect on the research process. In my research, for example, we looked together at the photographs and decided together which ones were included and which ones were not. Photographs that would make my children feel uncomfortable in any way, were deleted. Even more, my children were given a voice in the artistic process. They would give suggestions and share their aesthetic preferences with me.

In sum, there is a growing interest in child-parent research as it can potentially provide experiential 'inside' knowledge on child culture and childhood. However, there are also ethical considerations about hierarchies and power that should be carefully taken into account. Abrams et al. (2020) state that the parent-as-researcher should cultivate an approach that is egalitarian, inclusive, dialogical, and reciprocal. In my research, I have tried to cultivate this approach as much as possible, but there were also moments when I could have been more sensitive to the voice of the children specifically when it comes to their ideas on play and physicality. In my research, I have used photography as the main tool for collecting artistic material. However, there are other ways, to include the child community in my research. Not only photographing them but also giving them a voice and opening up a dialogue with them. In future research, I would like to involve children and other parents as co-researchers. Giving children a voice is not only a way to empower them but also to examine play culture from their perspective. Certainly, there are ethical considerations that should be taken into account such as insider/outsider perspectives, power differentials, safety, and protection. I do believe that conducting research in personal life offers potential as long as ethical challenges are carefully considered. Caroline Bradbury-Jones and Julie Taylor (2015) state that there are many tensions to address and dilemmas to deliberate. When these challenges are faced, it can offer inside perspectives that are often absent or dismissed. Even more, research in personal life might give access to different ways of knowing (tacit, experiential, subjective) that add texture and depth to understanding on how children experience physical play in their daily lives.

[12] One could argue that the non-investigating father is perhaps too close and as a result, he cannot take a neutral or objective position. However, legal authority rests with the parents and permission for a child's participation in research, so in this case, it was the only (legal) option. Even more, in young children (up to 12 years) the informed consent form is signed by the legal guardian. From 12 years it is common practice that both legal guardian and adolescent sign the informed consent form.

Chapter 2. Physical Play and Dance Improvisation

In this chapter, I want to provide a clearer picture of the relationship between two main phenomena of this artistic research: physical play and dance improvisation. The aim is to give a general overview of the theoretical landscape of both (physical) play and dance (improvisation), as well as some of its most pronounced landmarks. I thereby focus on a phenomenological perspective on physical play and dance improvisation. The lived body itself is considered here as the vital source of experience and sense-making processes. Physical play and dance improvisation are therefore seen as creative practices where bodies and worlds are in constant dialogue with each other. The first part of the chapter is dedicated to play. I first introduce ideas presented by prominent authors of play (Huizinga, 1995; Caillois, 1961; Bateson, 1972). Subsequently, I discuss the difference between play and game, and introduce two perspectives on play, an evolutionary (Fagen, 1981) and a developmental perspective (Piaget, 1962; Vygotsky, 2016). In addition, I offer a contemporary viewpoint on play by discussing the writings of Flemming Mouritsen (1998) and Helle Karoff (2013). The second part of this chapter is dedicated to dance improvisation. In this second part, I discuss the following notions of dance improvisation: spontaneity and being present in the moment (Ravn, 2020), real-time decision making (Kimmel, Hristova & Kussmaul, 2018), improvisation as a tool to release habits (Midgelow, 2012), and dance improvisation as a relational and attentional practice (Little, 2014; De Spain, 2014). At the end of the chapter, I provide a preliminary definition of both physical play and dance improvisation.

Play and Games

The seminal work *Homo Ludens*, first published in 1938, by Dutch historian and cultural theorist Johan Huizinga, is considered a major turning point in play theory. For Huizinga, play is not only an expression of culture but even more important, play constitutes culture. Culture manifests itself in and as play. He refers to play as an element *of* culture and not *in* culture. "Play is older than culture, for culture, however inadequately defined, always presupposes human society, and animals have not waited for man to teach them their playing" (Huizinga, 1955, p.10). Huizinga defines play as:

> [...] a free activity, standing quite consciously outside 'ordinary' life, as being 'not serious', but at the same time absorbing the player intensely and utterly. It is an activity connected with no material interest, no profit can be gained by it. It proceeds within its own boundaries of time and space according to fixed rules and in an orderly manner. (Huizinga, 1955, p. 13)

The work of Roger Caillois, *Man, Play and Games,* first published in English in 1961[13] is in many ways a continuation of Huizinga's work. According to Caillois, play is an activity that is free, separate in time and space, uncertain, unproductive, rule-driven, and involves make-believe. Caillois (1961, p.x) makes a distinction in four types of play: *agôn* (competition), *alea* (games of chance), *mimicry* (simulation or make-believe), and *ilinx* (vertigo, thrill-seeking and risk-taking)). He also makes a distinction between two styles of play: *paidia* (free, turbulent, carefee) and *ludus* (structured, discipline, convention).

In another seminal work, *The Ambiguity of Play* (1997) by Brian Sutton-Smith, it becomes clear that play is difficult to define because of its ambiguous and diverse nature. Sutton-Smith warns against a narrow definition of play. Instead, he proposes an open and broad description of play. In the

[13] The original French version, *Les jeux et les hommes (le masque et le vertige),* was published in 1958 in Paris/France by Gallimard.

first chapter of his book, Sutton-Smith gives an overview of different types of play ranging from mind play (fantasy, daydreaming), solitary play (reading, hobbies), contests (games, sports) to risky or deep play (bungy jumping).

In *Steps to an Ecology of Mind*,[14] Gregory Bateson (1972) points to the meta-communicative aspect of play. According to Bateson, playing is a form of meta-communication because the players (children and young animals) communicate to each other that 'this is play'. Bateson gives the example of the playful nip. "The playful nip denotes the bite, but it does not denote what would be denoted by the bite". (Bateson, 1972, p.180) In other words, in play we engage in actions that do not denote what they 'normally' would denote. Play sets its own boundaries of space/time and its own rules– and what is meaningful in play can only fully be understood within this specific space/time frame. Bateson furthermore states that playing is self-generating and self-motivating, and as such, it can generate positive play moods and affective states.

From the above, I come to the following understanding of play:

- Play is an intrinsic part of culture (Huizinga, 1955). Play is a free activity that takes place within its own boundaries of space and time. Play has no material interest and there is no direct profit (Huizinga, 1955).
- Two types of play can be distinguished (Caillois, 1961): paidia (free play) and ludus (structured play). Play includes a spectrum of play practices that range from structured/pre-arranged to unstructured/free (see also page 49).
- Play is ambiguous, it is diverse and has a wide range of meanings and connotations (Sutton-Smith, 1997).
- In play, the players communicate on a meta-level with each other (Bateson, 1972).

The play theorists discussed above don't make a clear distinction between play and games. Huizinga uses the two terms interchangeably and he refers to both play and game as cultural forms of meaning-making that are free and have no material consequences. Caillois examines playing and gaming through a socio-historic lens. He makes a distinction between *paidia* (free play) and *ludus* (structured, rule-governed play) but he does not further elaborate on the distinction between play and game. Sutton-Smith (1997) explicitly refers to games. Games can roughly be divided into traditional games (board and card games but also hide and seek games) and modern, technological-driven games (such as video games). However, he does not pursue a further theoretical delineation of play and games but instead examines the meaning of play through seven rhetorics (such as fate, power, communal identity, etc.). Bateson, finally, is foremost concerned with the meta-communicative aspects of both play and game.

According to Bo Kampmann Walther (2003, para. 9) playing and gaming share the following characteristics:

[14] This seminal work of Gregory Bateson consists of collected essays in anthropology, psychiatry, evolution, and epistemology. Bateson examines in this book the nature of the mind in terms of a network of interactions. Specifically relevant to this chapter is Bateson's idea on metacommunication and the transmission of messages. According to Bateson, play can only occur when there is some degree of meta-communication, that is, the players (young animals as well as children) signal to each other that they intentionally simulate an action (such as fighting). Even more, other players recognize the intentional simulation. In other words, players communicate about their communication.

1) Play and games are anchored in spatial and temporal settings (in other words, the players are committed to the rules that make up the game or play.
2) Play and games are embedded within the realm of cultural dynamics (they generate cultural meaning.
3) Play and games create flow states, i.e. states of concentration, absorption, and optimal experience.
4) Play and games require certain moods.[15]
5) Play and games are meta-communicative acts (in line with Bateson, 1972).[16]

Besides the similarities, Kampman Walther (2003, para.1) also points to the differences between play and games: "Play is an open-ended territory in which make-believe and world-building are crucial factors. Games are confined areas that challenge the interpretation and optimizing of rules and tactics - not to mention time and space". In addition, Hsu (n.d.) states that play emphasizes spontaneity while in games this spontaneity is interchanged for playful order where participants willingly comply with the rules. Games are rule-governed. The rules dictate a certain structure/organisation that gives room to tactics.[17]

In this research, I will mainly focus on physical play. However, I am aware that the line between play and game is a blurry one. For example, hopscotch is a playful movement but it becomes a game when specific rules and spatial-temporal characteristics are added to the movement (such as a hopscotch diagram, throwing a stone on the first square, hopping on the empty squares (except the one with the stone), jump with both feet at the pairs, etc.). In this research, I will mainly focus on hopscotching (or any other movement such as balancing, running, turning, climbing and rolling) as a verb and not as a game with specific rules. The same is true for hiding and seeking: at one end of the spectrum there is the movement of hiding and seeking, at the other end of the spectrum it turns into a game (such as KickTheCan). In this research I am foremost interested in physical play, i.e. bodily activities that are 1) spontaneously initiated, 2) open-ended, 3) not confined to fixed rules or tactics and 4) that give children the opportunity to explore movements creatively.

More on Play

Play is often embedded in an evolutionary or developmental perspective. Robert Fagen (1981) is most notable when it comes to describing the selective and evolutionary aspects of animal and human play. Within the evolutionary perspective, play is explained as a way to practice and rehearse adaptive responses and a way to increase behavioural variability (in terms of novel or innovative behaviour).

Within the developmental perspective, two major theoretical frameworks are offered by Jean Piaget (1962) and Lev Vygotsky (1967). Both Piaget and Vygotsky situate play in early childhood. For Piaget, play reflects the different phases of cognitive development. He identifies three phases of play: practice play in the sensorimotor phase (0 to 2 years), symbolic play in the preoperational phase (2 to 7 years), and play with rules in the concrete operational phase (7 to 12 years). In other words, the types of play reflect the cognitive phase of development of the child. Piaget's theory has been

[15] See page 122 for more information on play moods.

[16] See page 36 for more information on play as a meta-communicative activity.

[17] Sutton-Smith (1997) makes a distinction between traditional games (board and card games but also hide and seek games) and modern, technological-driven games (such as video games). My research focuses on physical play activities that are spontaneously initiated by children in informal contexts and that are not mediated by technology or media. Games, and especially video games, are not part of this research.

criticized by Sutton-Smith (1966) and Nicolopolou (1933) for neglecting the constitutive role of play within thought. Play is only considered as an expression of cognitive structures that are already existing, and as a result, Piaget "closes off any opportunity to see play as a context for new [cognitive] development" (Nicolopolou, 1993, p.6).

Vygotsky, in contrast to Piaget, does not offer a systematic theoretical framework but a set of orienting contexts. In his theory, play is a social symbolic activity. For Vygotsky, play is vital for development in early childhood.

> In play a child is always above his average age, above his daily behavior: in play, it is as though he were a head taller than himself. As in the focus of a magnifying glass. Play contains all developmental tendencies in a condensed form: in play it is as though the child were trying to jump above the level of his normal behavior. (Vygotsky, 1967, p. 6)

This developmental perspective however is criticized by Flemming Mouritsen (1998). Mouritsen states that our thinking of play has been greatly conditioned by developmental thinking. He asserts that nowadays play and play activities are increasingly seen "as competencies, as indispensable phases in cognitive development, as transitional stages on the path of development, as precursors of thinking, as children's ways of learning, and as tools that can stimulate various aspects of the development of personality cognitively, linguistically, motorically, socially, etc." (1998, p.12).

But play belongs to children, as it peaks before adulthood (Sheets-Johnstone, 2003). Although adults play too, play is the home ground of children. Play is what children do, it is their main project, it is their way to express meaning and creatively engage with the world. For children it is the primary medium, for adults it is secondary. Play does not have to be justified from a developmental perspective. It is not good or right because it contributes to the emotional, physical, cognitive, or social development of a child. Play is a meaningful phenomenon in and of itself. In this thesis, I will look at physical play as an intrinsic part of children's informal culture, i.e. spontaneous play activities that are initiated by children in and around the home (Mouritsen, 1998).

Child Culture / Play Culture

Play usually takes place within informal social contexts, usually from child to child. Play does not typically exist in a fixed form, but it is a fluid practice that is situation-dependent (Mouritsen, 1998). There is no creative product, as only temporal meaningful moments are constituted that are only relevant in the situation and to those who are present (Hammershøj, 2021). For Mouritsen, play is part of child culture. Children's culture is understood as "expressions of culture that children produce in their own networks; that is, what with an overall term one could call their play culture" (1998, p.6). This involves (amongst others) games, play activities, songs, rhymes, jokes, riddles, etc.

Play is not something that children know, but it is something that they do. It is a practice, that requires its own skills and know-how. From an educational or developmental perspective, these skills seem not to be relevant or purposeful, however, the skills become meaningful within the play context:

> There is status in being a good player or an accomplished spitter. What you are good at may be something that from the educational point of view does not seem to matter. Good at elastic-skipping? Good at talking like Donald Duck? Good at joshing? But it does matter to the children. (Mouritsen, 1998, p.14)

According to Mouritsen (1998), children's play is based on "simple formulae" (p.14), in other words on a recipe that consists of basic ingredients. Think for example of jumping rope. To do it right, you have to create an ongoing flow between the jumping and the circular swing of the rope. This requires

quite some rehearsal and repetition. The basic movement ingredients are there, but to do it right, you have to find your momentum and rhythm. When you get the hang of it, you can start making more complex variations (such as jumping rope with two feet or jumping rope with a group). Jumping rope is a play activity that finds its origin in repetition, variation, rhythm, and flow. Playing "is a doing and a making, done in a repetitive rhythm" (Schmidt, as cited in Karoff, 2013, p.3).

Playing as doing and playing as a state of being

Helle Karoff (2013) also starts her theoretical exploration of play by stating that we should not approach play in functional terms (developmental or evolutionary) but she considers play as a bodily practice that brings children together in a meaningful way. For Karoff, play is a way of being in the world, i.e. play creates meaning within its own frame of reference. She uses Bateson's concept of framing (1972) to explain this. As already mentioned above, Bateson perceives play as a meta-communicative act. In play, children step out of the daily (habitual) frame to the frame 'this is play'. In other words, children know that they are playing (Bateson, 1972). Play allows children to break out from their conventional notion of self and to experiment and engage with new ways of being and becoming.

Karoff (2013, see also p. 122) makes a distinction between play as a practice (as a doing) and play as a state of being (a mood). For Karoff, play is a doing, a practice in which we share experiences with others without having to discuss them or put them into words. In other words, meaning is created in the doing:

> When you are playing you create a universe of meaning through your actions or practices, where all other types of meaning make sense in relation to your set-up. Meaning in that sense can only occur within a specific perspective, and it has no reference to anything beyond this (2013, p. 3).

The production of meaning is bound to the doing and what is expressed can only be understood within the specific space/time frame of the play event. Play is a way of being in the world, a way to relate to self, other(s) and the world. This being is affective, it is an attunement to the world from which meaning emerges. Karoff refers to this as play moods: ways of being that are not inner psychological states but that are out there, "in the world, in our doings" (2013, p.8).

In sum, Karoff considers play as a practice, as a doing in which meaning is created through the affective attunement to self, others and world. Even more, the meaning that is produced can only be understood within the specific (time-space) frame of the playing activity.

Physical Play

Physical play activities are activities that take the kinetic/kinaesthetic experience as a constitutional element of the sense-making process. Physical play includes (amongst others): tag, hide-and-seek, chasing games, exercise play, rough-and-tumble play, challenging games, etc. It also includes activities that stimulate the senses (sensorial and exploratory play), require physical collaboration and cooperation (for example, building a den or a snowman together), or provide physical challenges (for example climbing in a tree).

Of all types of physical play, most has been written on rough and tumble play. Rough and tumble play is often referred to as playfight (Pellis & Pellis, 2017) and it includes "vigorous behaviours such as wrestling, grappling, kicking, and tumbling" (Pelligrini & Smith, 1998, p.579). Playfight is generally seen as a nonserious form of fighting (a simulation). Several meta signals are used to communicate playful intent such as facial expressions (smiles, laughing, play faces), self-handicapping (giving the larger/stronger partner a disadvantage) and role reversal (the roles are

interchangeable), as well as the fact that the playfight receives "little attention from outsiders and participants remaining together after the encounter" (Storli, 2013, p. 2). Playfighting is observed among species of mammals, birds, some other taxa, and human beings (Pellis & Pellis, 2017), as well as in children's free time play ranging from pre-school to adolescence (Storli, 2013).

In physical play, children learn to speak a shared kinetic/kinaesthetic language in which the players kinaesthetically attune to the movements of self and others. Physical play is "a kinetic happening in which the sheer exuberance of movement dominates and in which a certain freedom of movement obtains" (Sheets-Johnstone, 2005, para. 29). Children learn to know their bodies and the bodies of others in an experiential way. Meaning arises through the sharing of corporeal-kinetic experiences.

From the above, I can now come to an initial understanding of physical play as:

1) bodily activities that are **spontaneously initiated**, open-ended, not confined to fixed rules or tactics and that give children the opportunity to explore movements creatively;
2) an intrinsic part of **children's informal culture**, it is an activity that is foremost initiated by children in and around their homes;
3) a practice, a doing in which meaning is created through the **affective attunement** to self, others, and world; meaning resides in the playful event itself and has no reference to anything outside of it;
4) an activity in which movement itself is the motivating force. Physical play activities are activities that take the **kinetic/kinaesthetic experience** as a constitutional element of the sense-making process.

Dance Improvisation

Several studies have been written on dance improvisation (Blom & Chaplin,1988; Tufnell & Crickmay, 1990; Zaporah, 1995; Cooper Albright & Gere, 2003; Buckwalter, 2010, De Spain, 2014; Midgelow, 2019; Sarco-Thomas, 2020). However, it is not easy to find an all-encompassing definition of dance improvisation.

Dance improvisation is a broad concept that includes solo and group exploration, studio work, and performative practice. The term covers an entire range, from choreography with real-time compositional elements to open contact jam sessions[18]. Dance improvisation is often discussed in relation to terms such as spontaneity, openness and being present in the moment. Susanne Ravn (2020) however argues that any dance (choreographed or improvised) contains at least some degree of spontaneity and openness. A dance can never be exactly repeated, every enactment produces difference and requires some level of spontaneity of the dancer. It is thus more fruitful to look at *ways in which* openness and spontaneity take on shape in dance improvisation – thereby keeping in mind that dance improvisation itself is a highly diverse practice (ranging from free to structured dance improvisation).

Ravn uses the term 'body of today' to point to being present in the moment. In dance improvisation, the dancers need to attune to how the body feels today. The body of today feels different than the body of yesterday and the body of tomorrow. The dancer tunes into the body of

[18] Both dance improvisation and choreography are plural in their manifestations, and therefore often intertwined. Contemporary choreographers use improvisation as a tool to create dance material and the final performance may also consist (entirely) of improvised sequences. Improvisation and choreography are thus not two sides of a coin, but a continuum. Along this continuum of choreography and improvisation, other forms of dance making can be found too such as instant composition (e.g. Julyen Hamilton) and open form composition (e.g. Mary O'Donell). In this thesis, I restrict myself to dance improvisation although I am aware of the fact that dance improvisation, composition, and choreography are intertwined practices.

today, and this body invites her to "undertake kinaesthetic exploration" (2020, p. 79). Dance improvisation, in this respect, could be described as a kinetic/kinaesthetic discovery guided by sensorial and reflective awareness. In this process, familiar elements blend with unfamiliar elements. Susan Foster (2003, p. 3-4) formulates this encounter between the known and unknown, as follows: "Improvisation can be envisioned as a continuous moving back and forth and blending of predetermined and spontaneously discovered events." Dancers move back and forth "between the known and unknown, between the familiar/reliable and the unanticipated/unpredictable". Dance improvisation pushes the boundaries, as it summons the unexpectedness, the surprise and the unknown. Foster embraces this element of surprise. However, she also states that the encounter with the unknown can only be accessed through the known. Dance improvisation can thus be seen as an encounter between predetermined structures/choices, bodily routines, and creative potential (i.e. the unknown, the surprise) that arises in the moment.

For Michael Kimmel, Dayana Hristova and Kerstin Kussmaul[19] (2018) dance improvisation is process-oriented. Decisions are made in the action "without delay, using present resources, and in response to current constraints and adaptive pressures" (p.6). The dancers must respond to what is readily available, finding themselves in a "double loop of simultaneous feedforward and feedback" (p.7). The dancers need to be sensitive to what happens in the moment, while at the same time they anticipate on what is yet to come. This is not to say that dance improvisation is solely an intuitive and spontaneous practice. In order to respond creatively to what happens in the moment, the dancer must have a set of enculturated, situated, bodily routines and knowledge ready for use (Stein, 2011). The experienced dancer has trained and rehearsed these routines over and over. Improvisation thus requires a "state of readiness "(a prepared body/mind) for real- time decision-making and thus cannot do without "cognitive skills such as prediction and anticipation" (Da Silva, 2017, p.127).

Many dancers use improvisation as a tool to release old habits and to experience new ways of moving. For Vida Midgelow, dance improvisation is a somatic practice that takes transition and change as its central departure point. She speaks of "heightened attention to ever-changing details" (Midgelow, 2012, p.4). This heightened attention allows the dancers to register ongoing (micro) shifts in the body in relation to space and other bodies. Through active sensing, the dancers become aware of the familiar and habitual[20] and this awareness allows them to respond in different ways, thereby breaking-up bodily routines. Improvisation then is a way to "experiment and re-invent new ways and different ways of thinking connections" in the body (Ravn, 2020, p. 80).

Dancers not only attune to the internal body dynamics (the kinetic/kinaesthetic dimensions of the body) but also to the relational dynamic (with space, with time, with others, with objects). Just as in play, this can be seen as a skill that needs practice. A dancer becomes responsive and response-able by the doing, by the practice itself. With this practice, dancers develop and fine-tune their "ability to experience the smallest multiply located intervals within the larger action" (Little, 2014, p.251). In other words, dancers develop (throughout their practice) an ability to attend to tiny shifts (micro changes) while at the same time they do not lose track of the overall action. This ability allows them to be "response-able" (Little, in reference to Manning, 2007), i.e. to be sensitive to a multiplicity of relations (with space, with time, with others, with objects).

[19] Kimmel et al. (2018) focus in their article specifically on contact improvisation but some of their ideas, such as distributed creativity (see chapter 3) and real-time decision making are also applicable to dance improvisation.

[20] Midgelow (2012) describes the familiar as a certain way of moving that is comfortable, familiar, and performed with ease. According to Rothfield (2013) habits are "a form of corporeal scriptwriting, a shorthand for the body. They are dependable, not because they are instinctual or mechanistic, but because they function "as if" they were" (p.100).

> Another way to describe this […] is that our self expands into a sensing, or a self-sensing. We shift as ecologies, interdependent and responsive actions of being. Surfaces now come and go, appear and vanish, and what emerges is a full geometry of spatially thinking relations, potentiating a far broader – and wilder – dance. (Little, 2014, p.252)

For Nita Little (2014) dance improvisation is an attentional practice, since it is attention that makes available new possibilities of relating. Dancers tune into their own bodily felt (internal) dynamic, while at the same time they tune into the relational (external) dynamic of the moment (i.e. the temporary configuration of space-time-bodies-objects). Erin Manning (2007) describes dance improvisation as "relational shape-shifting" (p.279. She challenges the idea of stable bodies that exist in a pre-given space-time but instead argues that movement creates relational intervals.

> It is never simply a cue, a direction, a prodding that moves us. What moves us is an intensity alive in the potential of movement moving. Together, we move to movement's relational taking-form, moving the shape of the dance, not its steps. To dance relationally does not mean to follow in someone's footsteps. It is not to follow up on a direction already underway. To dance is to move the relation. (Manning, 2007, p.279)

The relational should here be understood as the coming together of places, durations, energies, intensities, and affects. In the unfolding of the improvisation, dancers become sensitive to the new possibilities that emerge in their relation with self, others, and space-time.

Kent de Spain (2014) also considers dance improvisation as a relational and attentional practice. He describes dance improvisation as "the ability to sense how the movements in the present moment relate to movements that have come before, to feel them in space and time, to connect them to the movements of others, to frame the content of those movements in a way that carries humanity and meaning, and to use all of that as the canvas for the movements that emerge to create the next moment" (2014, p.167). His view resonates with my experiences of dance improvisation. De Spain draws a holistic picture of dance improvisation as a somatic practice that is at once deeply internal (i.e. active sensing and heightened attention to ever-changing details that affect the internal bodily constellation) as it is external (i.e. receptiveness and responsiveness to the other and to time-space). Dance improvisation is the willingness and openness to engage with self, others and world creatively. It is a way of sense-making that takes creative movement as its main vehicle of expression[21].

From the above, we can now come to an initial understanding of dance improvisation as:

1) an **ongoing encounter between predetermined structures/choices and creative potential** (i.e. the element of surprise) that arises in the moment and that requires **real-time-decision-making**
2) a process of **kinetic/kinaesthetic discovery** guided by sensorial and reflective awareness;
3) a somatic activity that increases (kinetic/kinaesthetic) awareness and that allows dancers to respond in different ways, thereby **breaking-up bodily routines;**
4) a way to experiment with and **to re-invent different ways of connecting** with the body, with others, with space, with time as well as with things;

[21] It must be noted here that although dance improvisation is a bodily practice that draws creative connections between self, others and environment, this is not always the case. Moments of connection are interchanged with moments of disconnection. Sometimes there is no connection at all. The dancers thus move in and out of shared moments of sense-making.

5) a **relational and attentional practice**, a moment-by-moment inquiry into the moving experience. In improvisation, dancers become sensitive to the relational dynamics of movement.

Final thoughts:

In this chapter, I have explored two key concepts of this artistic research: physical play and dance improvisation. I have first provided a general overview of the literature on both play and dance, and then gradually narrow this down to physical play and dance improvisation. Including the broader field was necessary to situate both concepts and to understand how they relate to other concepts (for example how dance improvisation sits beside choreography and composition).

To do so, I have incorporated theories that range from cultural history to more experimental approaches toward play and dance. My main focus however has been phenomenology. I am indebted here to the writings of Maxine Sheets-Johnstone. First of all, she is one of the few authors that draws explicit connections between bodily play and dance improvisation. Second of all, her writings are deeply embedded in phenomenology, since for her all meaning-making processes are rooted in movement, in animate life. The kinetic/kinaesthetic body is the generative source of corporeal concepts, thinking, and being.

I have also examined opposing views on both play and dance improvisation. On the one side, there are views that associate play and dance improvisation with terms such as risky, freedom, spontaneity, not-knowing, and intuition. Poststructuralism and process philosophy, however, have no interest in static entities and binary oppositions. They consider play and dance improvisation as fluid practices that are at once mindless + mindful, unpredictable + predictable, risky + safe, spontaneous + planned, etc. This view offers in my opinion, a richer perspective because it considers play and dance improvisation as dynamic, relational practices. It abandons dichotomic thinking, as it moves beyond "semantic articulations and sediments ways of thinking and knowing. The stable unified sense of self and a pre-given reality are exchanged for an ever-changing, relational, and interpenetrative experience of being and becoming" (Van der Schyff, 2015, p.8).

In this chapter, I have identified the main characteristics of physical play and dance improvisation. Both can be seen as somatic activities in which meaning is created through the bodily attunement to self, others and world. Movement itself is the motivating force and the sense-making process is deeply embedded in the kinetic/kinaesthetic experience. Even more, physical play and dance improvisation are relational and attentional practices in which the participants tune into their own bodily felt (internal) dynamic, while at the same time they attune to the relational (external) dynamic of the moment.

There are also differences. Physical play is part of children's informal culture. It is an activity that is foremost initiated by children in and around their homes, whereas dance improvisation most often takes place in a studio - a confined space that is specifically devised for movement/dance. Physical play is part of the lives of all children, regardless of gender differences and age differences. Dance improvisation, in contrast, belongs to a specific community of people (professionals and amateurs) that finds joy in the sheer exploration of movement. Dance improvisation is usually not part of daily life, it is not a home practice (although Covid-19 has turned many living rooms into private studios) and it takes place in a rather homogeneous community.

This chapter aimed to come to a preliminary understanding of the two main concepts of my artistic research: physical play and dance improvisation. In the next chapter, I will further elaborate on the main characteristics of physical play and dance improvisation - this time from an enactive point of view.

Chapter 3. Of rhythm and movement: physical play and dance as (participatory) sense-making practices

Drawing on the enactive account of cognition, I discuss here how both physical play and dance improvisational practice can be seen as (participatory) sense-making processes (De Jaegher and Di Paolo, 2007). In this chapter, I first give a short introduction to the enactive approach and the concept of participatory sense-making. I then discuss how children's physical play and dance improvisation can be seen as special forms of participatory sense-making based on five core elements: decision-making-in-action, kinaesthetic pleasure, rhythmic coordination, creative potential, and its ambiguous, open-ended nature. This is followed by some reflections on how physical play and dance improvisation bring forth worlds of meanings through dynamic interactivity (Van der Schyff et al., 2018). Finally, I press the need for future research in the interdisciplinary field of play, dance improvisation, and enactivism.

Introduction to the enactive account[22]

Most theories on subjectivity look to social cognition from a representationalist point of view (Fuchs & De Jaegher, 2009). Models such as theory of mind, theory theory or simulation theory[23] all start from the premise that the mental state of other people cannot be directly observed and therefore our mind-reading abilities have to rely on common sense or folk-psychological theory (Gallagher, 2004). In contrast, the enactive account looks at the problem of intersubjectivity from an interactive and nonrepresentational perspective (Gallagher &Varela, 2003; Gallagher, 2005; Thompson, 2007).

In the enactive account, cognition is considered an "organismic activity taking the form of sensitive interactions stretching across the brain, body, and environment" (Röhricht et al., 2014, p.13). In the enactive account, the interaction itself is the source of intersubjectivity. Social understanding is not considered a simulative, projective, or inferential process in the individual brain but meaning-giving processes are generated and transformed in the interplay between individuals. The interaction involves bodily resonance, affect attunement, interpersonal coordination and synchronization of movements and gestures.

There is a strong connection between the enactive approach and phenomenology. Varela, Thompson and Rosch consider enactivism as "a continuation of a program of research founded over a generation ago by the French philosopher, Maurice Merleau-Ponty" (1993, p. xv). According to Gallagher (2018), many of the ideas of enactivism sit easily with phenomenology. In phenomenology, consciousness and our primary relation to the world are not seen as intellectual/theoretical but as a form of bodily intentionality (i.e. not an 'I think' but 'I can'). Enactivism picks up on the notion that cognitive processes are deeply intertwined with bodily action and bodily intention. Even more,

[22] This paragraph is borrowed from the introduction paragraph of Hermans (2018).

[23] The theory of mind and theory theory are closely related. Both theories propose that our understanding of the mental states of others is based on folk psychology, that is, we make inferences about the mental states of others by "relying on an innate or acquired theory of how people generally behave and of the mental states such as beliefs or desires that cause their behaviour" (Fuchs & De Jaegher, 2009, p.468). The difference between theory of mind and theory theory, is that the first one is solely concerned with mental states of people while the theory theory also is concerned with objects/things. The simulation theory states that we do not need a theory since we can simulate the mental states of others by using our own mind (through imagination). Gallagher (2001) argues against all three theories. Instead, he proposes that we come to understand others through primary interactions, in other words, by physically relating to others and the world.

Merleau-Ponty's notion of intercorporeality[24] is further developed by enactivism and resonates with De Jaegher and Di Paolo's notion of participatory sense-making.

Enaction stands for the manner in which a subject of perception creatively matches its actions to the requirements of the situation. The term was first introduced by Varela et al. (1993) and refers to a pathway in which several related ideas come together and are unified: embodiment, autonomy, emergence, experience and sense-making (De Jaegher & Di Paolo, 2007). The first underlying assumption of the enactive approach is that the body is considered "the ultimate source of significance" (Di Paolo et al., 2010, p.42). Embodiment refers to the notion that the body is more than an instrument of the mind: it is a dynamic system that is in constant dialogue with the world. In the enactive approach cognition is not "entirely located in the head, but distributed across brain, body, and environment" (Gallagher, 2004, p.6). The second underlying assumption of the enactive approach is that a system is autonomous: its dynamics generate and sustain an identity. This is called operational closure. The third idea, emergence, refers to collective self-organisation in complex systems theory. It describes how a novel property or process "emerges" out of "the interaction of different existing processes or events" (Di Paolo et al., 2010, p. 40). Experience, as the fourth underlying assumption, is not an isolated mental act but comes into existence by being alive and acting upon the world. Finally, sense-making refers to the idea that we do not passively receive information about the world, but we actively engage and participate in the generation of meaning.

In this chapter, physical play and dance improvisation are considered self-organising, emergent activities in which experience is transformed through the dynamic coupling of two or more autonomous agents. Meaning is generated within the interaction: sense-making in play and dance improvisation is thus always a relational and situational process.

From sense-making to participatory sense-making[25]

De Jaegher and Di Paolo (2007) draw further on the five basic ideas of the enactive approach. They introduce the concept of participatory sense-making. Sense-making, according to De Jaegher (2009) is an intentional and expressive activity, i.e. an activity affected by coordinating movements in interaction[26]. Each agent involved in this interaction process contributes in his own way to the coordination and co-regulation of intentions/perceptions and movements. Even more, the interaction process itself can move into directions that are unexpected to the agents and even not-willed. This means that when we engage in interaction, not only the participants but the interaction process itself can influence sense-making.

In the enactive approach sense-making and meaning in interaction cannot be a solely individual activity: they are co-authored, inter-bodily, situated, and situational (Jensen, 2014). Participatory sense-making can be defined as "the coordination of intentional activity in interaction, whereby individual sense-making processes are affected and new domains of social sense-making can be generated that were not available to each individual on her own" (De Jaegher & Di Paolo 2007, p.13). This coordination can take on different shapes (such as imitating, mirroring, rhythmic

[24] Intercorporeality refers to the connection between bodies, specifically when it comes to the perception of another's action. Through the reciprocity between bodies, "we directly grasp the intention of another's action" (Tanaka, 2015, p.462).

[25] This paragraph (until "this joint sense-making is not a static process but involves relational dynamics") is a copy of the introduction paragraph of Hermans (2018), Joint Action and Joint Attention: Dance Improvisation and Children's Physical Play as Participatory Sense-Making Activities.

[26] The enactive approach doesn't make a clearcut distinction between sense-making (senses that make sense) and meaning-making (often associated with semantic meaning, propositional knowledge and internal representations) because they perceive cognition as embodied, situated and relational. Any type of knowledge and any type of meaning-making is the result of a living organism that interacts in an embodied way with its surroundings.

synchronization) and different modalities are at play (such as movements, gestures, language, etc.). Each participant engages dynamically in the interaction process.

Gallagher (2004) adds to this that joint sense-making is a thoroughly embodied process in which we share intentions by interacting with each other. The lived experience plays a crucial role in understanding other people's actions and intentions.

> A common intentionality emerges among the individuals as they enter into the interaction involved in a specific task […]. Their shared understanding emerges from a set of embodied movements and actions in the specific context of what they were doing, and it is irreducible to any set of mental states in one individual or even the collection of mental states found in all of them. The action, and the meaning of the action, transcends any one individual; it is generated in the interaction required for the outcome. (Gallagher, 2010, p. 120)[27]

In addition, participatory sense-making acknowledges the musical structure of our interactions. Through an expressive interactive play of intentional actions and responses, a meaningful action chain is developed. Di Paolo et al. (2010) explicitly use the term interaction rhythm, which they define as diverse aspects of the temporality of the interaction. Interaction rhythm can be observed in daily actions when we communicate to each other and the listener rhythmically coordinates his movements to the speech and movements of the speaker.

Participatory sense-making is not an on/off activity, in the sense that it takes place or not, rather it should be seen as a spectrum of participation, ranging from almost individual sense-making to whole shared sense-making activities where actions, affects and intentions are co-constructed in and through the interaction. In sum, participatory sense-making occurs in the interaction between two or more autonomous agents through the coupling and coordination of movements and intentions. This joint sense-making is not a static process but involves relational dynamics.

Physical play and dance improvisation can both be seen as activities in which sense-making is situational and interactional. Sense-making is the process in which meaning or valence emerges through our interactions with others, or with the world. Through sense-making we lay a grid over the world, we imbue the world with values and meanings (Thompson, 2007).

In both physical play and dance improvisation, we can identify three layers of sense-making: movement, affect, and attention. First of all, movement exploration is at the heart of both physical play and dance improvisation. In both activities, there is a kinetic urge – i.e. the thrive to engage fully in movement solely for the pleasure of moving. Sheets-Johnstone formulates it accurately when she stresses that "movement is in and of itself engaging, fun, and delightful, and it is engaging, fun, and delightful because it resonates in feelings of aliveness radiating dynamically through a kinetic/tactile-kinaesthetic body" (2003, p. 418). In short, physical play and dance improvisation are both 1) grounded in movement, and 2) movement itself gives rise to (mutually shared) sense-making processes through the exchange of kinetic/kinaesthetic bodily patterns.

Second, physical play and dance improvisation are affective practices. Affects are expressed through and within the qualitative dynamics of movement. It is a bidirectional process of moving and being moved, affecting and being affected. Even more, "the interaction dynamic itself creates and

[27] A daily example of common intentionality is for example when two persons carry a table or couch upstairs. This might be accompanied by verbal instructions but in most cases, the bodies adjust to each other pragmatically. Often this results in one person being in front while the other is in the back. Even more, to keep the table or couch stable, the two persons do not carry the object parallel to the ground instead the front person carries the end high and the person in the back carries the end low. As said, this is often something that the movers discover during their shared interaction, by finding the right balance, sharing the same amount of weight, etc.

constitutes an affective quality which is not pre-existent to the encounter" (Mühlhoff, 2015, p.2). Affects arise through the ongoing dynamics of moving and being moved. Physical play and dance improvisation can be seen as "dynamic affective happenings" (Sheets-Johnstone, 2009, p.379), in which sense-making is experienced in and through a creative movement inquiry.

Third, physical play and dance improvisation are attentive practices. This attentiveness includes micro-awareness of tiny bodily shifts as well as macro-awareness of the interactional dynamic. Players direct their attention to themselves, to the other players, and to the environment through active sensing. Little (2014) speaks of fine slices of attention that can occur in rapid succession or that are stretched over time. Attention is a prerequisite for the actualization of creative potential since only through active sensing (self-sensing, sensing the others, and sensing the environment) we can respond and be response-able to the continuously shifting relational dynamics. Even more, in physical play and dance improvisation, we give attention to attention. The players and dancers attend to selves, others, and the environment amid the experience. The players and dancers orient themselves within the slipstream of movements, in situations that are self-evolving and they creatively adapt to the ever-changing relational dynamics. In other words, attention draws the players/dancers in - as they attune and become sensitive to the qualitative dynamics (such as forces, intensities, contours and flow) of the movement. Attention is thus not a static phenomenon, but a dynamic phenomenon that is intrinsically connected to perception and movement.

In sum, physical play and dance improvisation can both be seen as activities that 1) take movement itself as the source for creative exploration, 2) are affectively charged and 3) require sensitivity to the ongoing qualitative dynamics of self-generated and other-generated movement (see Figure 9).

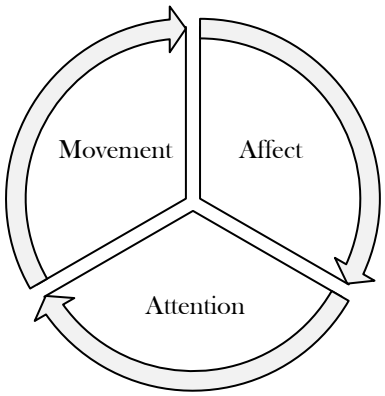

Figure 9. Participatory sense-making: movement, affect, and attention

Five additional elements of sense-making in physical play and dance improvisation

In addition to the three layers, five core elements can be distinguished in the sense-making process of both physical play and dance improvisation: decision-making-in-action, kinaesthetic pleasure, rhythmic coordination, creative potential, and its ambiguous, open-ended nature (see Table 1).

(participatory) sense-making	• a real-time process of *decision-making-in-action* • a movement practice that welcomes the playful and the joyful, and that deliberately seeks *kinaesthetic pleasure* • a diverse practice of beginners as well as expert movers that *collaborate and (rhythmically) coordinate their actions* within the temporal flow of movement • the unlocking of *creative potential* that is actualized through *an emergent set of structures and rules* • *ambiguous* and open-ended nature

Table 1. (Participatory) sense-making in physical play and dance improvisation: five elements

Decision-making-in-action

Dance improvisation and physical play are both practices in which movements are created on the spot. Decisions are made in real-time. Making a decision implies that all other options are taken aside: the event unfolds itself through a series of decisions that create a pathway but also closes off other pathways. "A constant stream of action decisions is made without delay, using present resources, and in response to current constraints and adaptive pressures." (Kimmel et al., 2018, p.5) Decisions are made along while being in the action. This requires not only action-readiness but also attunement, bodily listening and field awareness.

Players/dancers have to engage with what is presently at hand. The decision-making is therefore made "without delay, using present resources, and in response to current constraints and adaptive pressures" (Kimmel et al., 2018, p.6). Players/dancers respond to the different possibilities that appear in the moment. This means that sometimes you move along with the suggestion of another participant, while at other times you actively sculpt and re-direct the situation. To respond creatively to the moment, the players/dancers need to attune to their own bodies, other bodies and surroundings. They need to be sensitive to the relational parameters and open to the creative potential that might pop up.

Although decisions are made on the spot, this does not mean that players/dancers only make spontaneous decisions. Decisions are made "in a double loop of simultaneous feedforward and feedback" (Kimmel et al., 2018, p.52). In other words, decisions are made in the here-and-now without breaking the ties with what was and what is still to (be-)come. Decision-making-in-action is therefore always relational and contextual. Although decisions are made on the spot, they are "nevertheless context-sensitive in a way that actions require mindfulness about the in-the-moment disposition of the players" (Torrance & Schumann, 2019, p.268). Decision-making-in action is not mindless: it requires pre-reflective and reflective awareness. Even more, decision-making is not considered an internal process taking place inside the head but a coming together of self, others, and environment.

The pleasure of the flesh

Sheets-Johnstone (2003), Bond (2000) and Stinson (1997) are of the few authors that consider fun not as a byproduct but as a vital ingredient of both physical play and dance improvisation. The kinetic/kinaesthetic, tactile experience evokes in us a high state of arousal, a deep engagement (and connection) with the environment, and a sense of aliveness. We feel awake, alert and alive. According to Sheets-Johnstone (2003, p.416) movement itself is a motivating force:

> […] we can begin to appreciate how and why movement can itself be a motivating force, or correlatively from a dynamic systems perspective, how and why movement can itself be an attractor. Movement is enjoyable, pleasurable; for the moving individual, it produces a high, an elevated sense of aliveness, a delight in the kinetic dynamics that is underway.

Kinaesthetic pleasure is an integral part of physical play and dance improvisation[28]. "It is not an accessory to a main event, but the main event itself." (Sheets-Johnstone, 2003, p. 415) Movement itself is a source of pleasure, something we can all testify to when we jump, run, chase each other, roll or turn-around. It is as if suddenly the body wakes up from the daily habits of movement and finds itself back in movements that are just performed for the sake of moving. Notice for example the difference between the reaching out of the body to grab something from the top of a closet, or reaching out for the sake of reaching (extending the arms, lengthening the body, rising up). The body finds pleasure in movements that exceed the threshold of the functional and that trigger our kinetic curiosity[29].

To engage in fun is to engage fully and without concerns or hesitations in the kinetic/tactile-kinaesthetic experience. One has to throw oneself into the experience, to surrender fully and entirely, with a serious commitment to whatever may pop up. Outsiders recognize this kinetic delight instantly – "a lightness of heart, a glint in the eye, alertness, enthusiasm, and readiness for surprise" (Gordon & Esbjörn-Hargens, 2007a, p.8). Pleasure is not something superficial or peripheral. It requires serious dedication and commitment. In other words, improvisational practice in play and dance calls for serious attention to having fun (Hermans, 2018; 2019).

Coordination and interaction dynamics

Improvisation in play and dance can be done alone or in a group. In a group the relational aspect is clear from the start, but also a solo player is part of a relational web that spans between her and her surroundings.

Interaction dynamics can occur in three ways: intra-player coordination, environment-player coordination, and inter-player coordination. Intra-player coordination refers to the coordination that takes place inside the player's body/brain boundary (Torrance & Schumann, 2019). Examples are eye-hand coordination and the coordination of the whole body in complex movements such as jumping, running, and balancing. Environment-player coordination is here defined as the way the player adapts her body to the needs of the environment. Think for example of how we adapt our walking when confronted with a slippery, icy surface. James Gibson's theory of affordance (1979) is a well-known theory that explains how the body molds itself to the needs of the environment. An affordance is an "action possibility formed by the relationship between an agent and its environment" (Nye & Silverman, 2012, p.179). The physical environment (including objects) affords different actions and behaviours. In other words, the environment evokes certain action responses in us. In daily life, affordances are highly functional and goal-oriented (e.g. a toothbrush has the affordance of brushing

[28] It must be noted here that physical play and dance improvisation are not always pleasurable activities. Both can be demanding (in a physical as well as mental way): there can be social and artistic pressure and it may involve risk (in terms of potential physical/mental harm). See also page 16.

[29] Within phenomenology, joy and pleasure are associated with the "fulfilment of an intentional tendency" and with "the dynamics of accomplishment of activities that are considered to be aims in themselves" (Husserl, in Summa, 2020, p.417). Summa associates joy and pleasure with playful activities (such as physical play and dance improvisation). However, it goes too far to state that play and dance improvisation always provide pleasurable experiences. Throughout the playful event, the participants move through different states that can be pleasurable or not. Pain, discomfort and frustration can all be part of this experience.

your teeth) while in improvisation affordances can be imbued with new values and actions (e.g. the toothbrush becomes a telephone or a baton/conducting stick).

Inter-player coordination refers to the coordinated interaction between two or more players. Inter-player coordination involves bodily resonance, affect attunement, and interactional synchrony. The term affect attunement originates from infant development and psychodynamic psychotherapy. The term was first coined by Daniel Stern (1985) who describes affect attunement as the process of expressing and communicating emotional states through rhythmical bodily repetition, flow, vocalizations and gestures. The term interpersonal synchronization also finds its roots in the context of early childhood communication (Condon & Ogston, 1971; Condon, 1975; Malloch & Trevarthen, 2008). In developmental psychology, interpersonal synchronization refers to the rhythmic coordination between infant and caretaker in which not only movements, expressive gestures and vocalizations are shared but also affects. Gallagher (2005) describes interpersonal synchrony as the coordination of perception-action sequences that result from the bidirectional coupling of sensorimotor systems. It involves the rhythmic co-regulation of gestures, face or vocal expressions and movements. Inter-player coordination requires a constant negotiation of physical interactions through a delicate balance of give-and-take. In sum, inter-player coordination refers to the relational dynamics of social interactions. Through bidirectional rhythmical coupling, the participants co-regulate their actions and intentions.

Creative Potential: Moving within Constraints

Creativity is usually defined as the "ability to produce something novel and useful" (Malinin, 2019, p. 9). Traditionally, creativity is seen as a cognitive and intra-individual process (Sawyer & DeZutter, 2009). Recent theories on creativity however point to the distributed and emergent nature of creativity. This is in line with enactivist and 4E accounts of cognition and action. "Creativity does not begin with an idea in the head that is subsequently realized; it emerges through interactions with others and artifacts of the material environment." (Malinin, 2019, p.8) Creativity in this respect is considered an embodied process where novel insights emerge as responses to changing situational cues. "Creativity is situated practice; it involves embodied experiences and is embedded in socio-material environments." (Malinin, 2019, p.9)

A creative process can be a group process or an individual process. In both cases, it is a situated practice. A child who is playing alone, or a dancer who performs an improvised solo, is still part of a self-organising dynamic system in which creativity emerges as a novel response to changing, situational cues. The player is sensitive to situational cues, she responds to the temporal micro affordances that pop up in her surroundings. Her engagement with objects, materials, and the environment provides a generative source for creative interaction.

In group improvisation the same creative mechanisms are at work, however, this time creativity is also distributed over and across the players. Keith Sawyer and Stacey de Sutter (2009, p.82) refer to this as "distributed creativity", i.e. the process where groups of individuals collaborate to generate a creative product. Distributed creativity has four characteristics (Sawyer & De Sutter, 2009, p.82):

- The activity has an unpredictable outcome, rather than a scripted, known endpoint.
- There is moment-to-moment contingency: each person's action depends on the one just before.
- The interactional effect of any given action can be changed by the subsequent actions of other participants.
- The process is collaborative, with each participant contributing equally.

In other words, the interaction between the players is not only the medium for action but also the source of creativity (Kimmel et al., 2018). Even more, within a group, the players have to constantly negotiate with each other, in a process of give-and-take that requires an ongoing sensitivity and responsivity to the movements of self and others. At all times, they must keep the connection alive. In collaborative improvisation, both the creative process and the creative product are emergent properties of the interactions. This does not mean that creativity is always distributed evenly among the participants: sometimes a creative impulse is initiated by one person and at other times it emerges from the collective.

Finally, constraints are necessary within the creative process, but too many constraints can inhibit creativity (Malinin, 2019). There can be situational constraints, interactional constraints as well as skill, task-based and bio-mechanical constraints. Freedom and constraint are intertwined: a constraint can limit or enable new movement potential (Da Silva, 2017). Take for example an instruction such as 'move to the other side of the room while your left foot does not touch the ground'. This instruction certainly limits the number of movement possibilities (no walking, running, galloping, crawling, etc.) but it enables other ways of moving (rolling, crawling, hopscotching). In an improvisation, some constraints will be set from the onset, but most of the constraints will emerge during the creative process. Players have to move through an ever-changing landscape of constraints, that pop up while they move along. These constraints help to limit the infinite amount of movement possibilities, reduce the degrees of freedom, and as a result foster creativity. However, too many constraints can narrow down the number of possibilities in such a way, that only a few options remain. Improvisational creativity thus requires a delicate balance between freedom and constraints.

Sense-making as an ambiguous and open-ended process

Both physical play and dance improvisation are creatively open-ended activities: process and outcome are not pre-defined, there are a limited set of constraints and as a result, new meaning and valences may arise. There is no logical ending point, no predetermined narrative and no planned order of meaning (De Valk, 2015). The purpose of dance is dancing, and the purpose of play is playing.

It must be noted that both physical play and dance improvisation can take on different appearances (see Table 2). It is therefore better to speak of a spectrum of practices that range from structured/pre-arranged (at one extreme) to unstructured/free (at the other extreme). In the case of physical play, challenges and physical games (such as tag game or hide-and-seek) are located at one end of the spectrum. In the middle of the spectrum, we can find physical play activities that are less structured and more open-ended. Building a den or rough-and-tumble play are examples of physical play that have some rules and constraints but that are still open-ended. Finally, there are also types of physical play that are entirely open, free, and spontaneous. Free play is usually defined as "the type of play the child uses throughout the day in various forms. Free plays are the chosen, proposed, child-initiated plays without adult intervention" (Catalano, 2018, p.2). Make-believe play, molding clay, playing on a playground or outdoors with activities such as running, climbing, swinging are all examples of free play.

In dance improvisation, there is a similar continuum that ranges from highly structured (e.g. working with a score) to free (e.g. ecstatic dance, authentic movement practice). In the middle ground, one can find dance improvisation that welcomes new, radical movements while at the same time it

operates within a certain set of constraints (such as open form composition and contact improvisation)[30].

Structured play/dance improvisation	⟷	**Free play/ dance improvisation**
Structured		Radical, chaotic
Finite		Infinite
Fixed rules		Few rules that can be adapted
Predefined		Spontaneity
Challenge, competition		Sensation of play, expression

Table 2. Characteristics of structured and free play/dance improvisation. Adapted from *"Designing for open-ended play*" (p.33), by L. de Valk, 2015, Doctoral thesis, Eindhoven University of Technology.

Physical play and dance improvisation can both be seen as self-organising processes "governed by the dialectics of expansion and exhaustion of possibilities. Its freedom lies in the capability that players acquire of creating new meaningful (not arbitrary) constraints" (Di Paolo et al., 2010, p. 79). Although the players/dancers operate within certain constraints, the sense-making process itself remains open, fluid, and instable. This is because physical play and dance improvisation are both creative movement practices. Martha Davis (1975, p.84) states that dance and movement in themselves are "far too complex, to be reduced to fixed meanings. The myriad combinations and sequences of movement variables as they continually occur militates against this; different combinations yield different nuances of meaning despite of certain general "threads" […] movement continually reveals an unlimited variety of patterns and combinations of its finite parameters." Even more, dance improvisation and physical play bypass language - they rest on semantic indeterminacy - and as a result, meaning and sense-making are foremost kinetic and kinaesthetic.

As a result, sense-making in dance improvisation and physical play is inherently ambiguous. They are considered meaningful activities – yet it is impossible to point to their specific meaningful content. The expressive content is non-specific, instable, and ephemeral by nature. Sense-making, therefore, remains in the kinetic/tactile-kinaesthetic realm. We experience its value through mutual affiliation, through the sharing of corporeal experiences. Ian Cross[31] (2014) uses the term floating intentionality to describe how sense-making and meaning are intimately bound to the contexts in which they are experienced.

In sum, physical play and dance improvisation can both be seen as special forms of participatory sense-making because (Sheets-Johnstone, 2003, 2009: Kimmel et al., 2018; Sawyer & DeZutter, 2009):

- Movement itself is a motivating force and a vital source for interaction.
- Both physical play and dance improvisation produce an elevated sense of aliveness (pleasure in the flesh).
- Sense-making arises through the coordination of rhythm, movement, and intention.
- Affect and movement are dynamically congruent: as a result, the interaction is affectively charged and intentions are expressed in a bodily way.

[30] Contact Improvisation (CI) can be described as a practice of two or more bodies exploring movement with each other (in terms of weight, touch, and kinetic/kinaesthetic awareness).). Open-Form Composition sits in-between improvisation and composition: it includes the openness of improvisation but also embraces the closure of form associated with composition (Da Silva, 2017). Constraints in CI and Open-Form Composition usually derive from the interaction as well as from bodily constraints (e.g. degrees of freedom of a movement, gravity).

[31] Ian Cross introduces the term 'floating intentionality' in the context of music but the term is also applicable to dance and play.

- Decisions are made within the action, and therefore highly situational and interactional.
- The interaction itself is a creative source for movement exploration.
- Creativity is distributed over and across (autonomous) participants.
- Both activities are ambiguous and transformative, i.e. both physical play and dance improvisation are capable of imbuing a concrete, physical event with new, alienated meaning.

Some closing thoughts

In this chapter, I have identified three layers (attention, affect and movement) and five characteristics of both physical play and dance improvisation (see also Figure 10). In both activities, there is:

1) a real-time process of decision-making-in-action;
2) an elevated sense of aliveness (kinaesthetic pleasure);
3) rhythmic coordination and synchronization;
4) creative potential that arises in-between freedom and constraints;
5) ambiguity and fluidity in the generation of meaning.

Out of this follows, that the sense-making process in physical play and dance improvisation is fluid, instable, and meaning emerges through a complex interplay between self, others and environment. Even more, meaning is first and foremost experienced in a corporeal way, it comes into being through the dynamic interaction of autonomous agents with their physical, biological, and sociocultural surroundings.

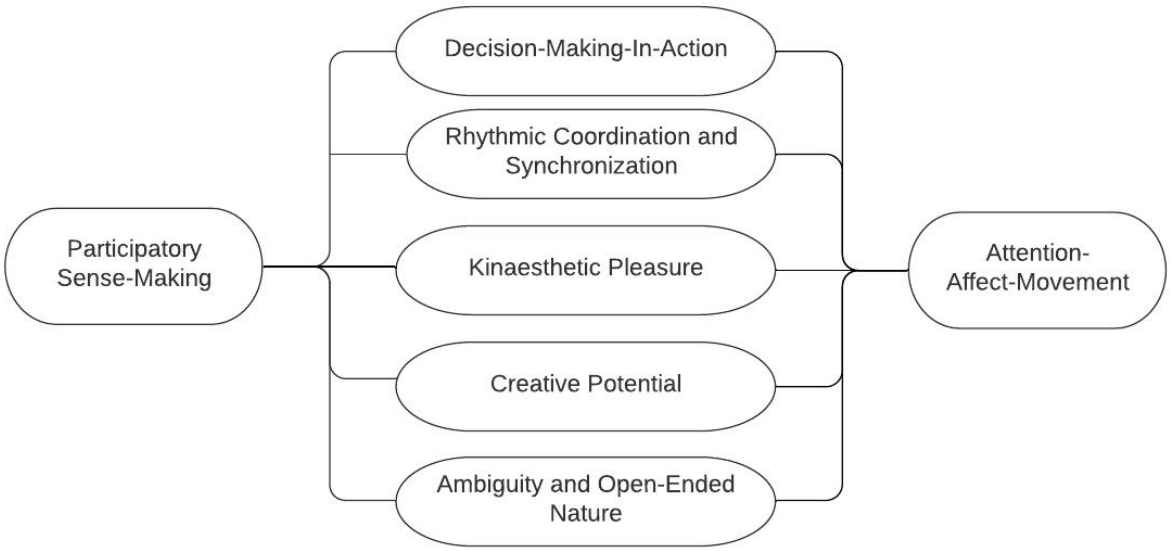

Figure 10. First model of participatory sense-making in physical play and dance improvisation

In this chapter, I hope to have shown that both physical play and dance improvisation are indeed good candidates to explore ambiguous and fluid forms of (participatory) sense-making. In both dance improvisation and physical play, "cognition is tightly coupled to the circumstances and yet capable of producing novel meaning as a result of a dialectic process of value-generation[32]" (Di Paolo, 2007,

[32] Value generation is an intrinsic part of the sense-making process of all living organisms. Values arise when living organisms load a specific situation with meaning. Where traditional theories in cognitive science perceive values (i.e. cognitive appraisals) as an internal part of the cognitive structure of an agent, enactivism considers value-making as a context-dependent and embodied activity that is only partly under the control of the agent. For enactivism, values emerge

para.2). The body in both physical play and dance improvisation is a body-in-action: meaning is generated and transformed through creative movement exploration. Both activities put the lived experience to the front. Not only the qualitative movements dynamics (effort, shape, space, and rhythm) but also intentions and affects are shared and coordinated between the participants. Meaning is generated and transformed within the interaction process.

This brings me to a first conceptual model of physical play and dance improvisation. The model (see Figure 10) will be taken along throughout the different phases of my artistic research. In chapters 11 and 12, this conceptual model will be adapted and revised.

through interaction with the world and are therefore tightly bound to lived experience. Di Paolo et al. (2010, p.18, original emphasis) define value as "*the extent to which a situation affects the viability of a self-sustaining and precarious process that generates an identity*". In other words, values are generated in the dynamic interaction of a living organism that wants to maintain its own autonomy/identity (also referred to as autopoiesis). Value is what "affects the organism's autopoietic organisation" (Di Paolo et al., 2010, p.15).

Chapter 4. Reflections on artistic research

In this chapter, I describe and reflect upon the artistic research method. First, I discuss the role of the artistic researcher as someone that is both an outsider and an insider. Subsequently, I discuss the type of knowledge that is produced, the role of documentation, and visual ethnography as an artistic research method. Schwab's notion of exposition (2019) is introduced as a way of overcoming the traditional distinction between theory and practice. Finally, I discuss how artistic research can be seen as a methodology-to-come, i.e. a methodology that does not seek to close but open up things (Ingold, 2016).

Artistic research: moving between an insider and outsider position

Artistic research is research that is rooted in the creative/artistic process. The study unfolds *in* and *through* the artistic creative process:

> Art practice qualifies as research if its purpose is to expand our knowledge and understanding by conducting an original investigation in and through art objects and creative processes. Art research begins by addressing questions that are pertinent in the research context and in the art world. Researchers employ experimental and hermeneutic methods that reveal and articulate the tacit knowledge that is situated and embodied in specific artworks and artistic processes. Research processes and outcomes are documented and disseminated in an appropriate manner to the research community and the wider public. (Borgdorff, 2012, p.53)

First of all, artistic research takes artistic experience as a starting point for exploration. It produces artistic knowledge, i.e. sensual, physical, and embodied knowledge, or, *felt* knowledge (Klein, 2017). As a consequence, artistic research is always (at least to some degree) tied up with the artist. The researcher is an insider, an embodied participant in the practice (Hannula, Suoranta & Vadén, 2014). According to Borgdorff (2012, p.18) in artistic research, embodied knowledge is "revealed and articulated by means of experimentation and interpretation".

The researcher thus also takes distance from the artistic research process, and this distance allows the researcher to create not only a meta-narrative but also to intertwine the different building blocks of the research into a meaningful whole (the unifying argument). As a researcher, I move in between an insider and outsider perspective. The insider perspective allows me to zoom in, become intimate with the artistic material, and to relate to the material in a personal way. The outsider perspective on the other hand allows me to take a more reflexive stance.

I thus move back and forth between periods of intensive (insider) engagement and more reflective (outsider) distance-taking. Periods of (artistic) making and doing are interchanged with periods of writing, making drafts, plans, and so on.

In this research process I have created a body of material that is publicly available at all times. On the one hand this body of material consists of the living archive, the re-enactments and the Re-Play/Re-Move toolkit.

Besides the living archive and the documentation of the re-enactment, the body of material also consists of articles and other additional texts. The artistic research is made public in two ways: 1) the documentation of the artistic process and 2) the contextual framework. It is important to note that the products of the research are not separated from the process: "they feed back into it, maintaining and nourishing it, questioning and even possibly jeopardizing it" (Hannula et al., 2014, p.19). Artistic

research distinguishes itself from artistic practice in the explicit contextualization of the artworks. Situatedness and actualizing the context are important strategies in my research. There is a fusion between the doing and the reflection on the doing. This requires a commitment to the conditions of the practice, moving between insider and outsider positions, and contextualizing my artistic practice.

Research as a Re-search

Ingold states that research [in anthropology and the arts] is "not about describing the world, or wrapping it up. It is, in the first place, about attending to presence, about noticing, and responding in kind." (2016, p.12) The researcher enters into "a relation of correspondence" (p.10) where she responds to things, while at the same time things respond to her. Ingold describes research in terms of mutual involvement, a practice of attention that involves curiosity and care. Research is not about the confrontation between ideas in the head (presuppositions/hypotheses) and the facts out there. It is not about collecting data but about corresponding with the world. Research seeks for openings, for pathways to follow, it engages in the making instead of perceiving the world as already made.

Research in a literal sense is searching again, a re-search, and thus always implies a process of repetition and difference (Ingold, 2018). This is specifically the case in my artistic research. Not only do I capture the living play events of my children, but the play events are then re-enacted by professional dancers. In other words, the initial play event is re-enacted. This re-enactment in turn becomes the source for the development of a creative movement toolkit (the Re-Play/Re-Move toolkit). The whole artistic process is thus at once a search and a re-search - by revisiting the original play events and using them as a starting point for artistic exploration.

Artistic research is an embodied practice that taps into the living experience. "Research in the arts seeks to articulate some of this embodied knowledge throughout the creative process and in the art object." (Borgdorff, 2012, p. 7). Since my research takes the bodily experience as vital for sense-making processes, it is useful here to elaborate a bit further on the notion of embodied practice and bodily knowing.

Bodily knowledge

Jaana Parviainen (2003) explores the nature of bodily knowledge[33] in her article 'Bodily Knowledge: Epistemological Reflections on Dance'. She starts by stating that propositional knowledge is inadequate in explaining how knowledge in dance (and lived experience in general) is produced. Propositional knowledge involves the conceptualization of perception through a process of transformation (i.e. the formulation of propositions). Propositional knowledge is objective and impersonal – it does not include the subject, or the lived experience.

Instead, Parviainen (2003) proposes a type of knowledge that is not only situated (historically, culturally, spatially, kinaesthetically, etc.) but also self-referential (i.e. it points to the knower). Parviainen uses Michael Polanyi's notion of tacit knowledge (1966) to understand the distinction between propositional, explicit knowledge and implicit, tacit knowledge. Polanyi's underlying assertion is that "we can know more than we can tell" (1966, p.4). He describes tacit knowledge as

[33] In this thesis, I use the terms bodily knowledge and embodied knowledge or understanding interchangeably However, I am aware that the two terms are not identical. Bodily knowledge involves the living dynamics of movement, the repertoire of 'I cans' (Sheets-Johnstone, 2015a, p.30) that is grounded in the kinetic/kinaesthetic, tactile body. Bodily knowledge refers to synergies of meaningful movement created by animate organisms. Embodied knowledge, on the other hand, is often used to describe how our understanding of the world, selves and others is rooted in our bodily engagement with the surroundings. Embodiment thus emphasizes the role of the body in consciousness, cognition and the generation of meaning (Johnson, 2015). Sheets-Johnstone is skeptical about the term 'embodiment', because it does not do justice to the living dynamics of movement, to kinaesthesia. In this thesis, I don't make such a strict distinction between the two terms (bodily knowledge and embodied knowledge) because in my viewpoint both terms take the body, movement and the lived experience as a primary source for the generation of meaning.

personal knowledge that is hidden, and that cannot be easily put into words. For Polanyi, tacit knowledge is an understanding by indwelling. Knowledge is more than a sum of discrete pieces of information: knowledge has to be integrated and interiorized. Even more, intentional action is part of all knowledge. "The theory of tacit knowing [holds that] dwelling in our body clearly enables us to attend from it to things outside […] We may say that when we learn to use language, or a probe, or a tool, and thus make ourselves aware of these things as we are of our body, we interiorize these things; we make ourselves dwell in them." (Polanyi, 1966, p.147) Tacit knowledge is implicit, bodily knowledge. It is not only by looking at things but by attending and relating to them (with the whole body), that we gain an understanding of the specific thing or attribute. To dwell is to exist, to reside, or in the words of Ingold (2017) to correspond with the things and with the world. For Polanyi, all skills operate under the structure of tacit knowing.

Parviainen (2003) uses Polanyi's notion of tacit knowledge and indwelling to understand the nature of bodily knowledge. According to her, bodily knowledge not only involves the doing (in terms of bodily skills that are sedimented in body scheme) but also bodily reflection. Parviainen (2003) considers bodily reflection as something that precedes or antecedes the doing. "It is the possibility of doing" (2002, p.19) while bodily skills refer to the actual doing. There is thus a deep and complex connection between bodily skills and bodily reflectivity. Bodily knowledge is not something that a dancer can learn just by repeating a movement. To learn a dance is a process of indwelling. It is a constant practice in which movements are interiorized. It is a thinking in movement through (heightened) bodily sensitivity and responsivity.

Anttila (2007) considers creative dance practice as a practice where reflection and bodily knowledge are deeply intertwined. She uses the term *bodily presence* to describe the complex relationship between sensory attunement to the here-and-now (i.e. pre-reflective experience) and culturally, historical, and constructed knowledge. According to her, bodily presence is "always tied to bodily consciousness and our historicity" (2007, p.84). Attending to bodily states and sensations, also means that they enter into awareness. Bodily presence thus goes hand in hand with reflective consciousness. Anttila refers to Damasio (1999) who states that language arises from bodily experiences. The nonverbal narratives of our body (the pre-reflective experiences) form our core consciousness: language gives us the possibility to not only reflect on these pre-reflective experiences but to also share them with others. Anttila also makes a distinction between daily activities and dance practice. In daily activities, our bodily states and sensations are on "the fringe, vaguely attended to and articulated" (2007, p.83) while in dance (or other somatic practices) this felt-sense can be heightened. Creative movement practices, such as dance improvisation and physical play, allow us to heighten our attention to the qualities of movement and bodily sensations that emerge in the moment.

In this artistic research, I try to grasp the pre-reflective realm of bodily experience by capturing the experience in images (i.e. photographs). These images are wordless stories: they are seen as records or traces of lived experiences. Parallel to the non-discursive (artistic) practice, I make use of a discursive form of communication (the thesis, and the published articles). Through this double character of the discursive and non-discursive practices, I hope to provide a richer understanding of the role of the bodily, pre-reflective experience in the sense-making process of both physical play and dance improvisation.

Theory and Artistic Practice

According to Borgdorff (2012), theory and practice are intertwined in the arts. Art is reflexive because concepts and theories are incorporated into the artistic practice. "Research in the arts seeks to articulate some of the embodied knowledge throughout the creative process and in the art object" (p.7).

The connection between theory and my art practice is two-fold. First of all, the artworks themselves embody and generate theoretical/philosophical thought. Second of all, written texts are produced to make new insights and knowledge of my research topic available to a broader field of peers, colleagues, and researchers (such as dance and play theorists, phenomenologists, and cognitive scientists). I do think it is important to establish dialogues and exchanges on different levels of knowledge – varying from sensibilia to theoretical constructs. Sarah Rubidge's notion of "thinking in the work" is useful here (1998, p.3):

> Thinking *in* the work is contrasted to thinking *about* the work (either before or after its creation). Thinking *about* the work is articulated in the form of propositions which describe, explain, or otherwise articulate ideas about the work. Thinking *in* the work, whether it takes the form of question or answer, is articulated in and through the act of making or ordering movements, marks, sounds, etc. This kind of thinking can be art specific (to do with the way the materials of the artform, and/or its underlying assumptions, behave, or can be made to behave), or more philosophical, and is, I would claim, in and of itself a research process.

Thinking in the work includes observations, intuitions, analytic thinking, and practical knowing. Intuitions should not be seen here as non-rational thoughts, since it is based on antecedent, tacit knowledge (Rubidge, 1998). I consider my artistic research as a double-edged inquiry, in such a way that the artistic work embodies theoretical concepts and vice versa, the theoretical concepts are fueled by artistic insights.

Documentation, artworks, and visual ethnography

In my artistic research, there is no clear distinction between documentation and art work. The two are deeply intertwined. Throughout the artistic research, I have produced three 'objects' (artworks): the living archive, the re-enactments, and the 'Re-Play/Re-Move' toolkit. Only the latter can be seen as an independent object. In the case of the physical play events and the re-enactments, documentation plays a crucial role in the becoming of the artwork. The original play events and the re-enactments are captured in photographic sequences. There is no audience or public and the only 'evidence' that the play events and re-enactment took place are the photographic records. The play events and re-enactments become artworks through an intense process of documentation. Even more, the documents not only serve as access points to the original events but the documents itself become performative (Auslander, 2008, see also page 65).

The living archive and the use of photography in capturing the spontaneous physical play events of my children, clearly resonate with visual ethnography. Visual ethnography can be described as "the study of visual forms and visual system in their cultural context" (Kharel, 2015, p.153). Visual ethnography makes use of film, photography and other media throughout the whole process of research, analysis, and dissemination (Pink, 2008). It aims to provide a detailed and in-depth understanding of a particular culture, society, or community. Photographs are seen as material traces that not only describe or illustrate a social phenomenon but also open up new interpretations and meanings.

In my own artistic work, I capture and collect imagery of my children's physical play events. Although I consider it to be my artistic practice, I also recognize and acknowledge similarities with visual ethnography since the photographs are taken 1) in a real-life situation, 2) where (my) children engage spontaneously in physical play and 3) the photographs themselves are not manipulated or edited. In line with visual ethnography, the images of the physical play events are not considered representations of an objective world but they convey and communicate corporeal meanings. Visual ethnography is here understood as an approach that engages with audio-visual material throughout the

whole research process. It often involves reflexive engagement, "a knowing in practice" (Wenger, as cited in Pink, 2008, p.2) that seeks an experiential understanding of social or cultural phenomena.

To a limited extent, my research is also auto-ethnographic. The first phase of my research takes place in and around my own home when I capture the spontaneous and informal play events of my own children. However, I am not exploring my own role as a mother, nor am I interested in my own personal experiences with play. My motherhood allows me to observe and study the physical play of children at close range – and as such, it can offer rich insider accounts of the informal play culture of (young) children (see also page 24). Since I am not a participant (except for the second re-enactment), I believe that my research is mostly related to visual ethnography and not to auto-ethnography. Only the second re-enactment (see Chapter 8, page 101) can be considered an example of auto-ethnographic research.

In sum, my research is artistic and ethnographic. I use photography as a way to document the physical play events of my children as well as the re-enactments through dance improvisational practice. The camera is there, with me, nearby, and an intrinsic part of my daily life (and the life of my children). There is no distance, there is just nearness. The visual imagery is *more than* documentation since its goal is not to lay things to rest but to create openings, to cut across, pass through and engage with what is present.

Documentation, exposition, writing: the production of knowledge

The question that follows logically from the above, is where I situate the documentation: within the art practice itself or in the theoretically framing of the artistic work? The answer is not easy. My artistic research (as often is the case) consists of two elements: an artistic and a written component (the thesis). But this doesn't mean that the artwork corresponds with 'the art' and the 'written component' with the 'discursive component' – since one could argue that all "art counts as discourse" (Schwab & Borgdorff, 2014, p. 11).

Theory and art practice are deeply intertwined, and the idea that only written texts produce knowledge is not tenable. In this respect, documentation can be seen as a form of visual writing. The documentation engages with questions and claims about the knowledge that is produced within the practice itself.

Schwab (2019,) therefore introduces a third term: exposition. The term refers "to the aesthetic-epistemic transpositions of practice aimed at articulating artistic research" (Schwab, 2019, p.32). An exposition operates between art and writing: it creates a reflective distance, it a way of articulating the artistic research (Schwab & Borgdorff, 2014). The term exposition provides an alternative for the practice/theory model that is functional but also limiting. As a fixed framework it leaves little to no space for the artwork itself to be discursive and reflective.

Schwab and Borgdorff (2014) state that artistic research is research that crosses borders and by doing so it creates new relationships and new knowledge. The term 'exposition' refers to the idea that writing and knowledge are already present in the artistic practice. This type of writing can be non-textual or visual, or it can include interactive elements. In my artistic research, the living archive, the documentation of the re-enactments, the toolkit and the written texts can all be seen as expositions of my artistic research and practice.

Doing, performing, reading, and writing

If I would have to describe my artistic research in a few words, I would say that my research entails 'reading, writing, doing and performing' (the order is arbitrary). My research, and this in line with post-qualitative research, is concerned with practice, action, and performance. I am interested in shared experiences, in fleeting encounters, in affective resonances, in creative movements, and in corporeal concepts.

Post-qualitative research – also referred to as non-representational research – is an approach that takes poststructuralism as the departure point for new ways of looking at research. Post-qualitative research "doesn't have a pre-existing, formalized, systematic research process that one can follow, thereby guaranteeing validity" (St. Pierre, 2021, p.5). It is a methodology-to-come, it must be invented and created (every time we do research) and should more be seen as an experiment than as a method. It critiques representational logic and states that the research process in conventional research is in itself problematic because of the separation between data and the human/subject/experience (St. Pierre, 2021). Instead, post-qualitative research offers an open research approach by thinking differently about data and data analysis. It proposes an open research approach that starts with curiosity.

I consider my research as an assemblage of tiny experiments that not only involves the diverse (and spontaneous) physical play practice of children but also the re-enactment of these events in dance improvisational practice. Even more, the research method is performative and the research process unfolds through "intra-actions with the world" (Le Grange, 2018, p.8). The performative in this respect not only comprises the artistic making but also writing and reading are conceived as practices - even as performative acts[34]. Performance refers to the expressive engagement of the body – to the affective capacities that can be expressed in dancing and playing, but also in writing and reading. John-David Dewsbury states that research, in general, should be more performative:

> […] this does not necessarily mean staging research and acting out findings (though given all the performance rhetoric it would be nice if it did, at least *some time*), but in striving to find inspiration in the arts, in the poetics of embodied living, in enacting the very un-actualized expressive and impressive potentials of social-scientific knowledge, in taking dedicated risks, in exercising passion, and in finding ways to re-configure thinking, sensing, and presenting by emphasizing the singular powers of action, locution, and thought.
> (as cited in Vannini, 2015, p.16)

Artistic research is creative, practical, and being-with-the practice. What I have learned throughout the process, is that there is no recipe or formula for artistic research. There are guidelines, requirements, and even restrictions, but each researcher has to find her own path. Plenty of written texts can be found on artistic research, and the Research Catalogue[35] provides a wide range of artistic research examples. But there are no step-to-step procedures, and as a result artistic research has to re-invent itself constantly.

Artistic research is a methodology-to-come (St. Pierre, 2021). Artistic research does not seek to close but to open up things (Ingold, 2016). It is a form of research that opens up new pathways of doing, thinking and performing. The artistic process begins with curiosity and with addressing questions. Not knowing is just as much a part of the process as is the knowing. Experimental methods are used that straightly tap into the lived experience (i.e. bodily knowledge) and that are then articulated in a series of writings. It is a context aware process that requires both an insider as well as outsider perspective.

[34] Here I refer to the work of Judith Butler who states that language itself is performative: language does not simply describe the world but functions also as a form of social action. The performative is here understood as "the performative force of art, that is, its capacity to effect 'movement' in thought, word and deed in the individual and social sensorium" (Bolt, 2016, p.130). Performativity thus also may involve speech acts. Austin refers to this as performative utterances. The 'I do' in a marriage ceremony is a good example of a performative utterance since the words do not only describe but also perform the action to which they refer. For further reading, I suggest the article by Bolt (2016) on performativity.

[35] https://www.researchcatalogue.net

Most importantly, artistic research begins and ends with the artistic experience which is in itself a form of reflection (Klein, 2017). Because artistic knowledge is intimately bound to the practice, to the doing, and to experience there is no step-by-step plan that one can easily follow. As an artistic researcher, I have to find my own path and my own voice. In many ways, artistic research is an invitation to explore a rather wild and uncharted landscape full of challenges, obstacles and possibilities. It is from the not-yet knowing that new insights come into being.

Chapter 5. Living archive of my children's physical play

Since 2013, I have started to collect photographic material of children's physical play events. Together these pictures form the basis of the living archive. In this chapter I take a closer look at - what I refer to as a living, personal archive of children's physical play. First, I dive conceptually in what an archive is, what kind of archives there are and if and in what way a living archive can be defined. Second, I relate the archive to the arts, specifically to dance/play. The Dancing Museum of Boris Charmatz, and two other examples of dance archives are discussed - Shioban Dance Replay and Double Skin/Double Mind (DS/DM) interactive installation - followed by an analysis of the Playing the Archive Project. Third, I discuss the complex relationship between photography and documentation. Auslander's valuable work on the performativity of documentation (2006) is used to understand how the photographs co-construct and co-create the original play event. Finally, I describe different ways of ordering and organising the photographic material, in singular as well as sequential way - very much in line with Muybridge's work. I close the chapter with some final thoughts on the archive as an open-ended, transformative system that does not only have evidential value but is a creative artwork in and of itself.

The Archive

What is an archive? Archives are the "documentary by-product of human activity retained for their long-term value; […] the contemporary records created by individuals and organisations" (International Council on Archives, n.d.). In the traditional sense, archives are seen as windows to the past, as a place or a site that contains traces of a collective or individual history. An archive has two functions, it is at once a source and storage of information. In other words, retrieval is just as important as storing, and as a result, archiving is never a passive act.

There are all sorts of archives, ranging from historical archives (such as libraries and museum archives), corporate archives, amateur archives, private collector's archives, artist's archives, etc. We associate archives with rows and rows of boxes on shelves where documentation is stored and that can only be accessed through a codex or accession number. Archives are "repertories of knowledge as well as physical spaces" (Yiakoumaki, 2009, pp. 29-30). They often are stored in a concrete physical space (a museum or library for example) while at the same time they are conceptual – containing loads of concentrated information. There is something secret and mysterious about archives as if history can be found under layers of dust, carefully hidden, only retrievable for someone who is willing to get to the bottom of the matter. This, however, is a rather romantic view of archives, since archives nowadays are often digitized and the main building in which they are stored, is virtual.

Since the arrival of the personal computer, the world wide web, and the smartphone, everyone has turned into an archivist (Ketelaar, 2006). As a case in point, never have there been so many pictures in our personal lives and online platforms for photography and videos are increasingly popular. Smartphones with their in-built cameras help us to capture any moment of our life. More than one trillion photos were taken in 2018, and more than three billion images were shared across social media every day (Lavoie, 2018). Even more, through the web, we have access to an infinite amount of information, and new technology makes it possible to archive information in unforeseen ways. Whereas traditional archives often contain physical records (such as texts, microfiches, photographs, or audio) that are stored in real buildings, archives nowadays are mostly digitized and therefore have a more virtual than physical status (Dekker, 2017). As a result, the archive has changed in character too. "Digital tools have increased the fragmentary and instable nature of archives." (Breakell, 2008)

Technology transforms not only the archive as such (content, structure, access) but also its meaning. An analogue document has a physical arrangement in terms of form, structure, and content. Digital documents however do not have such a physical representation, and therefore "digital documents are *potential* documents, coming into existence only by virtue of software that understands how to access and display them" (Ketelaar, 2007, p.179). Digital documents are thus more flexible, fluid, and instable. Even more, there is no longer an 'original' document since each digital document is already a digital reconstruction.

According to the French historian Arlette Farge, "the archive is a participatory field; an open field of activity" (as cited in Yiakoumaki, 2009, p.28). This means that anyone who accesses the archive is entering into a process of exchange since each person brings his/he own context, history and interpretation along. Even more, (digital) archives nowadays are more and more networked and decentralized. As a result, the archive is no longer a static/passive phenomenon but active and alive.

This is where the living archive comes in. Living archives refer to the fragmentary, instable nature of archives nowadays. Archives are not inert, hidden in a state of stasis, deadly and passive. A living archive is a participatory archive that changes, evolves, and transforms over time. In other words, the archive is always in a state of becoming, and therefore never complete. Any archive has gaps, missing items, and inconsistencies. Nor is the archive ever finished. Eric Ketelaar (2008, p.12) writes:

> The openness of the archive outweighs the closure of a trial. The file may have been closed, but it will be reactivated again and again. Every interaction, intervention, interrogation, and interpretation by creator, user, and archivist is an activation of the record. Each activation leaves fingerprints which are attributes to the archive's infinite meaning […]. That is why the archive is never closed. It is open into and 'back to the future'.

According to Stuart Hall (2001), a living archive is "on-going, continuing, unfinished, open-ended" (p.89). New work is added to the archive, and each time the archive is accessed the archive changes. Archiving consists of a sequence of events: recording, putting the records in an archive, ordering and systemising the storage, sharing, and often re-archiving. Archiving also implies making choices: what is and what is not archived.

Hall argues that a living archive is not a prison of the past, it is not something static that is always pointing to the same. A living archive connects, is relational, is an interplay of differences, and although an archive is always constituted in the past, it points to the present and the future as well. Arike Oke (2017) states that archives are traditionally seen as untouchable (and often also invisible), living archives however have the potential to be the compost, the fertilizing soil for new ideas and new insights.

An archive is a territory, it encloses a plurality of virtual meanings that becomes actual once someone interacts with the archive. Meaning only arises through connection and interaction. There is not one author, nor one interpretation. The archive is a discursive terrain: in the encounter archives become meaningful. "Archives are traces to which we respond; they are a reflection of ourselves, and our response to them says more about us than the archive itself. Any use of archives is a unique and unrepeatable journey", writes Sue Breakall (2007). Living archives can thus be seen as territories or assemblages that are open, collaborative, and creative (Dekker, 2017). Their form, structure and content are not fixed but in a constant process of becoming. In other words, archives exist in a state of potentiality[36] (Kozel, 2017).

[36] Anarchive is nowadays used as a term that refers to archiving as an activity that considers traces/records not as inert but as carriers of potential. In contrast to the traditional notion of an archive as the documentation of a past event, the anarchive is a

The Archival Turn in the Arts

The archival turn in the arts refers to the increased appearance of archival material in art and exhibition practice from the 1990s on. It involves the use of historical and archival materials from non-artistic institutional settings in artworks (Simon, 2002). The archival turn in the arts is not so much concerned with the artistic creation of archives, but in the re-activation of existing, institutional archives to reveal and critique the way knowledge is produced and archived in these institutions.

Hal Foster introduces the term archival impulse (2004), as he identifies an emergence of art that focuses on archives. He describes four characteristics of archival art. First of all, archival artists seek to retrieve historical information that is neglected or marginalized, to provide a counter-memory and to give physical presence to the lost or the overlooked. Second, archival artists push the notion of originality and authorship, for example by re-using an image over and over - so that individual authorship turns into a collective or communal authorship. Third, although it seems likely that the internet is the perfect medium for archival art, most archival artists use a more tactile and physical approach. Human interaction, and not machinic processing, is put at the forefront in archival art. Fourth, materials are collected from all kinds of sources (such as objects, images and text) and arranged in a quasi-logic order. This often results in three-dimensional artworks that can take the shape of a kiosk (*Ingeborg Bachmann Kiosk*, Thomas Hirschhorn, 2000), a film-and-text piece (*Girl Stowaway*, Tacita Dean, 1994), or a theatrical space (*Upside Down and Backwards, Completely Unburied*, Sam Durant, 1999).

In the contemporary dance scene in the United States and Europe, a similar kind of archival interest can be observed. From the beginning of the 21st century on, choreographers and performance artists have become increasingly interested in re-enactment as a strategy to open up new potentialities of past works. André Lepecki refers to this as, *the will to archive*, a concept that resonates with Foster's archival impulse, yet also differs from it. Foster perceives the archival impulse as "a will to connect what cannot be connected" (2004, p.21), in other words, the desire within the art scene to reveal and overcome the gaps and failures in the cultural memory of a society. Lepecki takes a slightly different approach. According to him, the will to archive within the arts (and specifically in dance and the performing arts) is not so much driven by failures in cultural memory or the desire to connect to the historically overlooked. Instead, "the will to archive refers to a capacity to identify in a past work still non-exhausted creative fields of impalpable possibilities" (Lepecki, 2010, p.31). [37]

The time-based nature of dance provides challenges for dance archivists (Oke, 2017). The first question that arises when it comes to archiving dance, is how to capture the kinaesthetic nature of dance: How can the qualities and the liveness of dance be translated into archival material? And what should be captured: the creative process or the result? To archive a dance work, requires not only video documentation of the performance (preferably shot from different angles) but also a light plan, a description of the costumes and set and a piece of music or sound score. It also should include the movement repertoire, rehearsals and the creative process. Oke (2017) states that in an archival record

feed-forward mechanism where traces are reactivatable and carriers of creative potential. Through reactivation, new creative potential is actualized. The anarchive is process-based, it is not contained in one single object but is considered a cross-platform phenomenon. Even more, the event plays an important role in the anarchive: through live, collaborative encounters the creative potential of traces/archival material is explored (see https://www.researchcatalogue.net/view/659630/659631 for an example). The term anarchive resonates with my concept of the living archive in several ways: both focus on the reactivation of past traces and the actualization of new potential. However, there are also differences: the anarchive is event-based and it does not contain documentation. The living archive, in contrast, has a specific locus and documentation plays an important role.

[37] Lepecki's ideas on archiving and re-enactment will be discussed in depth in the next chapter.

of a dance work, the following elements should be available: the choreographer's idea of the dance work, the performers' idea of the dance work, the additional contributors' idea of the dance work, the audience, theorists, and critics' idea of the dance work. Even if all these aspects are archived, the question remains if it is enough.

The need to archive dance has led to the development of two main notation systems in the 20th century: Labannotation (1928) and Benesh Movement Notation (1955). Both notation systems however can only be written down and read by choreologists. Notations thus heavily depend on specialist training and the interpretation of the choreologist (Oke, 2017; Bermúdez Pascual, 2016). In practice, these notation systems are hardly ever used since they are time-consuming and cumbersome to use. According to Anna Heyward "dance notation is arcane, and mostly inessential to the art of dance" (2015, para.13). Notation systems, therefore, are hardly used to archive dance works in the contemporary dance scene.

According to choreographer and dance artist Boris Charmatz it is not only "the performed work that forms dance but the other contributing people, physical and meta-physical spaces that are present in the moment of the performance" (as cited in Oke, 2017, p. 204). He has developed the concept of the Dancing Museum (2009-2018) an experimental space that pushes forward the boundaries of what dance is. The dancing museum is not only a physical place (in Rennes) but also a nomadic idea. In the Dancing Museum the living and the reflective come together: it is art, it is an archive, it is a creation and a transformation. When archiving a dance, one should move outside the strictly choreographic field, and it could therefore also possibly contain a bar, a dance studio, a library, a school or an exhibition.

Two dance companies have experimented with new ways of archiving dance: Siobhan Davies Dance (2009) and ICK Amsterdam (2007). The aim of Siobhan Davies RePlay[38] is to bring together all of the materials and documentation of the company in one single collection. Siobhan Davies is interested in the history of her dance works, not in solely archiving it, but to "test the living potential of an archive. Through a process of reconstructing and reimagining past choreographies, she is re-inscribing the archival traces through her dancers' bodies; archival content is re-embodied, performed by finding its way back into the new work and, in turn, questioning her own choreographic choices." (Whatley, 2015, p. 121-122)

Siobhan Davies RePlay (2009) is an online digital archive, free to access and user-friendly. It encompasses audio-visual material such as films of performances and rehearsal tapes as well as texts, academic writings and experimental visualizations of the creative process (Whatley, 2014). The archive covers the work of Siobhan Davies Dance and is meant to give a creative impulse to future work. Instead of archiving the dance works in a fixed, static manner the dance works are documented in an unfinished way, as "dances in formation" (Whatley, 2014, p. 123). To do so not only rehearsal tapes are included, but also 'scratch tapes' that document the thinking, doing and making within the creative process. Another element of the Siobhan Davies RePlay is the 'kitchen' which gives visitors access to the different layers/ingredients of a choreography. Even more, dance vocabulary is used to frame the archive: the archive *breathes*, it highlights the *connective tissues* in-between the dance works and gives access to *the anatomy* of each dance work (Whatley, 2014). In an interview with Scott deLahunta, Siobhan Davies describes the relation between dance and the archive as follows:

> If we make an archive of dance, what does our art form bring to the idea of an archive? What can be distinctive rather than borrowed? In dance, we are constantly in process, in movement,

[38] Siobhan Davies RePlay is Europe's first digital archive of dance that was launched in 2009. See also https://archive.siobhandavies.com

> so should we not try to get the idea of movement, or even movement of thought to be somehow present within the archival architecture? (Ellis, Blades & Waelde, 2018, p. 9)

The challenge for Siobhan Davies RePlay was to develop a digital archive of dance that is dynamic and that takes movement and the living body as guiding principles for the archival architecture. Davies herself finds that RePlay was not successful in this sense, since the archive is technically arranged in such a way that it cannot organically adapt to the practice, nor can it incorporate all the layers that make up a dance. Davies also finds the fragmentary bits and pieces of the creative process more informative and fertile (she uses the word compost) than the video recordings of the finished works.

ICK in Amsterdam has faced similar challenges in building up an archive around the work of Emio Greco and Pieter C. Scholten. Together with an interdisciplinary team - with experts in dance, new technology, motion capture systems, and gesture analysis - they built a multimodal archive hosted on DVD and in an interactive installation– accompanied by the publication of a text and a film documentary[39] (Bermúdez Pascual, 2011). In the process, most attention was paid to the lived experience of dance, the idiosyncratic dance vocabulary of the ICK and the translation of dance material into a different medium than the body. Although the first aim of the interactive installation DS/DM (Double Skin/Double Mind) project was to develop tools to teach ICK's method and their idiosyncratic dance language to a broader field, and only after years of research, they eventually came up with the idea of a multimodal archive. Not without a reason, the project is also referred to as 'Capturing Intention', since ICK was foremost interested in how underlying intentions (such as motivations, internal driving forces, and internal imagery) give birth to a specific movement dynamics and dance language.

> DS/DM is a way of preparing the body for dance that is inherent to your thinking and your imagination. It needs a connection with your own choices, also during the improvisation with other elements and choreographic materials. The experience creates a condition and an opening, it is not something fixed by rules that say: this is how you should dance. It is rather the opposite, you use it, and then you contrast it in an open field of intervention and manipulation. (ICK, 2007, para. 1)

The DS/DM aims to increase the sensitivity of the body and is based on four principles: breathing, jumping, expanding and reducing. The interactive installation offers the participant (professional and non-professional) the possibility to engage in a virtual workshop, and to play, experiment and discover new interpretations of ICK's work.

As it already becomes clear, ICK is not interested in traditionally archiving their repertoire. Films and registrations of final work only play a minor role, since most attention goes out to the method that Emio Greco and Pieter C. Scholten have developed throughout the years. DS/DM is a tool to playfully engage with the underlying movement principles, increase the sensitivity of the body and explore new movement potential. ICK has developed a living archive in the true sense of the word: an archive that is open-ended, explorative, flexible and creative.

The two examples above, Siobhan Davies RePlay and the Double Skin/Double Mind interactive installation are both inspiring initiatives. What I take from both of them is their ongoing search for an archive that can capture the liveness of movement. In both cases, the creative process is acknowledged as the vital ingredient of the dance work, and this creativity is captured in different

[39] https://www.researchcatalogue.net/view/8247/8248

ways (the scratch tapes in the case of Siobhan Davies RePlay and the multimodal approach in the case of DS/DM). This has led to personal archives that invite the visitor/participant to actively engage with the dance material.

However, it must be noted that there is a big gap between these two archival dance projects and my own undertaking. Siobhan Davies Dance and ICK are both contemporary dance companies that produce dance performances for the stage. In contrast, my artistic work lies strictly within the exploration of physical movement structures – movement structures that come into being through play and dance improvisation. I don't make dance performances and I don't set up artistic play events. The goal of my artistic undertaking is to render visible the kinetic/kinaesthetic dimensions of both children's physical play and dance improvisation. In the case of Siobhan Davies Dance and ICK, the dance works form the starting point of their archival journey. In my case, however, the journey starts with capturing the physical play events of my children in such a way that affects, forces and intensities that are at work in play can be captured in another medium (in my case photography) - and when captured, the material is handed over to professional dancers. It is for this reason that I will discuss here a third project, Playing the Archive, that is entirely dedicated to the exploration of play.

Playing the Archive (2017-2019)

Playing the Archive explores memories and practices of play by bringing together archives, spaces, and technologies of play. The initial starting point of the project is the play archive of folklorists Iona and Peter Opie (n.d.), which is stored in Oxford, in the Bodleian Libraries. Iona Opie (1923-2017) and Peter Opie (1918-1982) were a husband-and-wife team researching children's culture. Over more than four decades they collected children's books (it is the largest collection of children's books in the world). From the 1950s until the 1980s Iona and Peter Opie undertook three national surveys of schoolchildren aged 8-14 years into the culture of play. The Opies placed an advert in the Sunday Times where they called upon the help of teachers to spread the survey around. The survey consisted of a set of questions about the games children play, as well as hobbies, playground activities, songs, rhymes, sayings and jokes. The Opies received thousands of replies of children and teachers that are now archived in the Bodleian Libraries.

Playing the Archive (2017-2019) is dedicated to passing play on from generation to generation. The project follows three strands. The first is to digitize and transform the Opies Archive. The aim is to build a virtual, immersive environment where young and old can engage interactively and playfully. Even more, the 3d virtual reality experience also includes games that are played by children nowadays. The second strand is studying memories and practices of play, in the past as well as the present. This involves interviews with the original contributors of the Opies Archive, as well as researching the play culture of children nowadays. Children have an active part in this research since they interview the older contributors and other children, and film their own play. The aim is to understand what play is, what the function of play is in society, how play is passed on from one generation to the other, and to understand why some games persevere in time, while others fade away. The third and final strand is the building of two experimental playgrounds that combine physical aspects of playgrounds with virtual reality. The aim is to build a playspace with mixed reality elements that links the physical playground with the digitized Opie archive (Playing the Archive, 2017-2019).

As becomes already clear, Playing the Archive is more than just an archive. The program seeks to make active connections between the play cultures of different generations, building further on Opies Archive by creating mixed reality playgrounds. This includes, amongst others a Time Telephone installation: by dialing an original rotary telephone in a red telephone kiosk, users can access a selection of the archival materials from the Opie collection through audio recordings (voiced by children). Another output of the research project is the 'Sense of Play' playing cards, a set of

playing cards with descriptions of games from the Opie archive on the one side, and on the other side an augmented reality experience that can be accessed by scanning a QR-code (Playing the Archive, 2017-2019).

Playing the Archive actively strives to make connections between the play culture of the past (as collected by the Opies) and the play culture of children nowadays with the use of new technology. If I compare this project with my own artistic research, at first glance more differences than similarities can be found between Playing the Archive and my personal archive of children's physical play. First of all, the size and scope of Playing the Archive exceed my own archive in every way. The Opies Archive includes thousands of play testimonials of children between 1947-1989. The archive gives access to the play experiences of a whole (British) generation of children and together they form the cultural memory of (British) children's lives in the second half of the twentieth century. Second, the project is highly interdisciplinary (just as Davies RePlay and DM/DS by the way). Several organisations and institutions are collaborating (the Bodleian Libraries, V&A Museum of Childhood, Site Gallery/Sheffield, and several universities), each providing experts in the field of archiving, conservation, new media digitization, virtual reality, etc. Artists, researchers, and archivists work together, whereas in my own case, I am the artist, the researcher, and the archivist at once. This does not only influence the size and scope of the living archive, but also makes it more subjective. The living archive that I am setting up, is a personal journey. It is intimate and immediate, and it only covers the physical play events of my immediate family (including friends and playmates). It is far from complete, it is unfinished, as it only leaves fragmentary traces of play events that took place in and around my own home.

Despite the differences, I find Playing the Archive an intriguing project – specifically how the project elaborates further on the Opie Archive. The project is connected to events in the past but it also (and foremost) reaches forward: it gives the testimonials of thousands of children a new life through the use of innovative technological tools. The project re-invents the past, as it opens up and throws us back to the future (in the words of Ketelaar, 2008). Even more, the project is cut up into different phases: from the digitizing of the Opie Archive to an inventory of children's play nowadays to the development of creative tools that not only provide access to the archive but also transform it radically. Playing the Archive is a place of creation (Foster, 2004). It provides fertile ground for new investigations and new interactions with the young and old (Oke, 2017). Through the creative re-use of the archive, new potentialities arise and layers of infinite meanings start to emerge.

In my own artistic work three stages can be distinguished as well: the living archive itself, the re-enaction of play events by professional dancers, and the development of creative movement workshops (Replay/Remove) for educational use. Photography is used as the main tool to capture the play events of my own children (whereas Playing the Archive merely consists of written texts, letters, and other documentation). This raises a few questions. First of all, how do the photographs relate to the original event? Are they to be seen as *documents of the original event* or as artifacts that move *beyond documentation*? In other words, do the photographs merely serve as traces or records and as such only have evidential value, or do they co-create the event? In the next two paragraphs, I take a further look at these questions.

The relation between performance and documentation

To understand the relation between the photograph and the original event (or performance), Philip Auslander's (2008) distinction between two types of performance documentation, the documentary and the theatrical, is useful. The documentary entails the traditional way in which performance documentation is perceived: the event precedes the documentation and the documentation serves as a record and actual proof that the event took place. An example of the documentary category is Chris

Burden's *Shoot* (1971)[40], an artwork in which the artist arranged to have himself shot at close range by a friend wielding a 22long rifle. The photograph of the shooting proves that the event took place.

The other category, the theatrical, consists of performances that are solely staged to be photographed or filmed. An example of this category is Yves Klein's *Leap into the Void* (1960)[41] where we see Klein jumping from a second-floor window. The photograph is manipulated and consists in fact of two events: the leap from a second-floor window and the leap from a rooftop in the Paris suburbs, while friends hold a protective net to catch him as he falls. The two negatives - one with the leap and the other with the surroundings (without the protective net) - are printed together. There is no audience, except for the photographers and the friends who assist him. The image is a record of "an event that never took place except in the photograph itself" (Auslander, 2008, p.84). The self-portraits of Cindy Sherman[42], in which she captures herself in a range of guises and personas, also belong to the second category. In Sherman's case, there is also no original event: the photograph is the only place where the performance occurs. Only the camera is the witness.

Although Auslander (2008) draws a clear line between the two categories, he states that in both categories the event is staged for the camera. The photographer is part of the action space. Even more, documentation seems just as important as the event itself – even to the point "that the photograph replaces the reality it documents" (p. 3). For Auslander, the difference between the two categories ultimately comes down to whether the documentation is a primary (in the case of the 'theatrical') or secondary (in the case of the 'documentary') record of the event. There is thus a tight connection between performance and documentation. Auslander (2008) even speaks of the "performativity of documentation, i.e. the act of documenting an event as a performance is what constitutes it as such" (p.5). The documentation not only serves as an archival trace of the autonomous performance, but it creates and materializes the performance.

I would place my own living archive under Auslander's documentary category since the photographs of the play events (as well as the re-enactments) provide a record through which the events can be re-accessed and re-constructed. Even more, the photographs provide evidence that the events took place, they point to the reality of the events. However, just as in Klein's *Leap into the Void*, the play events (and re-enactments) were not performed before an audience. The play events mostly took place close to home while the re-enactments were performed in the studio.

In line with Auslander (2008), I would say that the photographs produce and constitute the events (the original play events as well as the re-enactments). In other words, the physical events become available to the audience solely through documentation. They are framed as a performance "through the performative act of documenting" (p.7)[43].

The archive and the photograph

Photography, archive, and memory are closely linked. Taking a picture of something is making a record of something. Okwui Enzewor (2008) states that a camera is an archiving machine and its products are archival objects. "The capacity for mechanical inscription and the order of direct reference that links the photograph with the indisputable fact of its subject's existence are the bedrock of photography and film." (Enzewor, 2008, p. 11) A photograph is an archival record of an event that took place somewhere in history.

[40] See http://www.medienkunstnetz.de/works/shoot/

[41] See https://artlead.net/content/journal/modern-classics-yves-klein-leap-into-the-void-1960/

[42] See https://www.moma.org/artists/5392

[43] See note 34, page 57.

Our relationship with photography is very intimate. Since the invention of the medium of photography in 1839, the camera has rapidly evolved into a consumer product. Photography has turned into a commodity. The border between professional and amateur, between private and public, has faded. With the arrival of the smartphone with its built-in cameras we have become obsessed with recording and archiving our lives (Lavoie, 2018). The photo album (nowadays foremost digital) is perhaps the best example of our desire to make visual testimonies of our lives. We photograph birthdays, holidays, and other life events, to create visual narratives of our lives.

Every photograph is unique since it points to a singular event, that took place at a specific time and moment. However, this uniqueness disappears when the photograph becomes part of an archive. Uniqueness and singularity are annihilated in the process of archiving. This is also referred to as the "paradoxical effect of archiving, because at a certain point the individual components are deemed to be only another expression of those objects that surround it" (Van Alphen, 2008, p.66). In the archive, the individual photographs are no longer an expression in and of themselves, but they only gain meaning in relation to other photographs and archival materials. The individual photograph takes its place in a temporal order and as a result, its singularity perishes.

In my living archive, I deliberately play with the singularity and plurality of the photographs. Most often, the photographic material is organised in chronological sequences (see Figure 11), but in some cases, I have decided to keep the singularity of a photograph (I refer to them as stand-alones, see later on).

Figure 11. Gliding with matrasses from stairs © Carolien Hermans

The working method is similar to Eadweard Muybridge's (1830-1904) stop-action photography. Muybridge was a British photographer (based in the United States) and a pioneer in stop motion techniques. He shortened exposure times (through the use of special shutters) so that isolated moments in movement could be photographed. This is also referred to as bullet time images, i.e. images that "focus on the spectacular nature of the single frozen moment that only the camera can capture – that instant in which the laws of gravity no longer seem to prevail" (Braun, 2013, p. 48).

A more contemporary example of instantaneous photography is the work of Denis Darzacq, La Chute (2007). In urban environments, he creates images of bodies that float in-between heaven and earth. Many of his photographs are taken in the Paris *banlieues*. The juxtaposition of the bodies in mid-air, shot against a background of urban, concrete buildings, underscores the marginalized and vulnerable position of urban youth (Cooper Albright, 2013). Darzacq freezes the movement of the youngsters "in order to expose their subjectivity" (Cooper Albright, 2013, p. 39).

Besides the sequential series, my archive also contains frozen images of physical movement (see Figures 1, 12, 13, and 14). I refer to them as stand-alones, as photographs that should not be placed inside an order/sequence because of their singularity, and because they can only be fully understood in isolation. This is especially true for the movements that are captured in mid-air. It is only because the chain of movements is interrupted, that the narrative of the action is suspended. The body in mid-air shows us the in-between, "the body of the almost, the body of the between, when the movement is on the verge, actual but almost virtual, hanging, pulsing, spiraling" (Manning, as cited in Cooper Albright, 2013, p.40).

Figure 12. Sea Dance © Carolien Hermans

Figure 13. Living Room Dance © Carolien Hermans

Figure 14. Jumping © Carolien Hermans

However, in my archive, the stand-alones form the exception rather than the rule. Almost all physical play events are captured within a sequential structure. Where in Muybridge's work the hierarchical order is heavily manipulated in the editing process - he made post hoc arrangements to hide gaps and inconsistencies caused by technical problems in the shooting process (Braun, 2013) - I have kept the original order of shooting intact. I don't mind if there are gaps or holes in the sequence. The missing photographs are just as important as the existing ones. Absence constitutes presence. The photographic sequences are constituted around perceptual breaks in linear time. The original play event has been frayed and dissected until only isolated fragments (images) remain, frozen in time. Then the bits and pieces (the fragments) are put back together - in such a way that a new intrinsic logic and order start to emerge. As a result, the series of photographs are not complete, they are fragmentary and unfinished. My interest lies in the re-construction of the physical event, in a visual restructuring that is not identical to the original event but that transforms the event and opens up new creative potential.

In his earlier work on human and animal locomotion, Muybridge uses a strict hierarchical order. In his later work, however, he abandons the logic of the sequence almost completely. Muybridge starts to organise "images from unrelated series into dynamic layouts, each picture affecting the reading of the one next to it or above or below it" (Braun, 2013, p. 51)[44]. A similar mechanism is at work in my own work. When it comes to simple movement actions (such as jumping, turning, falling, etc.), I use temporal ordering structures. In more complex physical events (such as gliding from the stairs with mattresses), the photographs are loosely ordered, still put into a timeline but with many more gaps and inconsistencies between them (see Figures 15 and 16).

Figure 15. Gliding with matrasses from stairs © Carolien Hermans

These photographic series are probably best described as collages since together they hold the original event. The bits and pieces (the fragment of the original event) are stitched back together, linking the series of photographs to the original event, yet at the same, breaking its linear, narrative construction.

The photographic sequences only partly have evidential value. They point to the original event but their significance lies foremost in the creative re-construction and re-structuring of the play events. There is a suggestion of temporal order– specifically in the chosen format (i.e. the photographic sequences). Through the chain of images, a collective meaning comes about. The photographic sequences echo the original play events, yet at the same time they differentiate and separate themselves from the original – as they become artistic products in and of themselves.

[44] See https://penntoday.upenn.edu/news/new-way-thinking-about-motion-movement-eadweard-muybridge for more information on the work of Muybridge.

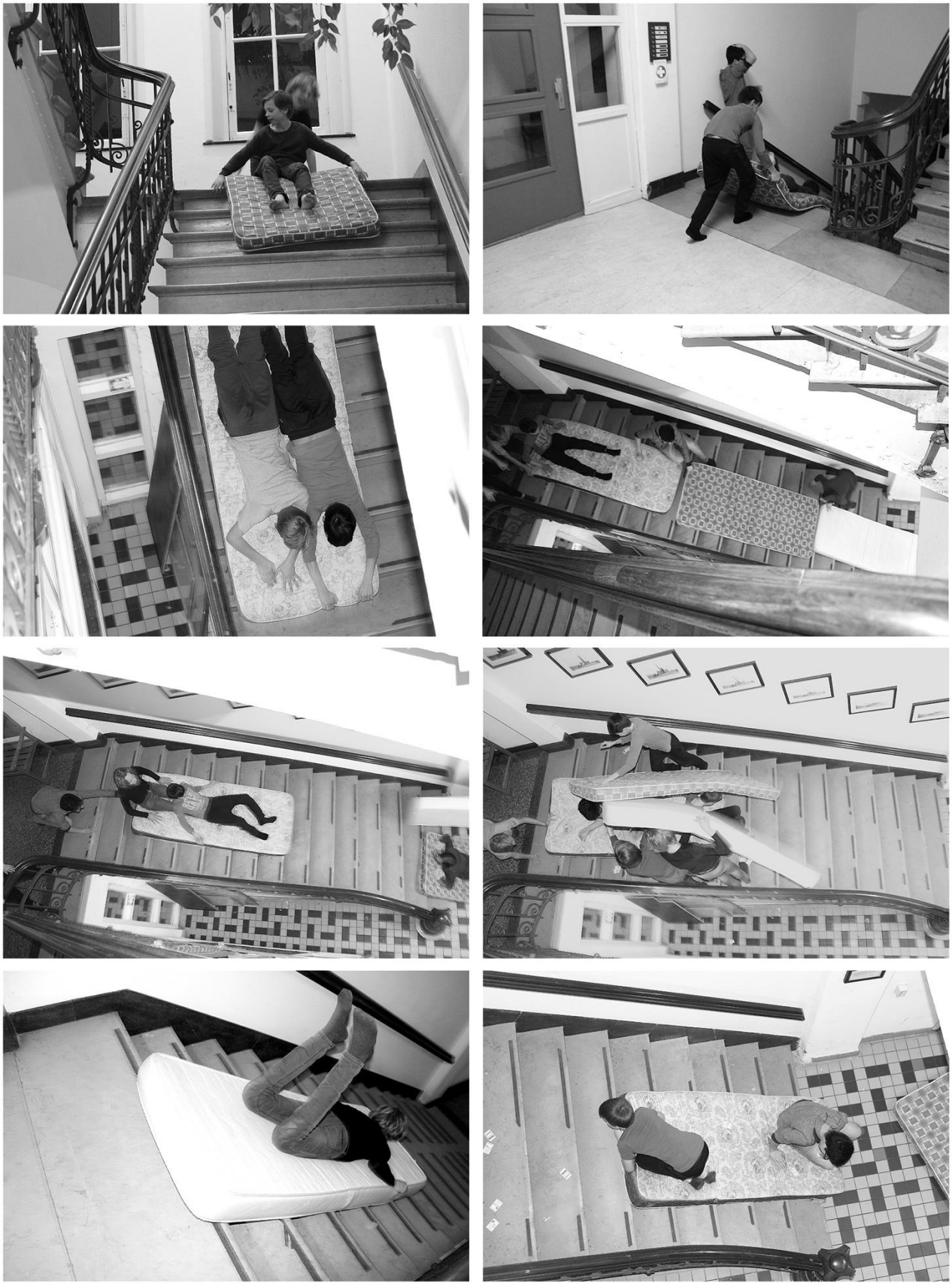

Figure 16. Gliding with matrasses from stairs © Carolien Hermans

Living archive of my children's play events

The living archive in my artistic research consists of photographic material of my children's physical play events. The photographs are taken over a period of roughly speaking, five years (2013-2018). At the start of the archive, my children are respectively 7 (Lisa) and 9 years (Luuk) old. At the end, they are youngsters in high school. The photographs are taken with a simple camera, the Canon EOS 6D, with a 20.2 megapixel CMOS sensor for high resolution. No tripod is used. All photos are taken by hand and captured in a raw image file so that all the original data are preserved and no information is compressed. The camera is always close-by. At home, I can grasp it immediately from the closet that is situated behind my working desk. When I go out with the children, I bring the camera along.

It is difficult to tell how much the presence of the camera affects the play behaviour of the children. There are a few things that I do to reduce the impact to a minimum. First of all, I make use of a handheld camera. In the cases that I use a tripod, the children are more aware of the camera and they also start to perform for the camera. Even more, I try not to intervene in the play event. I draw attention away from the camera by being silent and adapting to the situation. Duration also plays a role. At the start, children look at the camera but after a while, they simply continue with their play. However, the camera and my presence do play a role. Some children, at the end of the play event, say that they did their best. I also notice that some movements are exaggerated, more daring, or provocative. Research (Jansen et al., 2018) shows that the presence of a camera makes participants more self-aware, which in turn leads to more pro-social and normative behaviour. It is therefore likely that some behaviour (like cheating, disagreement, being mean to each other, boredom, etc.) is not being shown as a result of my presence and the presence of a camera.

Most physical play events that I have captured are improvised moments that just spontaneously happened. However, some play events (especially in the category 'movement ecology') are choreographed, that is to say, the physical play still happens on the spot but I interfere as I give my children instructions or I ask them to repeat an action. The photographs are mainly taken in and around our home in Amsterdam, and supplemented with photographs taken during holidays, especially at our watermill in Lisseuil/France.

This way, I have collected thousands of images since with each event I took around 200-300 pictures. After I have taken the images, I import them from the camera to my laptop, and from here a long and labor-intensive work starts: opening the images, looking at them, and selecting the images that I want to keep. This is not only a rational but also an intuitive act since the choice-making is based on aesthetic aspects, content and degree of expressiveness – so affective values play a huge role in the selection process as well. This also means that images are left out in this stage: they are erased, forgotten, neglected or stored somewhere else. Three criteria are used in this selection process: aesthetic (e.g. no clear composition, too messy, sexual connotation, pictures where children are posing for the camera), technical (e.g. over-exposed, blurry, oblique, too far away/too close) or content-wise (action is unclear/ambivalent, there is no physical expressivity). Selection is necessary for building up the archive since it is impossible to keep everything (Breakall, 2008). The archive becomes an archive because choices have been made and information has been ordered and systematized (even if the latter is done in a rather intuitive and playful way).

The images are slightly edited and manipulated. Editing actions include the adjustment of brightness, saturation, and contrast. All images are shot in full colour, however, in the editing process, I decide that some physical events/movements should be framed in black-and-white while others remain in colour. It is not easy to explain why I sometimes decide on framing in black and white, and why at other times I decide to use full colour. I guess it has partly to do with aesthetics: I most often decide for black-and-white when the original photographs are rather flat and when the action itself does not come to the fore. There is however another reason. Black-and-white photography provides different access to the physical event/movement as colour photography does. Erickson (1999)

suggests that colour photographs point more to themselves (as objects in their own right) while black-and-white photographs are more obedient as they draw less attention to themselves. Black-and-white photographs display a sense of utility, and therefore they are very useful in documenting events. "Moving into colour photography […] becomes less a record of a conceptually interesting event than a visual work to be appreciated for itself." (Erickson, 1999, p.98) This is also the reason why I use a mix of black-and-white and colour photograph – and why some events are rendered in colour. The yellow shirt in the living room dance, the red shirt in the hotel room dance, and the ominous blue sky in the sea dance: the colours reveal affects, intensities, and forces that were once present in the initial event but that are exaggerated and amplified in the colour photography. With the use of both black-and-white and coloured photographs, I show the friction between the archive and the photograph. The photograph points to the original event (as evidence/as a record), while at the same time it becomes a visual in and of itself. In some ways the photograph also detaches itself from the original event, and in the coloured photographs, this becomes most clear.

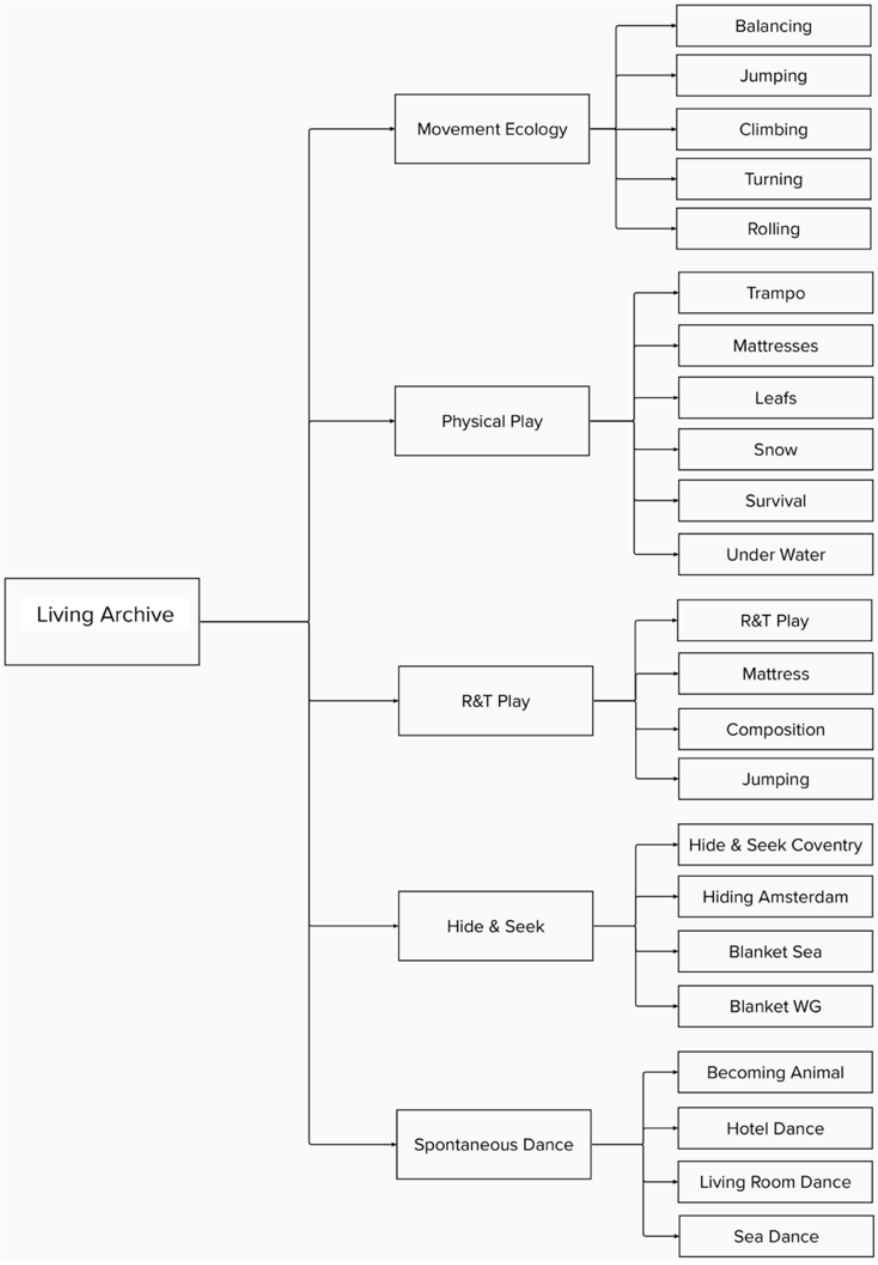

Figure 17. Tree Structure Living Archive

From the selected images I now start to re-construct the physical play event again. In general, the images are put in chronological order. However, sometimes I decide to put images together that resonate with each other or I categorize them in terms of the theme ('shelter' is a good example of such a category). All images are put in a sequential structure, except for a few images that are so 'singular' that they can only be grasped in isolation. I refer to them as stand-alones: they outlift a specific moment or movement and in sequential order this would get lost (the photograph of the upside-down legs in the category Hide-and-Seek is an example of a stand-alone).

In the final stage, I order and organise the archive. I make categories and give names to the physical events. The categories refer to the type of physical play. This leads to the following main categories: movement ecology, physical play, R & T play, hide & seek, and spontaneous dance. Each category contains subcategories. I have chosen specifically for categorization into themes so that images can be easily retrieved through the use of a tree structure. See Figure 17.

Conclusion

In this chapter, I discussed the how and what of the archive, with a specific focus on the living archive. I hope to have shown that archives are more than sites of the past that contain historical traces (Dekker, 2017). Archives are flexible systems: they are open, creative, and collaborative. An archive is not merely a window to the past: it is an open-ended transformative system that is fluid and constantly changing "through mutations of connections and disconnections" (Foster, 2004, p.6). Even more, the archive contains non-exhausted creative fields (Lepecki, 2010), virtual forces that can be actualized every time the archive is accessed. An archive, therefore, does not only store, it also acts (see next chapter for further elaboration on this).

Two archival projects in dance have been reviewed: Shioban Dance Replay and the Double Skin/Double Mind interactive installation developed by ICK. Archiving dance works provides extra challenges because of the ephemeral nature of dance. The creative process forms an undeniable part of the dance work, and it is the creative process that is so difficult to capture tangibly. Both projects have experimented with new ways of archiving, that can capture the liveness of movement. This has led to personal archives that invite the visitor/participant to actively engage with the dance material.

Besides the two archival dance projects, I have discussed Playing the Archive, an interdisciplinary project that is dedicated to passing play on from generation to generation. Playing the Archive is more than just an archive. The program seeks to make active connections between the play cultures of different generations, building further on Opies Archive by creating mixed reality playgrounds. The Time Telephone installation and the 'Sense of Play' playing cards are two examples of how new technology is used to infuse the Opies Archive with new meaning and new potential. Even more, three stages can be distinguished in the project: digitizing the Opie Archive, connecting the archive to play nowadays, and developing new play tools through the use of new technology.

My own artistic project can also be divided into three stages: the living archive of physical play events of my children, re-enaction of physical play through dance improvisation, and the development of creative movement workshops (Replay/Remove). Photography is used as the main tool for capturing the physical play events of my children. Sequential series of photographs, collages and stand-alones, are used as ordering principles of the living archive. Finally, the archive is categorized into different types of physical play: ranging from R & T play (Rough and Tumble play) to theater, to spontaneous dance.

Oke (2017) states that dance and movement archives should not stay still if they want to reflect the art form. The archive "must be dynamic and performative, […] it must move" (p.208). In the next chapter, I will discuss the dynamic and performativity of my living archive. Through the re-enactment of the physical play events, I try to access the non-exhausted creative fields that are still

present in the photographic series. Dance improvisation practice is used here to get a grip on the forces, affects, and energetic impulses that are at work in children's physical play and that together shape the participatory sense-making process. In the next chapter, I will take a closer look at re-enactment as an artistic research strategy to uncover and unravel the creative potential of the living archive.

Chapter 6. Re-enaction of physical play events through dance improvisational practice

The next phase of my artistic research consists of the re-enactment of the physical play events by professional dancers. Re-enactment is used in diverse practices, but this chapter is dedicated to the artistic practice of re-enactment in dance and the performing arts. I argue that re-enactment is not a re-production of the past in the strict sense of the word but a re-activation of the creative potential that is still lingering in the work (Lepecki, 2010). In addition, I discuss how the body can be used to re-enter and re-articulate the archive. The body, as a living entity, has the potential to access the archive in an experiential and affective way. I introduce Mühlhoff's notion concept of affective resonances (2015) to explain how affects can travel in-between bodies. The aim of the three re-enactments is to unlock and grasp the virtual forces that are present and still at work in the imagery. I close the chapter off with some final thoughts on re-enactment as a double-folded process, an affective doubling without appropriation. Re-enactment is a process in which experience is re-experienced.

Artistic re-enactments

When I think of re-enaction, the first image that comes into my mind is that of large groups of amateur hobbyists or history enthusiasts that wear costumes and that want to recreate aspects of a historical event – in most cases battles and wars. Re-enactment has a long history, the Romans already re-staged famous battles as a form of spectacle. Although re-enactment mainly has an educational or entertaining purpose, it is also emerging in scholarship as a potentially productive way to increase historical understanding in a corporeal way (see for example the RRR Network)[45].

In this research, I mainly focus on artistic re-enactments within performance arts and dance. Performance arts and dance can both be seen as time-based arts, and as a result, ephemerality and intangibility are central elements in both art practices. Both do not produce commodities or material outcomes. The performance ceases to exist after its execution. Re-enactments however provide possibilities to re-access the 'original' performance. They do not duplicate or imitate the original performance, and therefore are not identical to the original event (Westgeest & Augusto, 2020).

The core of artistic re-enactment is in general not to re-construct the original as truthfully as possible, but to grasp the creative potential that is still present in the work. Re-enaction is never an exact repetition of the original event. Re-enactment can thus not solely be understood as a return to the 'original'. The initial event has already taken place, and can never be repeated or re-enacted in its original form. "Those watching a re-enactment of this kind run no risk of confusion, knowing that the event has already happened and cannot therefore be replaced by another event, merely re-evoked, alluded to." (Caronia, 2014, p.13-14) In other words, the re-enactment itself cannot be confused with the original event.

Even more, artists in general are not so much interested in the exact re-construction of the event but in the exploration of new possibilities and the generation of new meaning. "Artistic re-enactments therefore do not view the original event as something singular and irreducible, but on the contrary, as a complex set of elements that can be interpreted in various ways." (Caronia, 2014, p.14) The aim of artistic re-enactment is not to reproduce the event in a similar way, but to re-experience the potential of the original event in all its immediacy (Quaranta, 2014). By doing so, the re-enaction becomes in itself a new art work.

[45] https://rrr-network.com

The role of the body in artistic re-enactments

Lepecki (2010) argues that within the performing arts and dance field, every will to archive necessarily includes the will to re-enact dances and performances. The body offers the most potential when it comes to recording and storing a performance action since the "body, as a transformative entity, is capable of functioning as a site where knowledge can be placed" (Griffiths, 2014, p.88). Laura Griffiths also refers to this as dancerly knowledge, i.e. the body of the dancer/performer serves as a vehicle for tacit knowledge. She argues that the dancer's body can be used as a three-dimensional vessel, a vehicle for knowledge, through which we can access and capture "the ephemeral attributes that otherwise go missing as a result of performance's disappearance" (p.92).

Because of its ephemeral nature, it is difficult to archive a performance in traditional ways. Conventional archives cannot capture the performance/event in its fullness, and as a result, archival gaps emerge. With archival gaps, I refer to the gaps between material and immaterial traces, records and the event. Conventional media (like texts/documents and audio-visual media) are perfectly capable to capture the material traces of a performance. However, when it comes to immaterial traces (such as affects, dynamics, flow, breath, energy, sensorial experiences) media fall short. It is here where the living body comes in. The living body can serve as a place "where non-verbal practices can be actualized through re-enactment" (Griffiths, 2014, p.96). Within this perspective, re-enactment is understood as a corporeal (trans)formation of past work.

Lepecki's (2010) notes an increased interest in the contemporary dance scene in Europe in the re-enactment of some well-known dance works of the twentieth century. According to him, this return to dance history is not so much led by a cultural critique on archival (bureaucratic) institutions (as is the case in Hal Foster's notion of archival impulse) but an artistic desire to unlock the creative potential that is still present in a past work. Through re-enactment, the body itself becomes the vessel for actualizing this creative potential. The dancer's body becomes a place, a zone, a system where the original does not rest, but is formed and transformed over and again. Lepecki (in reference to Deleuze) considers re-enactment as a process that produces differences, an act of transfer in which possibilizations are unlocked and actualized. The actual field of a past dance work is always surrounded by virtuals that can be activated through re-enactment[46].

Lepecki discusses three examples of re-enactment within the dance and performing scene: Julie Tolentino's *The Sky Remains the Same*, Martin Nachbar's *Urheben Aufheben* and Richard Move's return to *Martha Graham*. In all cases, the work is re-enacted in a body different than the body that originally performed it. The archive thus passes through a different body, and in this act of transfer, the work is actualized. Griffiths (2014) points to the difference between a dance practitioner that re-enacts repertoire that is already settled in the body and a performer or dancer that is not familiar with the work and thus has to re-construct the work from archival traces such as video footage, written texts and notes from the choreographer. In the first case, the dancer is re-calling and re-awakening traces that already reside in the body. In the latter case, traces are picked-up by another body that infuses the work with new life.

In my artistic work, I am interested in re-enactments done by performers that were not part of the original event. The aim of my artistic research is to transmit initially felt forces/affects that were once present in the physical play events of my children and that are then re-enacted in dance

[46] Lepecki here follows Deleuze who uses the term 'virtual' to point to the creative potential that surrounds the 'actual'. The virtual exists in a preindividual reality that is distinct from but nevertheless interacts with reality. Actualization is thus not "the becoming-real of possibilities, but the becoming-actual of the virtual which coexists alongside it" (Bluemink, 2020, para. 9). For the virtual to be actualized, there needs to be a differential change. The virtual can be understood as a force, as a tendency for life to diverge, to create and to adapt to its environment. The virtual is an active field that causes the actual experience to happen.

improvisational practice. I want to explore how affective traces can travel from one body to another body through the use of photographs. I am not interested in re-staging the original play event and to re-work it into a dance performance. My interest lies solely in capturing and documenting the affective resonances in photographic scenes.

Re-enactment: form and affective resonances

The question now is: what is precisely re-enacted in the re-enactments? What kind of traces are picked-up and what are the instructions that the professional dancers receive? To answer these questions, I must return to the initial research sub question that I formulated at the beginning of this thesis:

> How can professional dancers use photographic imagery as a tool to re-enact children's physical play events and explore the elements of participatory sense-making through their own practice?

In this phase, I want to explore how affects, intensities and forces can travel through different bodies in physical play and dance improvisation – through the mediation of a set of images. The aim is to get a deeper understanding of how participatory sense-making processes take on shape in both physical play and dance improvisation. I am specifically interested in the affective traces, the leftovers, that are still present in the set of images and the way these traces are picked up by professional dancers.

In other words, the set of images is actualized by the dancers, not only in form and shape but also in dynamics, flow, rhythm and the sensorial. The images are actualized through the senses, through the flesh. In this phase of my artistic research, I am interested in how affective traces can be used as a creative source for movement exploration. I use the term affective resonances (developed by Mühlhoff, 2015) here to explore how affects can travel through different bodies through the use of a set of imagery. Affective resonance (developed by Mühlhoff, 2015) usually involves the direct interaction between two or more agents. It refers to the gripping dynamic force, the affective interplay that is experienced by the interactants in face-to-face contact. It involves mutual attunement of facial expressions and gestures, interactional synchrony and the coordination of actions. Affective resonance as a concept is closely related to enactivism and the interactive social cognition theory of De Jaegher and Di Paolo (2007)[47].

In my artistic research, however, there is no direct contact or interaction between the professional dancers and the playing children. The relation is mediated by documentation (the photographic sequences). The dancer is asked to respond to the affective traces captured by the set of images – allowing it to resonate within their own bodies. The body of the dancer is not a passive receptor but an active force that creatively explores and attunes to the affective traces within the set of images. Re-enactment can thus be seen as a performative practice in which the body, with its own movement history and experiences, becomes the frame through which the dancer can re-enter the living archive.

The dancer doesn't just look at the visual imagery (well she does that too) but she establishes sensible connections between her own body and the archive. The dynamic of the affective traces (rendered visible by the photographs) acts on the dancer, it makes her move, not by mimicking the

[47] The concept of affective resonances (Mühlhoff, 2015) brings together insights from affect theory, phenomenology and enactivism. Mühlhoff uses De Jaegher and Di Paolo's notion of participatory sense-making to explain how affects emerge in processes of social interaction. Deleuze comes into the picture when Mühlhoff explains the being-in-resonance "as the actualization of [virtual] forces that are inscribed in the relational space" (p.13). For Mühlhoff affects are jointly created in the interaction dynamic, unlike Daniel Stern who acknowledges the social interaction in affect attunement but still considers affects as internal feeling states.

original play event but by dwelling in them (Polanyi, 1966). The dancer thereby creates her own line of actualization.

Each re-enactment is a singular event since each dancer connects to the living archive in her own way. Re-enactment is a double process: the dancer is not only moved and affected by the archival material but she also moves and affects the archival material. Suzan Kozel (2017) refers to this as affective doubling: the dancer not only picks up on the affective residues but also carries them further. The living archive is thus re-articulated by the bodily actions of the dancers, it is charged with new affects and new layers of meaning are added on top of already existing ones. This is done in two ways. First of all, the re-enactments themselves can be seen as actualizations of the living archive (and as such they produce affects, forces and intensities). Second, the re-enactments are captured by the camera and added to the living archive. They communicate with the photographs of the original play events and as a result, new layers of meaning are produced.

The re-enactments are not an imitation or a duplication of the initial play events. Re-enaction is not about resemblance. However, form and structure do play a role. In ways that are similar to Martin Nachbar's *Urheben Aufheben*[48] and Richard Move's impersonations of *Martha Graham*, the re-enactments in my artistic research start with a literal doubling, as dancers incorporate a specific gesture or pose (see Figures 18 to 25).

However, the outer congruence is only relevant because it allows the dancers to establish sensorial connections between their own bodies and the imagery. Their own bodies become the frame through which they re-actualize physical play. The pose serves as an entrance, a way in. By stepping into the pose, in a quite literal way, the dancers can experience the qualitative kinetic dynamics that are enclosed in the pose.

According to Sheets-Johnstone (2012, p.53) "all movement has an inside and an outside". Movement is both a kinaesthetic as well as a kinetic reality. By moving into the kinetic configuration of a movement or pose, the dancers also gain access to the kinaesthetically felt dimensions of the movement. Affect and movement are deeply intertwined, and affective resonances are experienced by moving through the exact form of a pose. Or even better said: "the dancers are not moving through a form, the form is moving through them." (Sheets-Johnstone, 2012, p. 51)

The dynamic of the pose acts on the dancers, "it makes them move—not in an externally determined way, but in their own way—, and thereby it gets enacted by them, they carry it further" (Mühlhoff, 2015, p.101). The immediate experience of being-in-resonance with the original pose is that of a present force, a force that takes hold of the dancers in a double dynamic of *moving and being moved* by the imagery of the original play event. The dancers are not only moved by the set of imagery but they also, in turn, *move the living archive* by adding new layers of meaning on top of already existing ones.

The dancers do not only attune to the affective traces of the specific pose that is displayed in the image, but they also attune to their own bodies (their own memories, movement history and bodily configuration), to the other bodies and to the present situation (being in a studio, with classmates, early in the morning so the body still needs to wake up). The unfolding of forces, intensities and affects is the result of this relational and situational configuration.

In sum, re-enactment is viewed here as a field of differences from which more than one meaning can be extracted (Caronia, 2014). The dancers bring their own bodies and histories along. Temporal lines are drawn between the archive, the body and the situation in which the body finds itself. Bodies, spaces and images together move through dynamic forms. The dancers are not only responding but also initiating movements, they pick up traces, enter somewhere in the middle, slip in

[48] I refer to the article of Lepecki (2010, pp. 40-41) for examples of doubleness in both Martin Nachbar's *Urheben Aufheben*[48] and Richard Move's impersonations of *Martha Graham*.

and also slip out again. The dancers thus create their own lines of unfolding. They not only re-construct the original play event, but they also add new layers of meaning on top of it.

Figures 18 and 19. Original rough-and-tumble play and re-enactment by dance students at the Amsterdam University of the Arts © Carolien Hermans

Figures 20, 21, 22 and 23. Original rough-and-tumble play and re-enactment by dance students at the Amsterdam University of the Arts © Carolien Hermans

Figure 24. Rough-and-tumble play of two boys © Carolien Hermans

Figure 25. Re-enactment by dance students at the Amsterdam University of the Arts © Carolien Hermans

Photography and Re-enactment

The working sessions with (emerging) professional dancers are captured by the camera. In this stage of the artistic work, another set of imagery arises – this time however from the dance improvisational practice. Selecting, ordering and classifying are once again used as organising principles. The selected set of images is added to the living archive.

Just as with the play events of the children, it is difficult to tell how and in what ways the presence of the camera affects the behaviour of the dancers. In general, I would say that the dancers professionally relate to the camera. They consider it a part of the artistic process and they understand the importance of capturing and recording the workshops. In contrast to some of the children, they do not look directly into the camera or show in an explicit way that they are aware of the camera. I believe this is trained. First of all, dancers are accustomed to look in the mirror in a dance studio. At the start of a lesson or training, they will perhaps fix their hair or their clothing, but as soon as they engage in the dance, their attention is drawn to the movement and not so much to how they look (although they can swap this gaze instantly in the break or a transition moment). Second, dancers are used to performing for an audience. They are thus aware of the presence of an audience, which is in many ways similar to the eye of a camera.

This doesn't mean that they are not affected at all by the camera. Just as with the children, I notice that if the camera is introduced from the beginning on, the dancers are more at ease. Duration plays a role here too. After a while, the dancers seem to forget about the camera, or at least, the camera shifts to the periphery of their attention. With the first-year students from the MTD (the first re-enactment), I notice that when I come close with the camera, in a way that I enter their personal space, it becomes harder for them to ignore the camera and to be fully present in the moment. The workshop with the MTD students is the only workshop where we close off the day with a presentation. This final showing makes it more formal. Performing for public (even if the public consists of fellow students) also gives the camera another status. The camera is no longer there to capture the artistic process but now it gains a performative value.

In the second re-enactment, the becoming of animal, I am the performer. Interesting enough, I am overly aware of the camera. Pretty much all of the time, I know where the camera is and I turn to the camera whenever this is needed (to get the best angle). Although the blankets cover my face, and I am thus without sight, I use my other senses (sound but mostly proprioception and kinaesthetic awareness) to locate the camera. I constantly shift between inner sensing and outer appearance. This is something that probably all dancers do, even when there is no mirror or camera around: being aware of inner sensations, yet at the same time also being aware of the outer configuration of a specific movement.

In the third re-enactment, I give the dancer (Paula Guzzanti) the assignment to film herself. Since Paula always uses a camera when she is rehearsing, I think the impact of the camera is reduced to a minimum. Finally, I should mention here the Touch Workshop at t Chester University. Although I check with everyone if it is okay to use the camera, I am still hesitant in using the camera. I sense that the camera is perhaps too intrusive and that it is enough for me to just be present. As a result, I return to writing down my impressions and sharing these impressions with the participants. The writings and not the photographs become the most relevant input for analysis of the Touch Workshop.

Conclusion

In this chapter, I have explored the concept of re-enactment within the field of dance and performing arts. I hope to have shown that re-enactment is not a re-production of a past event but an attempt to grasp the creative potential that is still present in the work. Re-enactment is "a privileged mode to effectuate or actualize a work's immanent field of inventiveness and creativity" (Lepecki, 2010, p.45).

Re-enactment is the actualization of past work: although it rests on the original work, the act of re-enactment activates affects, intensities and forces already present in the work but that have not yet been realized. Re-enactment is a re-turn to the past work, but a return only so far that differences are found and produced.

The past work is re-actualized through the bodies of the dancers. The aim is to gain a tacit understanding of the forces, intensities and affects that are still present in the past work. In this phase of the artistic process, the visual material is handed over to professional dancers. The instructions are quite simply: take a look at the set of images, choose a few images that resonate or appeal to you (in whatever way, you don't have to explain this, the resonance can be entirely on an affective non-linguistic level) and then you try to recapture the energy, the affects/intensities, or just something that grabs you and takes you along.

The process of re-enactment often starts with form and outer congruence. Through literal doubling, dancers can establish sensorial and kinaesthetic connections between their own bodies and the imagery. The outer form provides an entrance, a way in. But as soon as they are in, new connections and new virtuals arise. In this process of moving and being moved, the experience itself is doubled. Re-enactment, we could say, is an experience of an experience (Massumi, 2002).

Chapter 7. Joint action and joint attention: dance improvisation and children's physical play as participatory sense-making activities[49]

In this chapter, I discuss the artistic outcomes of the first re-enactment. The original play event consists of a rough-and-tumble play of four 13-year-old boys at the Conservatorium of Amsterdam. The play event is then re-enacted by first-year students of the Modern Theatre Dance department, at Amsterdam University of the Arts. Dance improvisation and children's physical play events are considered organisational practices (Noë, 2015)[1]. Both activities organisorganise and reorganisorganise our lived experience. Even more, both activities are socially shared and culturally shaped – and thus highly relational. According to the enactive approach, sense-making evolves out of self-organisational processes in which the brain, body and environment are linked. In this chapter, the concept of participatory sense-making serves as an underlying theoretical framework to explore the shared elements of physical play and dance improvisation. The main focus lies on joint action and joint attention. I will specifically look at the co-constitution of meaning through coordination of action, interaction rhythm and shared intentionality.

Physical play event of four boys at the age of 13

In December 2017 I invite four boys of 13 years old for a physical play session. The session takes place in the big theatre studio, in the basement of the Conservatory of Amsterdam. I am interested in their spontaneous physical play activities.

There are as many as sixteen different play types (Hughes, 2002) that include role play, object play, fantasy play, symbolic play, socio-dramatic play etcetera. In this research study, I focus on one specific play type, namely Rough-and-Tumble play (R&T play). R&T play refers to "vigorous behaviours, such as wrestling, grappling, kicking, and tumbling, that appear to be aggressive except for the playful context" (Pellegrini & Smith, 2005, p. 79), and that are almost always performed without hurting each other (Di Pietro, 1981). See Figure 26 for an example of R&T play.

Both boys and girls engage in physical play. However, R&T play is mostly initiated by boys across a variety of cultures (Pellegrini & Smith, 1998; Di Pietro, 1981). Physical play activity seems to have different functions: the refinement of social skills, the training for the unexpected (Pellis & Pellis, 1996) which subsequently leads to the improvement of self-regulation and a more accurate encoding/decoding of emotions. In addition, physical play also increases strength, endurance and movement skills. The boys play with dominance relationships through the exertion of corporeal power (Pellegrini & Smith, 1998).

On a Sunday morning, I invite the boys over for a physical play session at the Conservatory of Amsterdam. When we arrive in the studio, the four boys seem slightly disappointed since there are no (play) materials available in the studio except chairs, music stands and a really expensive Yamaha concert grand piano. However, when taking a closer look, the four boys discover a blue mat, some foam materials, a broom and long black curtains on one side of the studio that provide a perfect spot to hide. No hesitations anymore, let the game begin. Two boys rush to the mat, while the other two take off their coats and shoes (see Figure 27).

[49] This chapter is published in 2018 in *Choreographic Practices, 9*(2), 311-322. I made the following adjustments concerning the original article: I revised the abstract and omitted the sections where I introduce the enactive account and the theory of participatory sense-making. I also made some textual adjustments and added a few notes.

R&T play is more than just a physical encounter. Imagery, symbols and make-believe form a fundamental part of the play event. The blue mat becomes a war zone, a battlefield, a ship and an island. These images are not only implicitly present but also explicitly referred to. The boy in the blue sweatshirt for example calls himself a king (see Figure 28).

At other moments the boys introduce images such as (ninja) turtle, mole, crab and giraffe – many of them borrowed from the animal world. They also use verbs such as killing, quartering and wiping away. Here we see that meaning-making becomes a fluid and ambiguous process that is mediated by the environment and the interaction between the four boys. The concrete, physical play event transforms into something else, as a result of alienated[50], virtual meaning.

According to Di Paolo et al. (2010, p. 77), this is truly enactive since the youngsters bring forth "an adaptive equilibration (the absence of which would make play unchallenging and unreal)". The four boys search for an equilibrium that is dynamic and temporarily constructed.

Figure 26. Four boys engaging in R &T play. Conservatory of Amsterdam, 2017 © Carolien Hermans

Collective sense-making occurs through coordination and interaction rhythm. Interaction rhythm must be understood here as the rhythmical attunement of bodies on several levels of movements, such as gestures, postures and facial expressions. Interaction rhythm is here understood as "the self-organisation in time of several elements and processes that span the individuals, i.e. the temporal organisation of elements across and between individuals" – and where the process can "take a momentum of its own" (Di Paolo et al., 2010, p.33).

In the interaction process, we synchronise facial expressions, body postures and movements with our interaction partners in such a way that our behaviour rhythmically matches the social environment (Dimberg, 1990; Chartrand & Bargh, 1999). Gallagher (2010, p. 114) writes the following: "In communication, we coordinate our perception-actions sequences […]. Our movements are often synchronised in resonance with others, following either in-phase or phase-delayed behaviour, and in rhythmic co-variation of gestures, facial or vocal expressions."

[50] Alienated meaning is a term that Di Paolo et al. (2010) use to refer to processes where meaning is detached from the actual (goal-oriented) situation so that new registers of sense-making become available. Di Paolo et al. (2010) use the example of pretend play where a toothbrush can become a flute. Pretend play is a play with similarities and differences by untying the relation between a concrete situation and its meaning. The toothbrush is not used in its ordinary way, but in a different, imaginary way. One could also say that the usual affordances of an object or a situation are replaced by unusual affordances. It is the friction between the usual and unusual meaning of a situation that creates a sense of ambiguity. For Di Paolo et al. (2010) this alienation takes place not on an internal mental level but a bodily level.

Figure 27. Two boys rush to the blue mat. Conservatory of Amsterdam, 2017 © Carolien Hermans

Figure 28. Boy becomes king by putting a blue mat on his shoulders. Conservatory of Amsterdam, 2017 © Carolien Hermans

The four boys also organise their physical play through rhythm and coordination. Notice in Figure 29 how the four boys share the same momentum. They all land on the blue mat, with a slightly different timing (specifically the boy in the grey trouser who already has landed) but with a shared intention and a shared sense of timing. Notice that the two boys (both with black socks on) have synchronised their movements entirely: not only in timing and rhythm but also in movement form.
This is not so much the result of a conscious decision: synchronization happens in the interaction and is the result of the way they subconsciously adapt their bodies to each other. In other words, through the interaction process the movements of the four boys are co-regulated (Fogel, 1993).

Another example of coordination is observed in the upper right image (see Figure 29): here we see three boys physically coordinating their actions to squeeze the fourth boy in between the blue mat. Again, the movements share intention and timing. Notice how the hands of the three boys are in the same position. Also, the way they push is synchronised. The boy in grey and the boy in black exert the same kind of energy and force on the mat, while the other boy in black is involved in the action, exerting however less force and energy. Notice also how the three boys all look down at the fourth boy that is squeezed in between the mat. Gallagher (2010, p. 112) refers to this as joint attention and he considers the capacity to share attention as vital for "our ability to understand others, what they intend and what their actions mean" and our ability to co-constitute meaning. Joint attention includes gaze following, that is, following the direction of the gaze of another person. It is believed that gaze direction, together with facial expression, hand gestures and body postures, serve as non-verbal ways to share and communicate the intentionality of a movement/action.

The upper left image also displays joint attention and joint action. The boy in the blue sweatshirt has conquered the mat and puts his hands triumphantly in the air. Two boys are collaborating to tilt the boy in the blue sweatshirt from the mat and a third boy is approaching. One boy holds the left corner of the mat, and the other boy holds the right corner of the mat. Spatially as well as temporarily, they coordinate their movements, and they also share focus and attention. It is not that they look at each other but their gaze is directed towards the same objective (namely tilting the boy in the blue sweatshirt from the mat).

Finally, I want to mention one other aspect that becomes evident in the play event of the four boys and which can best be described as serious attention to having fun. The studio is filled with tremendous fun, excitement and enjoyment. At the same time, the four boys display a serious attitude. They are dedicated and absorbed into the play. Rules are treated seriously. Rules set and define what should, can, should not and cannot be done. Even more, rules are made up during the play. One boy for example introduces a broom into the play. 'You have to jump over. If I touch you with the broom, you're done', he says.

Fun and serious attention are thus intertwined within play. Fun is the "exploration of the limits thus imposed on bodily activity and social interaction" (Di Paolo et al., 2010, p. 78). Fun is needed to change and revise the rules in such a way that it becomes a self-structuring process. However, without a serious attitude, the fun will soon lose its grip.

In summary, different elements of the participatory sense-making process emerge in the physical play event of the four boys. First of all, imagery (such as 'king' or 'turtle) is used to transform the play activity in such a way that meaning becomes fluid and alienated. Secondly, joint action, interaction rhythm and shared attention all attribute to the co-creation of meaning in play. Finally, the boys display serious attention to having fun. This fun-factor is required to explore the boundaries and limits of their play and to generate new rules that structure and re-structure the physical play activity.

Figure 29. Synchronization, joint action and joint attention in physical play. Conservatory of Amsterdam, 2017 © Carolien Hermans

[Image left above: the boy in the blues sweatshirt has conquered the mat and puts his hands triumphantly in the air. Notice how the two other boys work together in order to push the boy in the blue sweatshirt off the mat. Image right above: example of a coordination task. Three boys work together in order to squeeze the boy that is caught in-between. Image below: example of rhythmic interaction and synchronization of movement.]

Dance improvisation workshop at the Modern Theatre Dance Department

In March 2018 I am invited to the Amsterdam University of the Arts, Modern Theatre Dance department to give a dance improvisation workshop to eleven first-year dance students (six male students and five female students). In this phase of my artistic research, I am handing over the photo material and video footage collected in December 2017 when I observed the play activities of the four boys. The dance workshop aims to revisit and relive the play event of the four boys by moving through the selected imagery, picking up traces of energy, intentions and foremost affects.

Sheets-Johnstone (2015b) describes dance improvisation as the spontaneous articulation of sheer movement. Dance improvisation is a broad concept that includes solo and group exploration, studio work and performative practice. The term covers an entire range, from choreography with real-time compositional elements to contact jam sessions. De Spain (2003, p. 27) defines dance improvisation as "a way of being present in the moment". Lynne Anne Blom and Tarin Chaplin (1988, p.x) consider dance improvisation as the "dynamic daughter of dance, at times self-indulgent, at times concise and determinant, but always developing and changing. She has a free spirit: she should be given free rein within wisely and flexibly set boundaries."

After a short introduction, the students divide themselves into groups of three and four. The groups look at the photographs, pick the ones that hold their attention and move to the dance floor. First, they are slightly hesitant, but gradually the dance students tune into the imagery and recollect traces of energy, intentions and affects.

Just as in the physical play event of the four boys, the dancers synchronise movements spatially and temporally. Figures 30 and 31 show how two dancers share momentum, energy and intensity. Notice the position of the arms and the shift of weight in the legs, as if they were looking in a mirror. The bodies are clearly resonating with each other. Although the movements "differ in detail, they adopt flow and use of space, their tempo, rhythm and weight, their kind of responses and style" (Blom & Chaplin, 1988, p. 23). The dancers integrate the other way of moving into their own.

Notice also the attentional focus[51]. Not only is the gaze directed towards each other, but also the movement of the head is synchronised. Here I believe, lies a crucial difference with rhythmic synchronization as it usually happens in daily life. The communication in dance improvisation does not depend as much as daily communication on language. Interaction in dance improvisation takes place, almost entirely, on a kinetic and kinaesthetic level. As a result, meaning is not easily captured. Cross (2014) uses the term floating intentionality to describe how meaning appears to be intimately bound to the contexts in which it is experienced. Intentions unfold, shift and evolve during the dance improvisation. Intentions are moulded into a perceivable form as a response to the ongoing movement. Some intentions lead to a dead end: others are taken up and transformed into something else. In the unfolding of intentions patterns of movement arise and form solidifies. Additionally, in dance improvisation intentions are shared and co-modulated by the interaction itself. The interaction "gains a life of its own" (Fuchs & De Jaegher, 2009, p. 471).

Daniel Lepkoff refers to another aspect of attentional focus, one that is closely related to intention and presence. According to him "being present is actually a movement […] a movement of attention" (Lepkoff, as cited in Buckwalter, 2010, p. 90). When a dancer moves his attention, he

[51] Susan Williams (2019) has done an artistic PhD research on the attentional focus of musicians. According to Williams, the learning of complex movements (as in music) is better achieved through external rather than an internal attentional focus. Instead of focusing (solely) on the technical aspects of music performance (the how), more attention should be paid to musical expression and intention (the what). The external attentional focus moves away from the internal complex process of motor learning towards a more holistic form of learning. In my PhD research holistic learning is also considered important, however, I am mostly interested in how *internal listening* (attending to internal dynamics of a movement, to the affects/intensities/forces that are experienced in the body) and *external attentional focus* (to the other, to the environment, but also the external dynamics of a movement) work together to facilitate the sense-making process.

opens up the space, thereby refreshing the field of possible intentions and actions that are present inside this space. Dance improvisation – more than choreography – also opens up the meaning-making process to the present, to what happens in the here and now. This is often described as spontaneity, as "an acute awareness of the moment and the context one finds oneself in" (Da Silva, 2017, p. 119). [52]

Let's return to the attentional focus of the two first-year students in the workshop (see Figures 30 and 31). Sharing focus is necessary to coordinate the action. Blom and Chaplin (2010) discuss three basic ways of attending: focused attention, diffused attention and creative attention. Focused attention is rational, logical and verbal. Diffused attention is receptive and accommodating. Creative attention is the ability to attend to both the surrounding field as to possible and relevant associations, while still being able to oversee all the elements.

Figures 30 and 31. Two first-year students are chasing one another. Theatre School, Amsterdam, 2018 © Carolien Hermans

Miranda Tufnell and Chris Crickmay consider attentional focus a foundational mechanism of dance improvisation:

> Group improvisation demands an opening of the attention, both to the work space and to the corpus of people in the space, as an ever-changing pattern of sound, activity, colour and energy. […] Each person is at once responsive to others and independent of them, ready to be changed by, but not absorbed into, another person's activity. The skill lies in being able to include what another person is doing while not losing one's own momentum of thought. This is a fine line and a difficult balance to strike. It is all too easy to make interventions which cut off another's person ability to respond in their own way, or to give up one's own line of thought in preference to another's. (1990, p. 72)

This is in line with what Thompson (2005) defines as autonomy, namely agents that actively bring their own identity into play in a social situation. Dance improvisation can be seen as an encounter of autonomous agents that constantly seek the balance between shaping others and t space, and letting themselves be shaped by others and by space.

[52] For a critical reading of spontaneity and risk-taking in dance improvisation, I refer to the work of Da Silva (2017).

Figure 32 shows how the dancers mould and sculpt their bodies to become a multi-sensory organism. The movement continuously evolves as a result of something bigger, namely the accumulation of bodies that together merge dynamically into a form. Through touch, the dancers create a third entity in between them. This third entity is the rolling point of contact between two or more movers (Steve Paxton in Pallant, 2006).

"The third party in the dance [is] the point of contact: that fugitive and always temporary centre and edge common to both yet outside both, a "blind spot" through-in-with-around-for-and-by which the two bodies orient their play." (Williams as cited in Dey & Sarco-Thomas, 2014, p. 121). Through physical contact, a third entity is established that allows the bodies to change through interchange (Dey & Sarco-Thomas, 2014). Synchronization and coordination take on a different appearance here. The dancers move into a third entity while still remaining autonomous agents; bodies unfold and shape themselves around this point of contact. It is co-agency in its fullest sense since the course of movements is entirely dependent on this third entity: the encounter itself is shaping the agents that are involved. It must be noted that this kind of synchronization/coordination is not limited to contact improvisation, it also happens in the physical play event of the four boys described earlier (see Figure 33).

Figure 32. Common intercorporeality in dance improvisation © Carolien Hermans

Figure 33. Common intercorporeality in R&T play of the four boys © Carolien Hermans

Figures 32 and 33 are good examples of what Thomas Fuchs and Hanne De Jaegher (2009, p. 472) define as common intercorporeality, a state in which "body schemas and body experiences expand and, in a certain way, incorporate the perceived body of the other". The surfaces of the other bodies guide and shape the movements of the bigger organism through the functional duplicity of touch since we touch and are being touched at the same time. The body is "in an ambiguous state, fluctuating between the incorporated body of the other and my own embodied position." (Fuchs & De Jaegher, 2009, p.474)

A final aspect of dance improvisation that I would like to discuss is the self-structuring process. Dance improvisation often starts with a set of rules or instructions. However, along the way new rules are generated as a result of how the movements are organised in space and time. The dancers invest in the ongoing immediate but also search for overall structures. During the dance improvisation, a framework starts to unfold. This framework provides an internal structure to which the movement of all dancers is organised and re-organised.

In Figure 34 we see how three dancers are engaged in a self-structuring (improvisational) process. At first, they take up the physical challenge to pull the female dancer from her neck up. As soon as they have accomplished that, they engage in a game where one dancer in the middle tries to prevent the other two from touching each other. When the possibilities of this game are exhausted, they move into a balance. First, it is just a balance. But then, after some time, this turns into another game as well. Can they stay balanced without using their hands? When the balance is no longer tenable, they start playing tag while using the whole space.

Rules pop up during the dance improvisation as a response to the ongoing movements. The rules serve as a framework, as recognizable reference points that provide a repeatable structure to the dance improvisation. "Improvisation arises from rules and rules arise from improvisation", says Steve Paxton (as cited in Buckwalter, 2010, p. 42).

Figure 34. Example of self-structuring process of three dance students engaged in dance improvisation. Theatre School, Amsterdam, 2018 © Carolien Hermans

In summary, different elements of the participatory sense-making process emerge in the improvisational work of first-year students of the Modern Theatre Dance department. First of all, synchronization becomes evident in how the qualitative movement dynamic (momentum, energy, force, intensity, form) of one dancer affects and resonates with other dancers. Second of all, meaning is ambiguous and novel values are created through co-agency. Third of all, touch serves as a way to

establish a shared intercorporeality. And fourth, dance improvisation is a self-structuring process that is two-directional: rules shape the improvisation while improvisation shapes the rules.

Finally

"Form is the shape of something: recognition of form is a way we make sense of the world around us." (Buckwalter, 2010, p. 34) Form is apparent in both dance improvisation and the physical play of children. We can see form in the way the bodies are sculpted through movement and arranged in spacetime. Form comes into existence through organising principles. Dance improvisation, like physical play, can be considered a self-organisational practice (Noë, 2015). One that is relational and contextual – out of which follows that the sense-making process is of a participatory nature. In the analysis of the two events (physical play and dance improvisation) the following elements of participatory sense-making can be distinguished[53]:

- Imagery is used to tap into reservoirs of meaning-making that transform reality.
- Intentions are dynamic and floating, always in a process of becoming.
- A common intentionality emerges through bodily engagement.
- The participants synchronise movements in terms of rhythm, timing, and phrasing but also in terms of force, direction and intensity (in short, the qualitative movement dynamics).
- Joint attention enables the participants to co-create intentions together.
- The participants are autonomous agents that bring themselves to the play or dance improvisation event.
- At the same time, the participants have a willingness to shape and let themselves be shaped by others and the environment.
- Both play and dance improvisation are self-structuring processes: some rules vanish while others emerge.

The term participatory sense-making has proved itself to be useful in understanding the basic elements of both dance improvisation and children's physical play since both activities seem to rely on creative activities, relational dialogues and corporeal meanings.

Some critical notes should be made too. First of all, gender differences have not been addressed in this chapter. Physical play, specifically, R&T play is mostly initiated by boys across a variety of cultures (Pellegrini & Smith, 1998; Di Pietro, 1981). Socialization plays a role here: parents promote physical play more often in boys than in girls. Fathers tend to engage more in R&T play with their sons while both parents engage mostly in imaginary play with their daughters (O'Connor, McCormack, Robinson & O'Rourke, 2017). In contrast, dance improvisation is more often associated with female than male dancers. However, in the dance improvisation workshop for first-year students at the Modern Theatre Dance department, the ratio between female and male students was reasonably well distributed. However, the question remains how and in what ways gender influences the sense-making process. Although this topic exceeds the scope of this chapter, it is important to realize that sociocultural conditioning lies at the root of gendered engagement in both physical play and dance.

Second of all, the concept of participatory sense-making is usually applied to daily interactions that require some sort of collaboration. However, physical play and improvisational dance differ from daily actions in several ways. One important distinction is that daily actions are goal-

[53] These characteristics do not fully correspond with the five (and later six) elements of the PSM model of physical play and dance improvisation as described in chapters 3,11 and 12. This is because this chapter has been written before the other chapters. Some of these characteristics however have found their place in the model, such as joint attention, movement synchronization and the self-structuring nature of physical play and dance improvisation.

oriented while both play and dance do not serve an immediate goal. We play and dance for the sake of the lived experiences that they afford. Dance and play "exist outside everyday life, creating their own time-space boundaries, seeking only their own profit and goal" (Blom & Chaplin, 1988, p. x). Dance and play move beyond goal-oriented actions and as a result, the sense-making process becomes fluid and ambiguous.

Even more, communication in play and dance does not rely as much on language, as most of our daily interactions do. Play and dance thus escape language, they tune directly into the lived experience of every agent that is involved. While language structures and decomposes the sense-making process in expressive semantic units, the sense-making process in physical play and dance improvisation remains inherently ambiguous. Because of this ambiguous nature, dance and play are capable to embody, entrain and intentionalise time in movement and action (Cross, 2014).

The point I am making here is that ambiguity, fluidness and dynamic sense-making are intrinsic characteristics of both dance improvisation and physical play. Novel kinds of values are produced every time we play or improvise. We can however not assume that this is true for all participatory sense-making activities. Fluid and ambiguous meaning-making may only occur in activities that are not clearly goal-oriented. In that case, physical play and dance improvisation do not serve as good examples of participatory sense-making since their intrinsic characteristics are not shared by other, more daily participatory sense-making activities.

Third of all, in both physical play as well as dance improvisation the moving point of contact plays a crucial role in the sense-making process. This is also referred to as the third entity, the in-between space between two or more bodies that are in touch but move independently. The participants mould and sculpt their bodies through and around this rolling point of contact. Co-agency emerges around this third entity. Touch thus plays a crucial role in the sense-making process in both physical play and dance improvisation. In daily life, however, and specifically in our western society, touch is highly formalized and regulated (Finnegan, 2005). In daily communication "touch is the most carefully guarded and monitored, the most infrequently used, yet the most powerful and immediate" (Thayer, 1982, p. 298). Although corporeal touch plays a prominent role in both dance improvisation and physical play, it seems not so relevant for daily participatory sense-making activities. I believe, however, that there is much to learn from the formative role of touch in the sense-making processes of both physical play and dance improvisation. I, therefore, press the need for further research into this domain.

Finally, physical play and dance improvisation can take on many forms, but the heart of physical play and dance improvisation is pleasure. The latter should not be underestimated. It is through fun that we can creatively explore the limits and the rules of social interaction. Fun can be seen as an affective state that reopens the playful process through the "creation of new meaningful constraints" (Di Paolo et al., 2010, p. 78). We engage in this fun part by seriously attending to the play and dance improvisation event. A serious attitude to fun is required otherwise fun becomes just a fugitive force that only superficially touches upon the sense-making process. To be self-sustaining the participants need to invest in the fun part – and they can only do that by seriously attending to it.

Through serious attending to fun, reality is inserted with new values, meanings and affects. The intensity of the investment thus shapes and modulates the experience. Playing the game requires a willingness to shape and to let oneself be shaped by the other participants and the environment – in such a way that both movement and the meaning of the movement transcends the individual. Being prepared to seriously engage in fun can thus be seen as a necessary requirement for the co-modulation and co-construction of meaning.

Chapter 8. Becoming animal: children's physical play and dance improvisation as transformative activities that generate novel meanings[54]

In this chapter, I discuss the artistic outcomes of the second re-enactment. The original play event consists of a spontaneous play event of my 12-year-old daughter in our living room that serves as an entry point to examine animal becomings as transformative forces. In an improvised dance solo, I re-enact the animal becomings of my daughter. The second re-enactment explores the transformative potential of children's physical play and dance improvisation. Using the enactive approach as a theoretical framework, I argue that play and dance improvisation trigger novel sense-making capabilities through a deep engagement with the environment (Di Paolo, 2007). Both activities give rise to transformative forces, ways of becoming that create openings and passages through which one re-engages and re-connects with the environment. Throughout the chapter, I will discuss how transformative forces in both physical play and dance improvisation can open up new registers of meaning-making.

Play and dance improvisation as transformative activities

This chapter looks at the potential of play and dance improvisation as activities that are capable of transforming the sense-making process. Putting the usual associations with risk-taking, challenge, uncertainty, and freedom aside for a moment, my main interest lies in providing an enactive framework that explains transformative mechanisms of both dance improvisation and physical play. Dance improvisation is here loosely defined as "the process of creating and/or choosing your movements as you are doing them" (De Spain, 2014, p. 5) while play is defined as "the exploration of new possibilities of being" (Henricks, 2008, p.159.

Transformation is a complex term that carries different connotations. Hans-Georg Gadamer (1960, p.124) for example speaks of "ecstatic self-forgetfulness" or "self-transcendence", a state where object and subject have inescapably changed. Psychologist Winnicott (2005, p.11) calls it the transitional space, "a space of experiencing, between the inner and outer worlds, and contributed to by both, in which primary creativity (illusion) exists and can develop".

Gwen Gordon and Donald Esbjörn-Hargens (2007a, p.9) state that transformations occur "through interactions across boundaries in the back-and-forth movement of encounter and exchange that characterizes most of life, but which is heightened in play and improvisation". They use the term transformational zones with respect to the possibilities provided by play and improvisation to engage safely with risk, allowing the player to experiment with new ways of being. To transform "we have to loosen our grip on the structures that define us" (Gordon & Esbjörn-Hargens, 2007a, p. 46) and both play and improvisation provide optimal conditions to do so. Play and improvisation take place in a flow of openness, flexibility and full engagement. According to Gordon and Esbjörn-Hargens these are the necessary conditions for the transformative to take place. See Figures 35 and 36.

[54] This chapter is published in 2019 in the *Journal of Dance & Somatic Practices,11*(2), 157-175. I made the following adjustments concerning the original article: I revised the abstract and omitted the sections where I introduce the enactive account and the theory of participatory sense-making. I also made some textual adjustments and added a few notes.

Figures 35 and 36. The transformative potential of physical play and dance improvisation © Carolien Hermans

Bateson (1972) argues that through play and improvisation we discover new possibilities of thinking. New frames, perspectives and horizons arise out of the playful. Play and improvisation are characterized as "particular kind of leaps across boundaries into and between new frames" (Bateson, 1972, p. 12). Philosopher James Hans (in line with Gadamer) refers to this as "the leap out of the conventional and habitual frame of the self" (as cited in Gordon & Esbjörn-Hargens, 2007b, p.62).

What the authors have in common is that the transformative power of both play and improvisation lies in the in-between space - an experiential space that connects the inner and outer worlds. It is here where the enactive account comes in. In enactivism, every action is inter-action: organisms are embedded in an environment through dynamic coupling. Dance improvisation and play, it is argued, are activities that are not "retrieved from a pre-given world but emerge from our embodied consciousness as it reaches out to, transforms, and is transformed by the ongoing process" of things, surroundings and others (Van der Schyff, 2015, p. 12).

The enactive account offers a holistic perspective in which life, body-mind and environments are deeply intertwined. Sense-making in this respect is not seen as the appropriation of fixed codes of meaning by a stable and unified agent. Instead, sense-making is considered a fluid, dynamic process that takes place in the coordinated and synchronised interaction with things, others and environments. "It is the world of *Becoming*, which includes both relative being and non-relative being taking place in the flux of self-organising, self-renewing processes of the universe." (Nakagawa, 2000, p. 32)

The enactive account, in line with Eastern philosophy, argues that nothing in the world can exist entirely in and of itself – experiences, things, thoughts, selves and minds come into being in the interaction with the world. Out of this follows that the self is not a singular, fixed entity but a plural and dynamic being. We do not move and engage with the world from a pre-given, fixed stance instead the self is just as much a non-self, floating in between being and non-being (Varela et al., 1991). The same is true for meaning. Meaning is here "understood as 'knots' of various relations, which includes the perspective of the experiencing 'subject' herself as constituted by a unique and ongoing history of such relational processes" (Van der Schyff, 2015, p. 6). This resembles Deleuze and Guattari's philosophy of relational ontology (1987). Pairing Deleuze with the enactive account might at first seem at odds, specifically when it comes to Deleuze's notion of difference (1994) and the enactivists emphasis on autopoiesis (Protevi, 2011)[55]. Enactivism assumes that living systems conserve their organisation (autopoiesis, i.e. an organism capable of reproducing and maintaining itself) and as a result, there is always some kind of identity preservation. Deleuze, on the other hand, advocates towards a dissolution of the self through dynamic series of modifications. The concept of autopoiesis seems to bite with Deleuze's universe of assemblages, movements of deterritorialization and destratification. However, Di Paolo's notion of adaptivity is more in line with the writings of Deleuze. According to Di Paolo, sense-making can only occur through the adaptivity of an organism, since an organism needs to sense and make sense of external environmental differences. This requires "a dynamic emergent self" (Protevi, 2011, p. 43). Sense-making in this respect is not seen as the appropriation of fixed codes of meaning by a stable and unified agent. Instead, it is the result of a dynamic series of modifications, a constant rhythmic renewal through which the self becomes undone. It is here where "Deleuze and enactivism can be brought together" (Protevi, 2011, p. 41).

[55] In the enactive approach, autopoiesis refers to a system that is capable of maintaining and simultaneously producing its own organisation and conditions (internal as well as external). An autopoietic system is organised as a network of processes of production in such a way "that 1) its components continuously regenerate the network that is producing them, and 2) constitute the system as a distinguishable unity in the domain in which they exist (Weber & Varela, in McGann, 2007, p.486).

Deleuze and Guattari (1987), just like the enactive approach, pick up the insights from dynamic self-organising systems and apply this to other kinds of systems (such as linguistic, politic-economic and cognitive systems). The result is a decentred framework, a rhizome that resists the organisational structure of the root-tree system and the linear, dualistic thinking that comes along with it. Instead of fixed entities Deleuze and Guattari introduce a world of assemblages, flight, movements of deterritorialization and destratification. Specifically relevant for this chapter is their notion of becoming. Becoming is the process of change, flight, or movement within an assemblage (i.e. a collection of things that have been gathered). It's a process of deterritorialization that generates a new way of being by "removing the element from its original functions and bringing about new ones" (Glossary, n.d., para. 2).

I argue here that play and dance improvisation both carry the capacity to initiate lines of de-territorialization, to create new values within the flux of self-organising processes. In the next paragraph, I will show how play and dance improvisation offer new associative frames, and ways of becoming that are inherently transformative.

Dance improvisation and play: sense-making and the transformative

If we now define the transformative as the infusion of virtual, alienated meaning in an actual situation, then we can easily recognize this as a main feature of play[56]. According to Susanna Millar (1968, p. 21) play "detaches messages, experiences, or objects from their context of origin, creating a new frame that allows for greater freedom, interactivity, and creative possibilities". Play possesses a non-literal, as-if quality (Hewes, 2014). Because play does not serve an immediate useful function, it enables the player to step out of the conventional interpretive frame and to replace it with another, associative frame. Since no sense-making is "directly demanded from the environment or from definite internal needs", play can invest in novel and alienated sense-making (Di Paolo et al., 2010, p. 76).

Gordon and Esbjörn-Hargens (2007b, p. 8) refer to this as the bracketing of frames[57], i.e. "to step outside of and manipulate interpretive frames from the perspective of another frame". In other words, a concrete, physical event is imbued with alienated, virtual meaning. According to Di Paolo et al. (2010, p. 79), play "is a self-structuring process governed by the dialectics of expansion and exhaustion of possibilities. Its freedom lies in the capability that players acquire of creating new meaningful (not arbitrary) constraints." The bracketing of frames is the moment when new associative frames emerge. Boundaries become fluid and this openness to the surroundings allows the player to engage and experiment with the possibilities that emerge in the moment (Gordon & Esbjörn-Hargens, 2007a). Play creates passages from the actual to the virtual, thereby opening up a continuum of

[56] In chapter 7, I already discussed the notion of virtual, alienated meaning. See note 50, page 89.

[57] In the original paper, I speak of the 'bracketing of experience' in line with Gordon and Esbjörn-Hargens (2007b). The bracketing of experience is understood as a transformative force that detaches meaning, messages and experiences from the original context. However, the term 'bracketing of experience' might be confusing since one might question how experience can be bracketed at all. I, therefore, have replaced the term 'bracketing of experience' with 'bracketing of frames' (which is also used by Gordon and Esbjörn-Hargens) throughout this chapter. Bracketing of frames refers to the transformation of an existing (or original) frame to a more indeterminate frame that allows for more creative freedom. Dance improvisation and physical play are good examples of how we can throw off the constraints of a specific context and insert new interpretive frames that allow for more creative freedom. For example, in daily life, I can reach to grab something from the top shelf of my closet. In a dance improvisation, this reaching becomes a self-movement (because the action has no immediate daily function): it becomes a creative force through which I explore different ways of reaching (the amount of effort that is attributed to the reaching, what it means to reach, etc.). The determinate frame of reaching (grabbing something from the top shelf) is replaced by an indeterminate frame (exploring the act of reaching as self-movement) that opens up new possibilities of moving and being.

multiplicities. Play enables us to engage with potentialities, it settles itself in the in-between of that which has passed and that which is yet to come. Manning (2009, p. 3) refers to this as "the elasticity of the almost, the intensive extension of the movement, a moment when anything can happen". By the bracketing of frames, we shift from the actual to the virtual. Openness, engagement in the here and now, flexibility and sensitivity are needed to tap into the stream of potentialities that emerge in the moment.

Furthermore, play is relational. Through play, we connect with the environment and with others. In fact, what is moved in and through play, is not the body, nor the object but the relation (Manning, 2009). Through play we change our relation with our surroundings. By detaching the experience from its context or frame, boundaries shift and fixed frames (i.e. ways of perceiving and sensing the world) suddenly become instable. Play stirs up, sets in motion, and disturbs. Play creates temporal oscillations. In play, a toothbrush can become a flute, a hair comb, a conductor's pole or a telephone. However, it is not the object or the environment that is radically altered in play (since the toothbrush has not really turned into a flute): what is altered is the relation. Change is even a too big name for what play does. Its aim is not to alter but to move the relation, that is, to produce openings and passages through which intensities and forces flow back and forth. Play thus undermines the stability of fixed objects, states and selves. Destabilization occurs every time the relation is moved.

In play, new associative frames may arise because play itself is inherently ambiguous. Play does not serve an immediate useful function (Huizinga, 1955) and it can move in different directions at once (Spariosu, 1989). Play establishes a paradoxical frame because it is play, yet at the same time it is not play (Bateson, 1972). When boys, for example, engage in play-fighting they hit and kick each other, however, they do not exert the same force or intention to the movements as in a 'real fight'. They are fighting each other, yet they are not fighting each other. The signals are similar to but not the same as those of a fight (Bateson, 1972). Here we see how the players hold at once two contextual frames (the real and the unreal).

In dance improvisation, similar mechanisms are at work. Dance improvisation is also associated with having no immediate, useful function. "Dance improvisation exits outside everyday life, creating its own time-space boundaries, seeking only its own profit and goal'." (Blom & Chaplin, 1988, p. x) Even more, dance improvisation is concerned with the kinetic-kinaesthetic. It requires attentiveness "to the qualitative realities of movement" (Sheets-Johnstone, 2015b, p. xxix). Language plays less of a role and as a consequence, the sense-making process remains ambiguous. In dance improvisation, multiple meanings may arise that are non-specific, instable and ephemeral by nature.

Dance improvisation is the process of creating movements in the here and now (De Spain, 2014). Sheets-Johnstone (2015b) describes dance improvisation as the spontaneous articulation of sheer movement. Dance improvisation is a "self-structured process governed by the dialectics of expansion and contraction of possibilities" (Di Paolo, 2007, p.1). Its freedom lies not only in the freeing of constraints but also in the creation of novel constraints.

As a result of these two features of dance improvisation – serving no immediate useful function and the creation of movements on the spot – the sense-making process is fluid and instable. Values emerge and are dynamically constructed in the interaction. This is in line with the enactive idea that values organise and emerge from a constantly varying loop between agent and environment (Di Paolo et al., 2010).

Although maybe not so obvious as in play, dance improvisation is also capable of bracketing existing frames. Where in play a toothbrush may be transformed into a flute, dance improvisation is almost always concerned with abstract movements. However, since movements in dance improvisation do not serve an immediate useful function, the movements themselves may transform into something else. Meaning is manipulated on a kinetic-kinaesthetic level. Without resorting to pre-fixed signals and codes, the dancer is engaged with kinetic qualities that emerge in the moment. In

dance improvisation the focus lies entirely on the "dynamically attuned body, that knows the world and makes its way within it kinetically is thoughtfully attuned to the variable qualia of both its own movement and the movement of things in its surrounding world—to forceful, swift, slow, straight, swerving, flaccid, tense, sudden, up, down, and much more" (Sheets-Johnstone, 2009, p. 61).

Dance improvisation, just as play, is highly relational. Manning (2009) explains that dance improvisation, even a solo, is not created alone. Together with the floor, the ceiling, the wall and other things that can be found in the space, new body-environments are created. Manning refers to this as "relational shape-shifting" (2009, p. 14) when bodies, things and spaces together move through dynamic forms. Through dance improvisation bodies become sensitive to the not-yet (i.e. the virtual).

From the above, we may carefully conclude that both play and dance improvisation are self-structuring processes that offer possibilities to detach pre-fixed meaning and to insert it with novel alienated meanings. The transformative is here defined as the infusion of virtual, alienated meaning in an actual situation (Di Paolo et al., 2010). Transformational interactions become possible because:

- Play and dance improvisation do not serve an immediate function.
- Both activities are capable of bracketing frames by temporarily inserting associative; frames over, and on top of, conventional frames.
- New meaningful rules and constraints are generated that regulate the interaction.

The question now is how the theoretical concepts, as discussed above, work in practice. In my own artistic research, I examine basic elements of both dance improvisation and children's play events from an enactive perspective. Two artistic events are relevant for this chapter: the spontaneous play event of Lisa, my 12-year-old daughter and subsequently the re-enactment of it in an improvised dance solo. Both events will be analysed in terms of alienated meaning, the bracketing of frames and the transformative.

1. Physical play event of Lisa: becoming animal

On a lazy Sunday morning, I am sitting at the table while my daughter is lying on the big blue carpet in our living room. Just lying. Out of the stillness, Lisa spontaneously starts to move. First, she does some rolls, then some stretching and along the way Lisa finds a soft blanket that becomes part of her play. 'I am a bird' she says, 'And birds can do whatever they want' (see Figure 37).

She stands up, runs and flies. When the running and flying are exhausted, she lands on the blue carpet. 'Water' she says in an associative mood. 'What happens when I touch the water?' It is not a question that is directed at me since she seems not to expect any answer from me. The question is directed towards herself. 'I become a fish', she answers. Immediately she starts to move in a fishy way. The blanket is part of her transformation. Lisa wraps it around her, as a second skin, and soon the blanket and her body transform together into scales, fins and the tail of a fish. The blue carpet is the water: as long as Lisa is in the water, she is a fish. Lisa swims and dives around, and before she knows it, she accidentally rolls off the carpet on the wooden floor. 'The earth', she says. 'What happens when I touch the earth?' 'I become a mole', she answers. Voilà, her body transforms into a mole. She crawls around, blindly, and hits a small wooden table. 'What happens when I touch wood?' 'I become a beaver', she answers (see Figure 38).

'What happens when I touch the air? I become a bird'

'What happens when I touch the water? I become a fish'

'What happens when I touch the earth? I become a mole'

'What happens when I touch wood? I become a beaver'

Figure 37. Becoming bird © Carolien Hermans

The whole event takes no longer than 15 minutes. In this relatively short period, Lisa moves through several animal becomings: from bird to fish, to mole, to beaver. According to Deleuze and Guattari (1987) becoming is a process in which elements are removed from their original functions so that new functions may emerge. One element is drawn into the territory of another element, thereby changing its value as an element and bringing about a new unity. In other words, meanings are detached so that new associative meanings may arise. I believe it is no coincidence that Lisa picks up elements that refer to the animal since children seem to be particularly sensitive to animal becomings (Bond & Stinson, 2000; Stinson, 1990; Anttila, 2003)[58]. Lisa in this case is not imitating an animal and her goal is not to really turn into an animal. In her attempt to become animal, Lisa enters an in-between zone, a zone of proximity that frees her from a fixed form.

[58] Stinson (1990, p.40) also points to the natural affinity that children have with the animal world: "I never ask them to pretend to be squirrels or rabbits. But young children feel their kinship with these creatures and are transformed."

Figure 38. Becoming beaver © Carolien Hermans

The becoming animal is a process that is fueled by desire, a longing for proximity and sharing (Brown, 2007) and a drive to participate in otherness. Becoming animal is a bodily experience: Lisa senses the presence in her of the animal, and she uses her bodily sensitivity together with her imagination to creatively engage with as the animal.

Even more, bodily sensitivity to the environment is heightened. In the becoming of bird, Lisa flies through the air, using the blanket as her wing. When this movement is exhausted, she lands on the carpet. It's the blueness of the carpet that makes the transformation to the sea possible. It is the blueness that makes her decide that the bird becoming is over and she now enters a becoming of fish. We see here how animal becomings are triggered by the surroundings. The increased sensitivity to the environment creates passages and openings for the transformative.

In this sense, it is also not correct to say that Lisa alone moves in a fish becoming. *Lisa + blueness of the carpet + blanket* move together in a fish becoming. Through the intimate connection between space, things/materials and body 'a relational shape shifting' takes place (Manning, 2009). There's no body in and of itself, there's the *Lisa + blueness of the carpet + blanket* connection. That is, body and surroundings are experienced in relation to one another. The space + thing + body connection can be re-organised in infinite ways. Soon, we know now, the fish becoming will come to an end. When Lisa accidentally rolls onto the wooden floor, another connection is established: the *Lisa + wooden floor + blanket* connection. It's the brownness of the floor that triggers in her the image of the earth, and consequently the image of the mole. From this point on she, together with the wooden floor and the blanket, will move into a mole becoming.

The space + object + body connection evokes animal imagery in Lisa. Here we see how sensorimotor processes together with higher-order processes such as imagination and symbolic thought lead to new values and alienated meaning. The experience of meaning is the result of the integration of sensorimotor experience, affects, corporeal connections to the world and our imaginative abilities (Van der Schyff, 2015). New meaning arises through action in the sensorimotor

and imagining sphere. “It is here that the kinaesthetic pleasure turns into make-believe.” (Di Paolo et al., 2010, p. 76)

Finally, new rules and new constraints are inserted in the play that re-structure and re-organise the event and that must be followed strictly (Di Paolo et al., 2010). ‘If I touch the wooden floor, I become a mole. If I touch the table, I become a beaver’. The new constraints are not the result of a stand-alone agent: they are created contextually. Although the new rules seem arbitrary (‘why should you touch a table and not a chair to become a beaver’) and invented on the spot, Lisa willingly submits to them.

In summary, we can distinguish several elements in Lisa’s transformational play. First, new associative frames become available through creative interaction with the direct surroundings. Second, a change in the body + environment connection triggers new animal becomings. Third, through increased sensitivity, sensorimotor engagement and the use of imagery, the play event is infused with alienated meaning. Fourth, new constraints and rules are temporarily generated that are highly contextual and are willingly complied to.

2. Re-enactment of Lisa’s physical play event

Lisa’s physical play event is captured in a series of images. These images serve as an entrance point for my improvised dance solo. The aim is to return to initially felt forces/sensibilities that were present in the physical play events of Lisa, and that are then re-enacted in dance improvisational practice. Re-enactment should be understood here not as imitation but as the embodied actualization of Lisa’s play. The aim of this re-enactment is to identify “non-exhausted creative fields of impalpable possibilities” (Lepecki, 2010, p. 31). Through re-enactment, I want to unlock and grasp the virtual possibilities that are present in the imagery – squeezing out actuals from the virtual as they shape my body in an ongoing movement (Lepecki, 2010).

I develop the improvised solo at the theatre of the Conservatory of Amsterdam. The theatrical setting, specifically the lightning, helps me to engage with the imagery of Lisa’s play event. The shadows and the sharp contrasts between light and shadow bring a certain kind of atmosphere and performativity to the space. Devoid of any daily functionality, the space becomes a zone for experimentation and exploration. The theatre triggers a sense of performativity in me – a state of heightened attentiveness. I notice how I start to ‘stage’ my movements, carefully placing them in space, the head here, my hand over there as if the space is looking at me. The imaginary easily slips in. Tiny shifts in movements awaken tiny shifts in imagery in me.

Where Lisa uses the blanket(s) to cover up loosely different body parts, I keep the blanket over my head all of the time (see Figures 39 and 40). Covering my face helps me in engaging with animal becomings. I no longer register any definite visual shapes or forms in the space. The blanket however lets light through and makes it possible for me to distinguish the spotlights from their dark surroundings. Although this gives me some (visual) sense of direction, I navigate mostly through space by using the other senses. The fact that I now have to trust other senses than sight facilitates the transformations. Where vision structures and fixes the environment immediately, the other senses give more space to the ambiguous (Van der Schyff, 2015). Even more, my awareness of the inside space increases as the outside is covered. Nearness draws me in.

The blankets (I use one, sometimes two blankets) themselves are vehicles for transformation. They offer openings and passages through which potentialities emerge. The soft material easily joins my body. The blankets and my body fold into each other, like porous surfaces, leaking through, pouring in - together holding the constraint. In a continuous embrace, we move together into a form as the blankets react to the movements of my body, while at the same time, my body incorporates the movements of the blanket. My body and the blankets thus move together in a connection that is alive and ever-changing.

Figures 39 and 40. Original play and re-enactment of animal becoming © Carolien Hermans

Even more, other animal becomings emerge in the dance improvisation than the four animals that Lisa introduces in her play (the fish, bird, beaver and mole). Lisa's animals float like particles through my body, out again, to a point where something else enters the stage. New possibilities. New animal becomings. An ostrich. An eagle. An elephant. A rayfish. A stork (see Figures 41, 42 and 43). A whole variety of non-existing animals. What I am not aware of but what is captured by the camera, are the animal figures projected as shadows on the white wall. This is not orchestrated, at least not by me. As we can see in Figures 41 and 42 different animal figures are produced by the shadows. The figures resemble the ones that are produced by my body and the blanket, yet they are not the same. Springing from the same source, they take their own course. This is due to the fact that different kinds of connections are established with the environment:

> Shadow figures: light + wall + projection of body/blanket connection
> Body figures: blanket + body + general space connection

Although different kinds of animal figures emerge during the dance improvisation, my starting point still remains the four animals that Lisa introduced in her play (see Figures 44 and 45). I give myself the assignment to move through these different animal becomings, starting with a bird, then moving to a fish, to a mole, to a beaver, and back again to a bird. During this process, other animal figures may materialize. The fish becoming is the most difficult, it results in lying on the floor in stillness, being unable to use my non-existing fins and tail. The floor is resistant too: the hard surface makes it difficult to drift and swim around. It helps to give myself a clear image, not of a general fish, but in this case of a ray fish (not entirely accidentally since a week before I saw a documentary of the manta ray). The wing-like fins provide an entrance for floating, vibrating sensations.

At a certain point, I also start to speak out loud, in an attempt to give words to felt sensations and "to exert pressure towards" the actualizations of Lisa's original play event (Lepecki, 2010, p. 31). The voice becomes an external guide that narrates and draws lines between the different animal becomings. With words, I try to connect the imaginary with the kinetic-kinaesthetic.

In summary, several elements can be distinguished in the re-enactment of Lisa's play event. First of all, the theatre (specifically the lights and its emptiness) triggers a sense of performativity in me, as I am well aware of staging the movements. Second, the body + blanket connection allows me to access animal imagery. The blanket covers my head: it allows me to experience imagery in a sensorimotor way. Third, I allow myself to deviate from the new constraints that emerge in Lisa's play since there seems no reason to stick to outer cues. Fourth, although I take Lisa's four animals as an initial starting point, other animal actualizations come into being too. Finally, words are used to help bring about the connection between imagery and the kinetic-kinaesthetic.

Figure 41. Becoming stork © Carolien Hermans.

Figures 42 and 43. Animal figures projected on the white wall © Carolien Hermans

Figure 44. Animal becoming in Lisa's play © Carolien Hermans

Figure 45. Re-enactment of animal becoming © Carolien Hermans

Conclusion/Discussion

In this chapter, I examined the following question: How and in what ways can play and dance improvisation be considered transformative activities that generate novel values and meanings? We have seen that sense-making is an interactional and relational activity (Thompson & Stapleton, 2009). Sense-making "emerges from our embodied consciousness as it reaches out to, transforms, and is transformed by the ongoing process of empathic inter(en)action with objects, ideas and other agents" (Van der Schyff, 2015, p. 12).

Play and dance improvisations are examples of activities that integrate sensorimotor experiences with higher-order processes such as imagination. Apparently easy, they are capable of inhabiting two seemingly different worlds, the biological sensorimotor world and the world of language, symbol and representation. Six characteristics of both play and dance improvisation seem to play a role in the capacity to infuse an embodied activity with alienated meaning[59]. Both activities:

- do not serve an immediate useful function;
- cherish the here and now;
- are deeply rooted in the kinetic-kinaesthetic domain;
- require bodily sensitivity, attentiveness and increased awareness of the environment;
- are capable of bracketing frames and contexts;
- generate new rules and constraints to which the participants willingly comply.

As a result, meaning in play and dance improvisation is ambiguous and made-on-the-fly (Di Paolo, 2007). Both activities are capable of temporarily detaching meaning from a situation, attaching new ones and manipulating values and constraints in the moment – and this is exactly where the transformative comes in. Transformation in this context is the infusion of virtual, alienated meaning in an actual situation. It is the detachment of meaning from the here andnow.

The concept of transformation resonates with Deleuze and Guattari's notion of becomings (1987). Becoming is the process of change in which elements are removed from their original functions and new ones are brought about. In the artistic practice that I presented in this chapter, I specifically looked at animal becomings, i.e. transformative forces that open up a field of potentialities between the human and the animal. In the spontaneous play event of my 12th-year-old daughter, four different animal becomings enter the stage, in my re-enactment even more animal figures appear.

The most important insight when it comes to the transformative potential of both play and dance improvisation is that an agent alone cannot create novel meanings and values. The texture of the blanket, the sharp colour of the carpet and the roughness of the wooden table all play a role in the transformative process. Something evokes a change and as a result, new connections with the environment are temporarily created. The blanket cannot do it alone. The floor cannot do it alone. The body cannot do it alone. But together they can infuse a situation with new values. In this respect, we also may find it not so strange when a child stumbles across a branch and declares 'it was the branch that made me fall'. Indeed, it was the temporary connection between the branch, the walking child and maybe a distracted mind that caused the stumble. Giving the blame to the branch is perhaps not fair, but we just as easily could say that 'if the branch had not been there, the child would not have fallen'. The falling is the result of the temporary link that is established between the body and the branch.

[59] The six characteristics that I describe here, have been used as input for Figure 57, page 165, 'Value making in the sense-making process of physical play and dance improvisation'.

We must not forget that infinite connections (virtual as well as actual) can be made between an agent and the environment. Even more, we do not only connect, we also dis-connect and re-connect. In between the dis-connecting and re-connecting the transformative takes place.

To understand and grasp the transformative forces that are at work in play and dance improvisation is a job of many years. In this chapter, I have attempted to point to several basic elements that might play a role in the transformative process, such as the bracketing of frames and contexts, the intermingling of the imaginary with the sensorimotor and the role of body-environment connections in the sense-making process. However, other aspects of the transformative process have only been tentatively touched upon. The role of affects and intensities, for example, as well as the experience of presence, forcefulness, vividness and a sense of being alive (Fingerhut, 2012) – as the enactive account clearly states that not only sensorimotor processes but also affective states and bodily feelings play a role in the sense-making processes. New questions have been raised by my theoretical and artistic exploration. What is the role of affects in the transformative process of both play and dance improvisation? What are the differences in play and dance improvisation when it comes to their transformative potential? Can we identify a certain set of conditions under which the transformative can take place? Further research, specifically the type of research that taps straight into the lived experience (such as practice-led research and artistic research) is warranted here. This kind of research allows us to look at the transformative nature of dance improvisation and play from the inside. Tuning into the practice may help us to gain a deeper, corporeal understanding of abstract theoretical and philosophical constructs. A corporeal account of the transformative nature of participatory sense-making should therefore include research that strives for felt knowledge (Klein 2017) so that the lived experience itself is at the heart of our undertaking.

Chapter 9. Let's play: re-enactment of affective traces through dance improvisation[60]

This chapter aims to explore the relationship between dance improvisation and children's play in terms of affective resonances. Dance improvisation and play are seen as activities that put the kinetic/kinaesthetic and affective dimensions of experience to the fore. I argue that bodily affects, play a crucial role in organising our lived experiences. Affects and intensities contribute to our feeling of being alive, and it's exactly this life energy that I find evident in both physical play and dance improvisation. The first part of the chapter consists of a theoretical exploration of several related concepts such as affects, affective resonances, and intensities/forces in relation to the moving body. In the second part, the theoretical concepts are applied to physical play and dance improvisational practice. Artistic research is used to shed light on basic elements that children's physical play and dance improvisation share with one another, specifically how affects and intensities that were once felt in a spontaneous play event can be re-lived and re-actualized through dance improvisational practice.

Affect

There are many different approaches towards affect (for an overview see the introduction chapter of Seigworth & Gregg, 2010). Roughly, two dominant views can be distinguished. In the first view, which is rooted in psychology and neuroscience, affect is considered an elemental state. In the second view, which is rooted in process philosophy, affect is treated as an intensive force (Ott, 2017)[61]. In this thesis, I follow the second line of thought.

In process philosophy, affect is treated as a force, a prepersonal intensity. Massumi (1995), in line with Spinoza and Deleuze, makes a distinction between emotion and affect. According to Massumi, "an emotion is a subjective content, the socio-linguistic fixing of the quality of an experience which is from that point onward defined as personal" (p.880). Emotion is qualified intensity, while affect is unqualified intensity. Affect is considered a force, "a prepersonal intensity corresponding to the passage from one experiential state of the body to another and implying an augmentation or diminution in that body's capacity to act" (Massumi, 1987, p. xvi). Massumi locates affect in the relational dynamic, rather than the interiority of a psychological subject (while emotion is the interiorization of qualified intensity).

Affects are world-involving, they are directed to our surroundings (Bower & Gallagher, 2013). Affective states are not inside us, hidden in our inner psyche, they are out there and intrinsically related to our surroundings. "The experienced space around us is always charged with affective qualities." (Fuchs, 2016, p. 196) Objects and environments have expressive qualities: some of which we register and some of which we don't. This depends on how valuable and relevant the expressive qualities are to us. In other words, to become part of our perceptual experience, or attentional field, objects and surroundings need to have an affective appeal (Bower & Gallagher, 2013).

[60] This chapter is accepted for Capacious, Journal for Emerging Affect Inquiry, to be published in Fall 2022. I made some textual adjustments and added a few footnotes.

[61] Seigworth (2011) argues that the two dominant views on affect can be traced back to Spinoza who made a distinction between *affectus* and *affectio*. *Affectio* refers to "the state of a body as it affects or is affected by another body" while *affectus* refers to "a body's continuous, intensive variation (as increase-diminution) in its capacity for acting" (in Seigworth, 2011, p. 160). Deleuze is highly influenced by the Spinozian concept of *affectus*, while contemporary views on affect in psychology and neuroscience have further elaborated on the Spinozian concept of *affectio*.

Affects are part of all modes of experience. Affects is what motivates us, thrives us, in its most simple form it is a movement toward (attractive) or a movement away from something (repulsive) that has caught our attention. In other words, "we are moved to move toward or against or away" (Sheets-Johnstone, 1999b, p. 267). Affects and movements are dynamically congruent: we move, are moved and are being moved. We charge our movements with affects, and they motivate us. Affects are thus not understood here as inner feeling states, but as gripping dynamic forces that unfold within the relational dynamic. Affects are moving phenomena that are movingly experienced (Sheets-Johnstone, 2018).

Affect is potential, the pre-personal capacity to become, to act and to be acted upon (Clough, 2008). It exists prior to any individuation or identification, and as such, it includes the nonhuman as well as the human. Seigworth and Gregg (2010, p.1) locate affects in the in-between:

> Affect arises in the midst of in-between-ness: in the capacities to act and be acted upon. Affect is an impingement or extrusion of a momentary or sometimes more sustained state of relation as well as the passage (and the duration of passage) of forces or intensities. That is, affect is found in those intensities that pass body to body (human, nonhuman, part-body, and otherwise), in those resonances that circulate about, between, and sometimes stick to bodies and worlds, and in the very passages or variations between these intensities and resonances themselves.

According to Seigworth and Gregg (2010), affect is born in *in-between-ness,* or to put another word to it, in the *not-yet.* The not-yet finds itself on the passage between virtual and actual, in "an emergent futurity" (Seigworth & Gregg, 2010, p.4) at the intersection of being and becoming. The in-between and the not-yet are specifically relevant to this research. In the next paragraph, I take a closer look at these concepts and their relevance for dance improvisational practice.

Dance Improvisation

Midgelow (influenced by the work of Braidiotti and Deleuze) considers dance improvisation in/as nomadism, as coordinated change and transition:

> Improvisers are comfortable with transitions and change; they do not cling to illusions of permanence and stability in their dance. Instead, they enact a kind of embodiment that celebrates processes and emphasizes emergence and becoming. (2012, p.2)

Improvisation, as a nomadic practice, is seen as a practice of change, as a "continuous process of creative transformations" (Smelik, 2016, p. 167). It is a process where dancers participate in movements, in lines of flight that open up new ways of becoming. It is a dynamic, multiple process that sets out a network of relations and connections with others. The dancers attend to what is happening in the moment in order to connect to the present, to what has been and to what is yet to come. This requires an open attitude, perceptual awareness and bodily readiness (i.e. preparedness to respond to the potentialities that emerge in the moment).

Manning refers to this as "the elasticity of the almost", "the not-yet", i.e. the moment "where anything can happen when bodies are poised in a togetherness that begins to take shape. The next movement has not yet come, the past movement is passing. No step is taken and yet in this elastic the microperception of every possible step can almost be felt" (2009, p.4). According to Manning, bodies are not fixed 'things', but bodies are in constant change, in flux. Improvisation, therefore, is an instable and dynamic process, where movements are "on the verge of expression" (2009, p.14), in

other words, movements are always on their way, always becoming. It is the in-between (Manning also refers to this as the "interval", 2009, p.2) that propels and instigates the improvisation.

Manning (2009) considers dance improvisation a relational practice. According to her, there is "no such thing as a body that is not relational" (p. xviii). In improvisation, it is not (only) the body, but the relation (with others, with selves, with the environment) that is being moved. Manning speaks of body-worlding: bodies are always excessive, always more than one, always directly linked to the world. In line with Whitehead (and process philosophy in general) she argues that Western thinking has too long be occupied with identity formation, ego, and a pre-existent, stable reality. Body-worlding refers to the invisible, but palpable link between bodies and worlds.

Through active sensing, the dancers explore the relational dimensions of improvisation. The dancers listen, tune in and respond to whatever pops up in the present moment. The dancers become sensitive to otherness – and this in turn may lead to shared awareness and collective agency. In other words, the interaction itself becomes the source of creative exploration and dancers often refer to this as the moment when the dance starts to unfold by itself. In this process, the dancers don't lose themselves, they are not consumed by this otherness, but they become "part of a shared practice in which risk and ambiguity are possible, in which the dancers implicitly acknowledge the need to be vulnerable to the process, open to the consequences and to the effect of each other's responses" (Midgelow, 2012, p.9).

Mühlhoff (2015, p. 1001) refers to this as affective resonance, i.e. "processes of social interaction whose progression is dynamically shaped in an entanglement of moving and being-moved, affecting and being-affected[62]". Affective resonance is a process that unfolds within the relational entanglement. It cannot be attributed to individual inner feeling states. In other words, affects are "a jointly created dynamic, and shaped within the relational interplay" (p.1002). The relational here must not be understood as solely human. Affects pass from body to body and this includes the human, non-human, part-body and anything else for which there is no proper term (Seigworth & Gregg, 2010). Bennett (2010) speaks in this context of vibrant matter, the capacity of things (materials, commodities, edibles) to affect us. Vital matter flows through bodies, through the human and the non-human. Materials themselves are alive and composed of an energetic play of forces and intensities[63].

Even more, the relational emerges not as clearly fixed oppositional elements (such as body/mind, chaos/order, spontaneous/planned, free/constrained, safe/risky etc.) but as muddy (Seigworth & Gregg, 2010). Manning (2009) sees relational movement as the undoing of dichotomies since movement is always on its way, it never stops, it reaches out to the not-yet. In other words, there are no clear-cut oppositions since the relational is always unfolding. Relationality is not static but a dynamic process that is fuzzy and that shapes and reshapes itself along the way.

[62] See also note 2, page 18.

[63] Bennett (2010) explores the relation between humans and things. Bennett calls this vital materialism – a strand of thinking that shifts away from the human as a central focus of attention and instead turns to matter. Inspired by the work of Bergson, Deleuze and Grosz, life is perceived as something that cannot be reduced to mechanistic processes. Instead, liveness and vitality are seen as an inherent part of matter. Matter itself is a self-organising (impersonal) force of all living systems. Vital materialism stresses the role of vital matter, thereby adopting a post-anthropocentric viewpoint on life (that abandons the humanistic, universalist position). For Bennett, agency is distributed across the human and non-human. See Abadía (2018) for more information on new materialism and vital materialism. In this thesis, I will not further pursue this line of thought. I am aware that within the arts and performance field, this is a promising new way of thinking (about the human and non-human) but in this thesis, my main interest lies in embodied cognition, enactivism and (especially in this chapter) affect theory.

Children's Physical Play

Children's physical play is here roughly defined as a creative activity initiated by children that brings the kinetic/kinaesthetic and affective dimensions of the body to the fore (Sheets-Johnstone, 2003). Christopher Harker (2005) considers play as a polymorphous, dynamic process that takes place at the intersection of being and becoming:

> Playing has no identity (being) itself, except as a secondary characteristic of its conceptual differentiation (becoming)—the identity of difference. (p.52)

According to Harker (2005), playing is an activity in which the affective register is heightened. I agree. In my artistic practice, I have captured many spontaneous physical play events of my own children as well as other children – and the thing that struck me the most were the intensities and forces that were expressed in a disruptive and messy way. This has made me believe that play is an activity where movements and affects are pushed to the fore. Play takes the intrinsic relation between movement and affect as a starting point for creative exploration. Stuart Lester (2013, p.137) adds to this, that play may be seen as "desiring to affect and be affected by creating uncertainty and disturbance, and to play with the relationship between disequilibrium and balance". Play breaks up the conventional and habitual: it multiplies, shoots in different directions, connects a multiplicity of meanings, opens the door to the not-yet, and invites participants to dynamically shift from being to becoming.

Play is a transformative act. Play can be seen as a practice of becoming different: it is not a 'becoming adult' (also not when children are playing 'mommy and daddy') but a way to engage with the not-yet (Kane & Petrie, 2014). Children's play "marks a time/space in which ever-present virtuals are actualized, producing moments in which children are *becoming-different"* (Lester 2013, p.131, emphasis in original). Play should not be understood as a fixed phenomenon, but as a fluid, dynamic and relational activity.

Jane Hewes (2014) points to the disruptive dimensions of (physical) play: the rowdy and rambunctious. Where adults move around as efficiently as possible, children slide, jump, gallop, skip and hop around. Children wind their way through the landscape: every obstacle (a bank, a pole, a hedge, a well, a ditch) is dynamically incorporated into their own bodily structure. Movements are stripped down or dressed up with fringes and exaggerations, a too much, a too fast, a too little, or too soon, with an internal logic that is equally disruptive and disturbing. In play, children creatively weave their internal bodily structures into the external structures of the environment. Play, in this sense, is a bodily practice of doing, undoing and redoing. It doesn't exist in a fixed form, instead, it is a fluid practice that is situation-dependent (Mouritsen, 1998).

Helle Karoff (2013) also considers play as a practice, as something that children do. She furthermore distinguishes two dimensions of play: play practices and play moods. "Play practice is the concept of all the doing in the playing activity and play moods is the particular concept of sense and feeling of being, which is what we are drawn to when we play" (p.1).

Play moods can be seen as ways of affective engagement. A play mood is a way of relating to the world: it is not an internal state, nor a fixed entity. A play mood neither comes from the inside nor the outside, but it arises out of our interaction with the world. Play mood is "not confined to a specific meaning, but open and ready for meaning to be articulated as something specific, even though the specification has not yet happened" (Karoff, 2013, p.10). Play mood within this context must not be understood as an internal, mental state (a category, a fixed entity) but as an affective tone that emerges and comes into being within the encounter between self, other and world.

Based on her field research, Karoff (2013) defines four types of play practices as well as four types of play moods. The first play practice is *sliding* which is characterized by a strong repetitive

rhythm, flow, and minimal change (for example stringing beads or puzzling). The second play practice is *shifting* that is again characterized by a strong repetitive, rhythm but this time the rhythm is a catalyst for surprise and chance (for example jumping on the trampoline or a roller coaster). The third play practice is *displaying* which is characterized by change, and showing yourself off (for example a kid's dance). The fourth play practice is *fleeding* which is characterized by excessiveness, and breaking with the ongoing (regular) rhythm of a play activity often leading to crazy, exaggerated forms (for example bending and racking barbie dolls, putting their heads off, etc.). Each type of play practice has its own play mood: *devotion* (flow, concentration, focus) is related to sliding, *intensity* (unpredictability, change) is related to shifting, *tension* (performing, showing off) is related to displaying and *euphoria* (silliness, laughter, exaggeration) is related to exceeding. Karoff's four types or categories of play practices and play moods will be used in the next paragraph as a way to structure and analyse children's play and dance improvisational practice.

At this point, I want to shift from a more theoretical to a practice-led approach. In my own artistic research, I examine basic elements of both dance improvisation and children's play events from an enactive perspective. Two artistic events are relevant for this chapter: the hotel dance of my 10-year-old daughter, Lisa, and subsequently the re-enactment of the event in two improvised dance solos. However, before I discuss the outcomes of the research, I will first provide an outline of the methodological approach.

Methodological approach

My artistic practice entails the exploration and examination of basic elements of children's physical play and dance improvisation from an enactive perspective. In this chapter, the spontaneous hotel dance of my 10-year-old daughter at the Brittania Hotel in Coventry, and the re-enactment of the hotel dance by two professional dancers serve as an artistic case study. The goal of the re-enactment is not to imitate or copy the original play event but to grasp and re-actualize the affective traces of the hotel dance – mediated through a set of images. The body of the dancer becomes a resonating channel, a passage through which affects, intensities and forces can travel that are then expressed in movement. The hotel dance is photographed as well as videotaped. After a technical screening, which consists of going through the set of images and deleting the images that are blurry, oblique, over-exposed, too far away or too close by, 243 images remain. The photographs are ordered and arranged around three main themes: 1) building up intensity through rhythm, repetition and variation, 2) heightening – moving towards the excessive, 3) and dramatizing/staging.

The themes are discussed below. Only a small selection of images (15 images in total) is handed over to the two professional dancers. I specifically chose images that display full body movement (like jumping) that have a clear spatial dimension (high, low, on the ground, trying to touch the ceiling) and that are expressive (in terms of qualitative movement dynamics).
Permission was obtained via a written consent form that was signed by the non-investigating parent (the father) and Lisa herself. The consent letter included: (1) informed and voluntary consent, (2) the use of data obtained during the artistic experiments, (3) the use of images for publication and 4)the use of personal names. The professional dancer also signed a consent letter.

Artistic Insights

As I already mentioned, three themes are identified in the hotel dance: 1) building up intensity through rhythm, repetition and variation, 2) heightening – moving towards the superfluous, 3) and dramatizing/staging. The themes are discussed below.

Building up intensity through rhythm, repetition and variation

The hotel dance starts with Lisa putting on music, *Despacito* by Luis Fonsi, a Spanish song with a strong rhythm and a recurring melody. The song Despacito is several times repeated during the hotel dance event. The song seems to serve as a "refrain", "a kind of sound territoriality" (Deleuze & Guattari, as cited in Seigworth, 2003, p.96) that reassures and comforts Lisa. The ritualistic replaying of the song serves as an organising principle for the hotel dance. It creates "temporary order in the midst of chaos" (Seigworth, 2003, p.96).

Since Lisa is not familiar with the Spanish language, meaning doesn't arise from the words themselves but from the melodic and rhythmic contours of the song. The hotel dance starts with cultural established games and movements, such as the water bottle flip (i.e. throwing a bottle of water so that it does one complete flip and lands upright) and the dab (i.e. a gesture in which a person drops his head in the bent crook of an upwardly angled arm). Lisa puts on the music (Despacito) and begins to make some culturally established dance steps that she has learned in her street dance class. She repeats the dance steps several times and after some time, Lisa starts to add her own movements to the dance steps.

This sequence is all about hopping, jumping and shaking (of the shoulders and upper torso in big circular movements). Lisa explores the possibilities of each movement through repetition and variation (see Figure 46). What is most noticeable in this dance sequence, is the building up of intensity and energy. First, Lisa simply performs dance steps, but gradually she becomes more and more engaged until she fully embraces the movements. The shaking becomes a real shaking. The hopping becomes a real hopping. The jumping becomes a real jumping. Lisa surrenders to the movements, and she finds joy and excitement in this surrender. The dynamic features of the movements are explored through amplification, refinement and repetition. The dance sequence also has a strong rhythmical component (a regular repeated pattern of movement) and a pulse (a regular succession of discrete movements through time) since Lisa performs the movements on the beat.

The building up of intensity and energy through repetition and variation can be placed under the second category of Karoff's model (2013): *shifting* (play practice) and *intensity* (play mood). The sequence is characterized by a strong repetitive rhythm. Over time, the movement itself becomes intensified. This produces a high, elevated "sense of aliveness' where repetition and change/unpredictability go hand in hand.

Heightening: towards the superfluously

At the beginning of the hotel dance event, culturally established movements from popular culture form the overtone. Gradually however improvised play takes over and exploration of the room (movements such as jumping, crawling, rolling) and objects in the room (the curtains, window, chair, bed, floor) become the source and inspiration of Lisa's hotel dance.

In the exploration of the room and objects in the room, the following actions can be distinguished: crawling on the bed, sliding off the bed, sliding off the chair, moving on the floor, standing on the chair, jumping from chair to bed, bouncing/falling on the bed, head roll, shoulder roll and handstand on the bed, trying to touch the ceiling, trying to touch the upper side of the doorframe. Every action is repeated, each time performed with small variations and adjustments. Different layers of the space are used: high (standing on a chair), middle (standing up) and low (lying on the bed and sliding to the floor).

Figure 46. Repetition and variation in expressive movements © Carolien Hermans

In each successive action, Lisa uses more force, pressure and weight and as result, the falling and bouncing become more intense. The small variations seem necessary 1) to explore the wideness and range of a particular movement and 2) to explore the affective tone of a movement.

At a certain point, however, Lisa abandons the rhythm and skips the beat. She breaks with the flow and continuity of movement, and instead, she challenges herself in making bizarre/creative movements. It is a too much, a too big, and it exceeds habitual and conventional ways of movement exploration. Movements are exaggerated in terms of energy, force and arousal. Examples are jumping, crawling on the floor, sliding from the chair in a clownish way, mowing with the legs, laughing and making faces. Exaggeration in this case adds to the expressivity of a movement.

This theme corresponds with Karoff's (2013) fourth category: *exceeding* (play practice) and *euphoria* (play mood). Exceeding is characterized by bizarre movement forms that contain explosive, brisk and abundant elements. Euphoria is the "intense expectation of silliness where you are ready for both others and your own silliness" (p.9). Laughing, funny faces and absurd/silly movements are certainly displayed in Lisa's hotel dance.

Dramatizing/Staging

The hotel dance has a performative character. The presence of a spectator (in this case me) is necessary for the unfolding of the event. Lisa's gestures, expressions and movements are clearly addressed to me. Even more, Lisa is fully aware of the fact that she is being watched. Through the watching and the being watched, the play event transforms into a spectacle where intensities and affects are dramatized and put to the front.

Even more, Lisa builds up tension and plays with the expectations of the spectator (=me). This becomes most clear in the following example. At a certain point, Lisa throws herself unto the bed and when she bounces up, she takes the pyjamas along. At first, she keeps the pyjamas and looks at me in a provocative, secretive way (in an 'I-am-about-to-do-something-but-I-am-not-telling-you-what way). She swings the pyjamas around and then, finally, she throws them into my face. This little sequence follows a dramatic structure (from introduction, development, climax to resolution). According to Delafield-Butt and Trevarthen (2015) the narrative four-part structure reflects "the four states of arousal that regulate the flow of interest and the pleasure of engagement" (p.3). The four-part sequence exhibits an initiation towards the goal (throwing the pajamas), rhythmic timing and a climactic contact with (in this case) the pajamas. In other words, the action chain produces affective valences and opens up the imagination. Throwing the pajamas is a dramatic, provocative and communicative act in which Lisa deliberately invites me, the spectator, to play along.

Lisa incorporates expressive gestures, expressions and pretend play in her movement exploration. She, for example, uses the hairbrush as a microphone and with this gesture, she explicitly stages her play as performative. Finally, Lisa uses the little hallway of the hotel room as a place where she can exit and enter the performative space. In other words, the hallway is used to enter and exit 'the stage'.

This theme strongly resonates with Karoff's (2013) third category: *displaying* (play practice) and *tension* (play mood). Displaying is characterized by "showing off, putting yourself on a stage" (p.8). Tension is characterized by a "readiness to show yourself", and "an awareness that you are looked at" (p.9). From beginning to end, Lisa is aware of my presence. Together, we create a space for playing and watching. Through the staging of the play event, imaginative registers are opened that allow for the experimentation and testing of different selves. The stage exists in the in-between, in the intersection of being and becoming.

Re-enactment of the hotel dance

In this phase of the artistic research, I am handing over the photo material to Paula Guzzanti, a dance artist and scholar based in Ireland/Malta. This time I want to explore how affects can travel through different bodies and different media. I am specifically interested in affective resonances, i.e. the affective interplay between two or more bodies (Mühlhoff, 2015). Affective resonance usually refers to the gripping dynamic forces that are experienced in the direct interaction between two or more agents. However, in my artistic research, I am interested in how affects can resonate in different bodies through the re-enactment of a past event. Photography is not only used to capture the affects expressed in the spontaneous play event but it is also used as a medium to transport affects from one body to the other body. Within the re-enactment, the dancer should be sensitive to the affective potentials that arise at the present moment. The photographs contain affective traces, and the task of the dancer is to pick these affective traces up and to let them resonate in her own body. The affective dynamic works on the dancer, it makes her move—not by mimicking or copying movements and gestures but by creating own lines of actualization. The aim is not to fix the hotel dance in its singular, original form but to unlock, release and actualize the affects that are still at work. The re-enactment is an unfolding of differential forces: it is less about imitation, resemblance and similarity but more about affective potential that is re-actualized by the dancer. For this reason, I decide to hand over only a limited set of fifteen photographs (and not the video footage) – so that there are enough holes and gaps, enough in-betweens. For is it in the in-between that affective potentialities may emerge.

R-enactment: Paula Guzzanti

I met Paula on two occasions. First, at the ADiE (Artistic Doctorates in Europe) in Stockholm (19 - 23 March 2018) and a second time in Chichester – again in the context of the ADiE research intensive 'researching in/as motion' (25-29 June 2018). I contacted Paula in July 2018 to ask if she would like to participate in my artistic research and when she agreed, I sent her a set of fifteen images by we-transfer[64].

Dear Paula,

It was really nice to see you a second time. In Chichester, I asked if you would like to participate in my artistic research. Underneath I will explain a bit more.

One step in my research is to spontaneously capture physical play (and also dance) of children. This material I then hand over to professional dancers, with the aim to re-enact an event of which they initially were not part of. I am specifically interested in energy, intensity, affects, having fun/enjoying, being in the moment and also in excessiveness and overabundance.

In your case, I would like to ask to re-enact the hotel dance of my daughter. Last year I went with my daughter (Lisa, at that time 10 years old) to a conference in Coventry where we did a performance lecture together on 'the animal body'. When we were back at the hotel (in Coventry) my daughter spontaneously started to dance and I captured that with the camera. I refer to this little instant dance as 'hotel dance'.

What I would like to ask you is the following: look at the pictures first, choose 3 to 4 images that resonate or appeal to you (in whatever way, you don't have to explain this, the resonance can be entirely on an affective non-linguistic level) and then you try to recapture the energy, the affects, or just something that grabs you and takes you along. It's quite important that you don't think too much about it, so that the body and the affects it produces guide you. The comment can/should be quite short, since I am mostly interested in your initial response.

It would be great if you can film or document this response. If you feel any hesitations, please let me know. Kind regards, Carolien (2nd of July 2018)

[64] https://www.researchcatalogue.net/view/592346/592347

Hello Carolien, thanks for asking me to do this task. I got a sense of powerful rapture and force from watching the images. I watched them once and responded with an improvisation where I incorporated what there was in the studio. When I arrived there was a theatre setting, and I decide to work with that -in a way it resonated with the hotel space. Then I thought that I wanted to have a second go but without the influence of the furniture. Working in a clear space was an invitation to play with voice, which is very much part of my practice. The material is very raw, as you will see. If I was to create or continue to work with this material, I will be looking at the force and the rapture that I received as a first affect in my body. I found that in the first improv I was holding on too much to the body shapes that I saw in the photos. I feel that the second improv has a fresher approach to the task. Looking forward to hearing your thoughts! Paula (10th of July, 2018).

As becomes clear in the email exchange, Paula decides to have two improvisation sessions, the first time she is surrounded by a theatrical setting and the second time she finds herself in an empty studio. Paula doesn't use music, instead, she uses her voice and her breathing to engage in rhythm, repetition and affectivity.

The three themes identified in Lisa's hotel dance (that were not communicated to Paula) are also central in Paula's improvisations: 1) building up intensity through rhythm, repetition and variation, 2) heightening – moving towards the superfluous, 3) and dramatizing/staging.

Paula's first improvisation is initially somewhat cautious and explorative. She is searching for ways to tap into the affects that are displayed in the imagery. At first, Paula's movements are organised around elements such as rhythm and repetition. She uses repetition and slight variations to increase the intensity and to sense the affects that emerge within the kinetic/kinaesthetic unfolding of the impro. Only after some time, Paula allows herself to engage with change and the unpredictable – as she starts playing more freely with movement patterns that are initiated by hands, arms, and upper torso (see Figure 47). In Karoff's model (2003), this is called a *shifting* from an initial (careful) exploration towards more surprise and taking chances.

Paula also incorporates elements of the space and the objects in her improvisation. She plays with the cushion, sits in the chair, touches the table with her foot and drops to the couch several times. Excessiveness enters the room. She plumps on the couch, letting gravity do the work while her legs float in the air. She slides off the couch, again with gravity on her side, and ends up to the floor. Sudden ruptures and changes appear – here a foot, there an arm while the head loosely balances on the head. She plays with duration, with direction – prolonging the interval to the max. Karoff (2013) refers to this as *exceeding*, that is, skipping the rhythm, being out of tune and allowing the body to express itself in absurd, creative forms.

Even more, the theatrical space plays a vital role in the improvisation. In her first improvisation, she incorporates the theatrical attributes that are left in the space (such as a couch, chair, lamp, carpet and side table). Paula decides to use this décor, and this contributes to the 'performativity' of her dance improvisation. The objects themselves create a stage, and the only thing Paula needs to do, is to enter this stage and perform her movements in front of an absent audience. The third category of Karoff (*displaying)* is therefore already available to her since it is the theatricality of the space that turns her movements into a spectacle. See Figure 48 for some visual correspondences between Paula's re-enactment and Lisa's hotel dance.

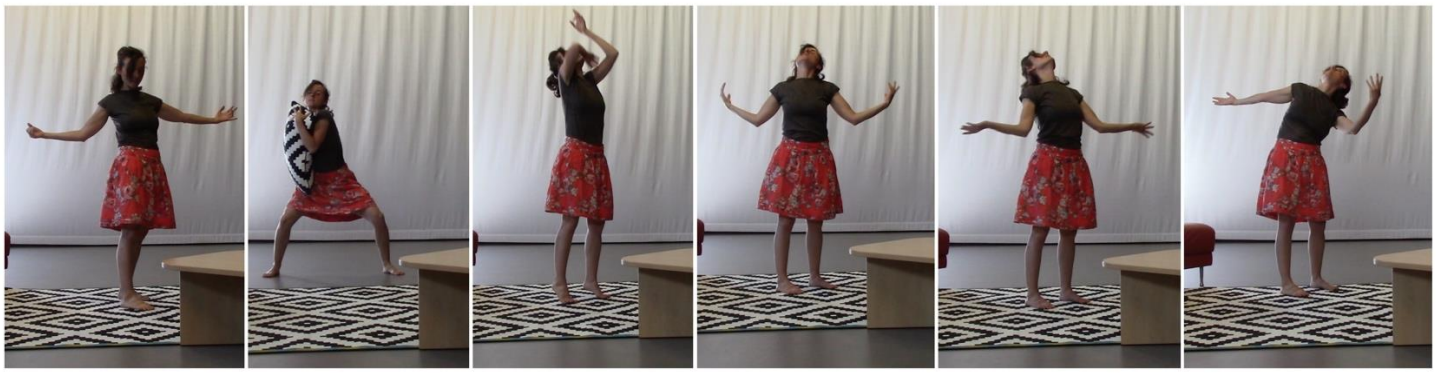

Figure 47. Expressive arm movements © Carolien Hermans

In addition, drama and performativity are clearly present in the first improvisation of Paula. Narrative gestures and expressiveness contribute to the felt intensity that is at play here. The voice itself is used to express affects and intensities melodically and rhythmically. Both Lisa and Paula display a "serious attention to having fun" (Hermans, 2018, p.320). Not only do they both laugh out loud, but they also dedicate themselves entirely to this serious, yet playful endeavoor.

In the second improvisation, this time in an empty studio, the improvisation process becomes more internal and less dependent on external cues. Paula now tries to access the affective traces through her voice. The voice becomes an outlet of affects. The vocalizations are delicate expressions and sensitive responses to the affective traces that resonate in her body. The vocalizations are accompanied by movements, and together dramatic structures are created. Paula uses her voice as a way to let affects move through her body. She uses vocalizations to regulate emerging affects and intensities. The vocalizations are abstract actualizations (in terms of timbre, pitch, melody and pulse) of the affective traces that Paula intuitively picks up from the set of images. Or as she describes it herself: *'tuning into the force and the rapture that I receive as a first affect in my body'.*

It must be noted that there are differences as well. Lisa's attention is all over the place. She tends to quickly shift from one thing to the other without giving full (conscious) attention to the affects that are produced. In Paula's case, attention is more directed and channeled. Paula consciously tunes in to the felt dynamics and movements are carefully placed in space, as she listens to what is needed now. In Lisa's case, there is an explosion of affects, an outburst, not yet channeled, with many peaks in her energy while she quickly jumps from one thing to the other. There are leaps and holes, there is sloppiness, there is distraction too in her dance. Both are fully absorbed, yet, in very different ways. They both pick up, gather, listen, collect and express. In Paula's case, there is a trained sensitivity (that is the result of her professional dance practice) while Lisa's sensitivity is rougher and more unstructured. Paula is more aware of the constraints within while Lisa plays with the constraints on a more subconscious level.

Discussion

In this chapter, I have explored how affects/intensities can travel through different bodies in physical play and dance improvisation. The artistic research project consists of three phases: 1) the original play event (hotel dance), 2) the capturing, ordering and selecting of a set of photographs and 3) the re-enactment of the hotel dance in two improvised dance solos. Photography is not only used here to capture the affects/intensities expressed in the spontaneous play event, but also as a medium to transport affects/intensities from one body to the other body.

The spontaneous hotel dance of my daughter forms the backbone of this research project. In the analysis of the 243 images, three main themes were distinguished: 1) building up intensity through

rhythm, repetition and variation, 2) heightening – moving towards the superfluous, 3) and dramatizing/staging. Even more, I used Karoff's (2013) theory on play practices and play moods as a tool for visual analysis. The first theme (building up intensity) corresponds with *shifting/intensity*, the second theme (heightening – moving towards the superfluous) with *exceeding/euphoria* and the third theme (dramatizing/staging) with *displaying/tension.* Only one of Karoff's categories was missing: *sliding/devotion*. This category refers to play activities that have a strong, repetitive rhythm, with a minimum of change, a certain quietness and a deep absorption/concentration. Lisa's hotel dance was from beginning to end full of energy, with a high arousal level and rich in "brisk and lively body movements" (Sheets-Johnstone, 2003, p.416). Sliding/devotion often takes place in play activities that have a strong repetitive character such as stringing beads or puzzling. In Lisa's hotel dance, this simply didn't occur.

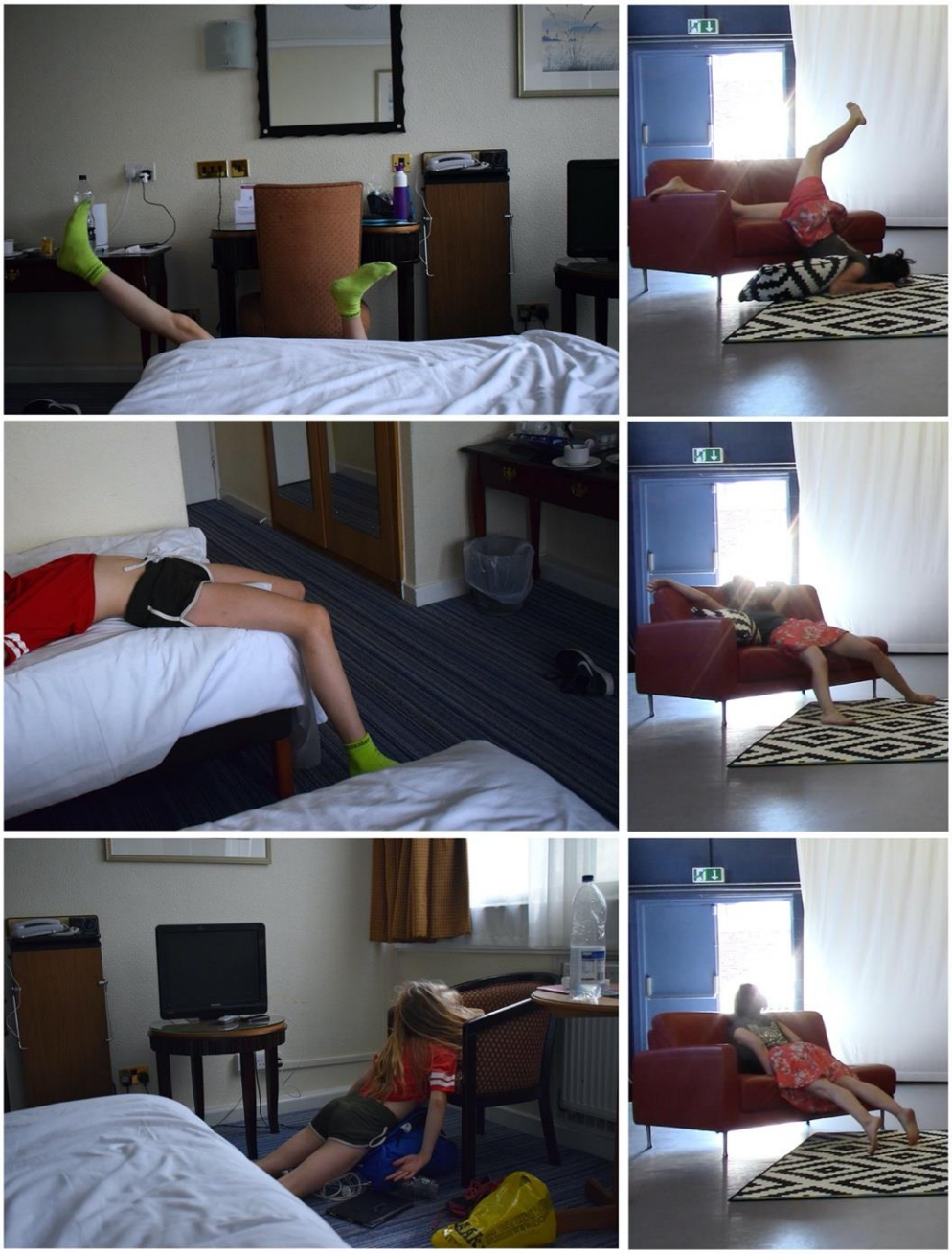

Figure 48. Re-Enactment of Hotel Dance by Paula Guzzanti © Carolien Hermans

Although Karoff's model has been very useful, I found the play activities more relevant than the play moods. There are two reasons for this. First of all, the play activities are formulated as verbs (as action and movement words) while play moods are described as nouns (as states of being). Since movements and affects are dynamically congruent (Sheets-Johnstone, 2019b), I prefer to speak in verbs instead of nouns also when it comes to affects and moods. Second, in this chapter, affects (in line with Deleuze and Massumi) are considered prepersonal intensities that emerge at the threshold of being and becoming. Karoff considers play moods as state of beings and although she clearly states that play moods emerge in the *in-between-ness* of inside and outside, it remains unclear if play moods should be considered as qualified or unqualified intensities (emotions versus affects). I, therefore, suggest to speak of 'affective tones' instead of 'moods' and consequently use verbs instead of nouns: *tensioning* instead of *tension*, *intensifying* instead of *intensity* etc. In this case, movement words might help to make the transition between being and becoming.

In this chapter, I used visual ethnography (see also page 55) as a research method to explore how affects can travel in-between bodies (within the context of play and dance improvisation). The visual analysis resulted in the identification of three themes (also referred to as kinetic melodies). In future research, however, I would further elaborate on the email correspondence. The short comments of Paula were very helpful, and in future research this (email) conversations could definitely add to a more in-depth analysis of the re-enactive process and the way affects travel through different (moving) bodies. Questions like 'How did you approach the imagery? Could you describe in movement terms what kind of affects you experienced? Where and how did it resonate in your body?' would be good starting points for such a conversation.

I want to close off this chapter with some final thoughts on the relationship between affects and play/dance improvisation. Affects play a vital role in the way we make sense of the world and of each other: through coordinated patterns we exchange dynamic forces and intensities. Affects emerge in the interaction with the world and with other. Physical play and dance improvisation can be seen as unique examples where affects travel through bodies creatively and playfully. This is because play and dance improvisation are both able to bypass the narratives/habits of daily life and as result, the dynamics of experience (rhythm, repetition, variation) can come to the fore. Affective resonances (Mühlhoff, 2015) usually take on shape in direct face-to-face contact. In this chapter, however, I have argued that affective resonances can also be experienced in our interaction with things and our surroundings. The hotel dance is a good example of how affects resonate in the playful interaction with the room. Even more, affective traces can be picked up by others through re-enactment: not identically or similarly but always in process of differentiation. Enactment must thus not be understood as a rehearsal or repetition of the same, but as the actualization of affective potential. In other words, re-enactment creates its own relational dynamic, as affective traces are picked up and taken further. In the re-enactment, the body of the dancer becomes a vessel through which new affective potential is actualized.

Chapter 10. To Touch and to Be Touched: Interconnectedness and Participatory Sense-making in Play and Dance Improvisation[65]

This chapter addresses the notion of touch and its constitutive role in the participatory sense-making process (De Jaegher & Di Paolo, 2007) of play and dance improvisation. Touch is considered a relational activity that continuously changes the contours of self, other(ness), and world(ing). It is therefore surprising that touch traditionally has received little attention in philosophy. Phenomenology and the enactive account however do hint at the vital role of touch in the interaction dynamics. The first part of the chapter consists of a discussion of key concepts, such as the duplicity and ambiguity of touch in relation to the enactive account and participatory sense-making (De Jaegher & Di Paolo, 2007). A short research overview is provided on the role of interpersonal touch in daily life. In the second part of the research, I shift to artistic practice. I discuss the Touch Project, a dance improvisation project that is part of my artistic research and that explores the notion of touch in a creative and experimental setting. Through bodily inquiry, I explore how touch contributes to relational knowing. The chapter concludes with some practical suggestions on enhancing body-mind awareness and encouraging playfulness through the use of interpersonal touch. It offers touch exercises that can be used in an educational setting to promote interconnectedness and a sense of community.

Introduction

In daily life we hug and caress our dearest ones, we accidentally or purposefully touch other people, but when it comes to public places we tend to avoid touching (in buses, metro, shopping malls, etc.). In daycare and elementary school, touch is often regulated and marginalized because of the negative associations with abuse and violence.

On top of this, the COVID-19 outbreak has led to a collective fear of touch. People suddenly have become overly aware of their touch habits. This includes not only the touching of others and the touching of surfaces but also self-touching. We avoid shaking the hands of others, many wear gloves and/or face masks, we wash our hands regularly, and we keep a distance of at least six feet. We are rapidly developing a culture of no-touch (Psypost, 2020) out of fear of getting infected by COVID-19.

In this pandemic culture, our relationship with our skin and the skin of others has become troubled (Hamilton, 2017). Touch is now associated with contagion, possible infection, and disease. It has led to a touch crisis and has caused ruptures in our daily touch rituals. However, we must not forget that touch is vital for our contact with the world and with others. Research shows that affective touch fosters cooperation and well-being and reduces stress (Saunders et al., 2018). Mark Paterson, Martin Dodge, and Sara MacKian (2012, p. 7) state that "[t]ouch is the most intimate spatial relationship between people, and a vital and subtle communicative practice".

Touch is the first sense to develop in human life, and it is the sense that is vital for our contact with the world and others. Schanberg points out that "touch is ten times stronger than verbal or emotional contact, and it affects damn near everything we do. No other sense can arouse you like

[65] This chapter is published in 2021 in the *Journal of Dance Education*. I made the following adjustment concerning the original article: I revised the abstract and omitted the sections where I introduce the enactive account and the theory of participatory sense-making. For reasons of consistency, I replaced the term play|dance improvisation with dance improvisation. I also made some textual adjustments and added a few notes.

touch. We forget that touch is not only basic to our species, but the key to it." (as cited in Field, 2001, p. 57) It is therefore surprising that touch is a neglected area in scholarship.

Touch differs from the other senses in that our whole bodily surface is involved in touch. "To put it very simply, when we are touched, our body appears to us; it appears as our lived body in a way that it cannot appear in vision." (Mattens, 2009, p. 101) Tactile sensations are spread out over the entire body surface. Touch is everywhere. We could not think of a life without touch.

Touch plays a vital role in the somatic interconnectedness with the world and others (Montagu, 1984). Touch creates an affective dynamic between two agents. In premature infants, for example, skin-to-skin contact, also referred to as kangaroo care, is beneficial for the health of the young baby. Skin-to-skin contact has positive effects on "temperature, respiration, heart rate, oxygen saturation, weight gain, breastfeeding status, mortality and morbidity" (Chiu & Anderson, 2009, p.1). Even more, it fosters mother-child interaction and promotes healthy attachment and social-emotional development (Chiu & Anderson, 2009). Touch is also used in therapy, for example in haptotherapy, massage therapy, or the use of touch robots for children with autism.

According to Maurice Merleau-Ponty (1968), touch is ambiguous: it is active (sentient) and passive (sensible). He explains this through "the double sensation" of touch. When my right hand touches the left hand, it feels as if my left hand is an object. The left hand however receives and feels the touch from within, as a subjective experience. The left hand in this case is both the object and subject of touch. Merleau-Ponty speaks of the reversibility of the flesh, "my hand while it is felt from within, is also accessible from without, itself, tangible for my other hand" (Merleau-Ponty, 1968, p. 133). It is not that we have both sensations at the same time, but each hand can shift from the position of toucher to the position of being touched:

> […] the two hands are never touched and touching at the same time with respect to each other. When I press my two hands together, it is not a matter of two sensations felt together as one perceives two objects placed side by side, but of an ambiguous arrangement in which the two hands can alternate in the role of "touching" and "touched." What was meant by talking about "double sensations" is that, in passing from one role to the other, I can recognize the hand touched as the same one that will in a moment be touching. (Merleau-Ponty, 1968, p. 93)

We are not only actively touching the world but we are also passively touched by the world. "Touchable things in the world constitute our touching bodies as much as our touch reveals them." (Maclaren, 2014, p. 97) We are equally constituted by touching as well as by being touched. A good exercise to practice this awareness of double sensation in dance improvisation is when one student initiates and directs the movements of another student by touching/manipulating her different body parts (like the hand, chin, chest, knee). This exercise is done in pairs: one student is the toucher and the other student receives the touch and uses it as a movement impulse.

The prerequisite of touch is movement. In absolute stillness, we would not be able to have any tactile experience. This is because movement registers relative changes, micro changes through which we can make contact with others and the world. In other words, we can sense textures because of the force, pressure, and direction we exert on a touchable thing. Sitting still, for example, is never a complete act of stillness. We make tiny adjustments in our posture (often unconsciously), shifting weight and renewing our contact with the chair constantly. One could say that the chair presses upon our body and our body, in turn, presses back upon the chair. A double force is at work here: we constitute worlds while at the same time we are constituted by the world.

> Thus, though it is true to say that our bodies are requisite for revealing the world, this is only a half-truth, for these bodies are equally shaped by this world that they are to reveal. We learn to see because the things call from us certain movements not yet acquired. The world induces in us new bodily powers and thus develops for us a new body, a new way of being in the world. (Maclaren, 2014, p. 98)

Sensing and being sensible are thus intertwined. We develop a sense of self through an active engagement with the world (to touch upon the world), but also through a passive registration (to be touched by the world). It is important to note that passivity is never entirely passive: any passive registration requires some form of active engagement. The intertwinement of the sentient and sensible becomes most evident when we hold our hands in a prayer position. In this position, both hands can alternate between the role of touching and the role of being touched (Merleau-Ponty, 1968). Even more, the touching hand feels the latent presence of being touched, and vice versa. Each hand is "ambiguously sentient-and-sensed, with, at different times, one side of the ambiguity coming to the fore and the other becoming latent" (Maclaren, 2014, p. 99).

Kym Maclaren (2014) differentiates between touching an object and touching a living being. She gives the example of petting a cat. When I pet a cat, the cat reacts to my soft strokes, for example by nudging me with her head or rubbing her cheeks against my body. The question is: Who is petting whom? I am petting the cat but the cat is petting me as well. In other words, the petting exists between us. The cat responds to my movements while I respond to the cat's movements. Together we create a we-space, a space in which petting becomes a coauthored activity. Touching a living being differs from touching an object in this respect. Leaning into a wall is different from leaning into a dance partner since in the latter case we engage in each other's flesh. We co-constitute the movements because two agents are involved. The touch exists in-between us.

Touch, we could say, is contact, is being with, is to co-exist with the other and the world. To touch is to communicate, to exchange affects, intensities, and forces. Within the enactive account, this is a form of participatory sense-making, "the coordination of intentional activity in interaction, whereby individual sense-making processes are affected and new domains of social sense-making can be generated that were not available to each individual on her own" (De Jaegher & Di Paolo, 2007, p. 497).

Participatory sense-making is an intercorporeal process: meaning is generated and transformed not only by the agents but also by the interaction process itself. As a result, the interaction process flows not in a pre-defined direction but finds its own course. The interaction process thus carries out its own autonomy (De Jaegher & Di Paolo, 2007). In dance improvisation, this is often described as the moment when dancers no longer know who initiated the action. The dance starts to shape itself. Sense-making is thus not ascribed to each of the participants but dynamically arises out of the interaction itself.

The in-between becomes the place where sense-making takes place. Even more important, the interaction itself is formative and transformative for the sense-making process. Together the participants move into a shared nomadic territory, a we-space, a third party which Hubert Godard and Romain Bigé (2019, p. 97) describe as "neither you, neither me, neither us, but at the interstice between these three pronouns, a third-included". The participants expand their corporality to include the third party. In dance improvisation, the third party is the rolling point of contact between the dancers, i.e. the dynamic and ever-changing point around which the dance unfolds (Dey & Sarco-Thomas, 2014).

Touch plays a vital role in the constitution of a we-space, i.e. a space in which the lived bodies of the participants expand to form a common intercorporeality (Fuchs & De Jaegher, 2009). In this holistic experience, the in-between becomes the source of the sense-making process. It is this

mutual incorporation that provides the basis for social bonding, coordinated empathic understanding, affect regulation and shared expressivity (Cascio, Moore & McClone, 2019).

Social Touch over a Human Lifespan

As stated at the beginning of this chapter, touch is the first sense to develop in life. Through sensory scaffolding, we come to know ourselves, the world, and others. Long before eyes and ears have developed, the human embryo responds to stimulation of the skin through amniotic fluid as well as touch and pressure of the womb (Montagu, 1984). Interpersonal touch is considered the earliest form of communication (Gallace & Spence, 2008). Birth intensifies this contact, and after birth, attachment is fostered through breastfeeding and skin-to-skin contact. In the first year of life, tactile stimulation plays a vital role in the social, emotional, and motor development of the infant.

Caregiving touch is not only "vital for growth and development but also has been actively used to calm infants in pain and discomfort" (Field, 2010, p. 368). The infant can "read" the way he is held or cuddled, and he immediately knows if he is held by a stranger or a familiar person. The attachment theory of John Bowlby (1973) suggests that affective touch promotes attachment, it allows infants to feel secure and safe. According to Winnicott (in Maclaren, 2014), touch provides a holding environment. The attentive holding by the main caregivers supports the infant, physically as well as emotionally. Through this holding infants feel safe: they implicitly and subconsciously learn that their caregivers will hold them, contain them, and catch them when they fall. In this respect, bouncing can be seen as a powerful soothing practice since it contains all aspects of trust: the holding, the falling, and the catching. Contakids, an organisation that specialized in contact improvisation between parents and young children, offers a whole range of exercises that stimulate deeper levels of corporeal communication between parent and child. In the "grab and climb exercise," for example, the child must hold on to the parent's leg, neck, or back. While moving together, theparent and child go through all aspects of trust: the holding, (potential) falling, and catching (Yatuv, 2016).

Interpersonal touch remains vital in adulthood. Research suggests that skin-to-skin touch from a partner activates the reward system in the brain, which in turn results in pain and stress reduction. Married women who hold the hand of their husbands have smaller threat-related neural responses than women who hold the hand of an anonymous male experimenter, or no hand at all (Coan, Schaefer, & Davidson, 2006). Touch plays a role in romantic couples. Andrew Gulledge, Michelle Gulledge, and Robert Stahmann (2003) found a high correlation between affective touch and overall relationship and partner satisfaction. People may also experience comfort from the touch of non-romantic relationships such as peers and friends, and even pets provide social and emotional support for their owners (McConnell, Brown, Shoda, Stayton & Martin, 2011). Even more, research shows that touching an inanimate object, a teddy bear, fosters pro-social behaviour in participants who are socially excluded (Tai, Zheng & Narayanan, 2011).

In elderly people, touch deprivation may occur as a result of loneliness and social isolation. The absence of human touch can harm physical and mental well-being such as anxiety, depression, and decreased awareness of the senses (Singh & Misra, 2009). In elderly people with dementia, a brief hand massage can reduce the levels of agitation while a foot massage can promote physical relaxation, sleepiness, more positive communication, and the stop or decrease of abnormal behaviour (Malaquin-Pavan, 1997).

The research reviewed here shows that touch has a powerful effect on health, well-being, and social bonding. Through touch, we encounter a meaningful world. Godard and Bigé (2019, p. 95) describe it as follows: "I cannot touch the world without being touched by it, and I cannot touch the world without being changed by it." Through the synchronization of our moving bodies with other bodies and the surrounding world, we experience a sense of connection. Through touch, we can participate in a joint sense-making process.

Until here, I have mainly explored the notion of touch in a broad sense. There are however situations where touch is practiced more deliberately, for example in therapy (haptotherapy, massage, etc.), contact sports (wrestling, martial arts, rugby), physical play (rough and tumble play, tactile play), partner dance (tango, salsa, folk dance), and dance (contact) improvisation. From these examples, I will take physical play and dance improvisation further on. Both practices can be seen as relational, experiential practices that cultivate kinetic-kinaesthetic inquiry, perceptual sensitivity, and interpersonal contact. Even more, both physical play and dance improvisation can be seen as unique examples of participatory sense-making since they integrate sensorimotor experiences with higher-order processes such as imagination (Hermans, 2018, 2019).

In my own practice, I used a methodology known as artistic research to examine how touch contributes to participatory sense-making processes in play and dance improvisation. My artistic research can be described as an integrative practice that uses a set of rules, structures, and scores for creative movement exploration. Keywords are creativity, personal expression, challenging the self, and inventing new worlds. Principles of both play and dance improvisation are used to facilitate spontaneous movement creation.

Artistic research is rooted in the creative/artistic process. The research unfolds *in* and *through* the artistic creative process, with the purpose "to expand our knowledge and understanding by conducting an original investigation in and through art objects and creative processes" (Borgdorff, 2012, p. 53). In artistic research, experimental practices and critical reflection enter into a meaningful dialogue. In line with Nikolaus Gansterer, Emma Cocker, and Mariella Greil (2018, p. 19) artistic research is perceived here as a "mode of researching our relationality, our being-in-the-world".

Permission from the participants was obtained via a written consent form that was sent to the participants after the Touch Workshop. The consent letter included: (1) informed and voluntary consent, (2) the use of data obtained during the workshop, and (3) the use of images of the workshop for publication.

In the next paragraph, I describe the outcomes of the Touch Project, an artistic research project that explores the vital role of touch in the participatory sense-making process of dance improvisation (see Table 3 for an overview of exercises). The Touch Project consists of two phases. The first phase entails a preliminary, personal examination of touch at a dance studio of the Amsterdam University of the Arts. The second phase consists of a three-day workshop at Chester University, Department of Music, Media and Performance, with ten professional dancers and theater-makers.

Tactile exploration	• collecting touchable materials, i.e. materials that hold multiple tactile cues and textures • tactile panels: sorting materials in textures and surfaces (rough, smooth, hard, and so on) • traces of touch: working with clay • tactile education (Marinetti, 1921) with exercises such as; 1) take a walk outside on bare feet, 2) take a shower with a raincoat on, 3) wear socks in the night, when you go to sleep, 4) find two contrasting surfaces and touch them first one after the other and then simultaneously, 5) hold your right hand under a cold tap while you hold your left foot in a bucket with warm water, etc.
Touch in relation to space	• exercises: moving in a very tiny area or covering the entire floor with your body, touching the floor and walls with a specific body part (the right knee or left pink) or with the whole body, the difference between a slow touch and a quick/sudden touch, touching with eyes closed and with eyes open, etc. • game: the floor is lava
Interpersonal touch	• games: ninja slap game, chain tag game, thumb war game, hand slap game • touch inquiry in pairs: simple contact exercises (only hands in contact, solely arms and shoulders, only the torsos etc.) • head-to-head dance • back-to-back dance: rolling on the floor in duos • exercises on leaning and counterbalancing, not using full body weight • rolling on the floor in a group, like waves in the sea • table-top exercise (one person in a stable position supports the other person) • set of touch questions (see table 4) • touch score (see table 5)

Table 3. Overview of touch exercises

Phase One: Molding Materials, Spaces, and Selves

The first phase consists of a tactile inquiry into materials and spaces. In this preliminary examination, I work alone at a dance studio at the Amsterdam University of the Arts. I am interested in the tactility of materials, spaces and also in my own tactility. To do so, I collect "touchable materials," i.e. materials that hold multiple tactile cues and textures such as feathers, cotton balls, sponges, sandpaper, leaves, and pineapples.

Next, I sort the materials in shape, size, and texture (rough, smooth, hard, and soft). I examine the knowable and unknowable surfaces, familiar and unfamiliar angles, and curves of the materials. Through touch, I become intimate with the materials, as the interstices between me and the tactile surfaces become intensified. In line with Marinetti's Futurist manifesto "Tactilism: Futurist Manifesto" (Milan &Tommaso, 1921)[66], I develop tactile panels with materials and textures that can only be understood by touch.

[66] Marinetti was an Italian artist and leader of the Futurist movement. In the manifesto, first published in 1909, Marinetti rejects the art of the past and celebrates the energy and strength of the modern, industrial world. As part of the manifesto, Marinetti has developed tactile panels/boards that consist of different textures and colours. The panels should not be experienced through visual contemplation but through touch. Marinetti writes: "These tactile boards have arrangements of tactile values that allow hands to wander over them, following coloured trails and producing a succession of suggestive sensations, whose rhythm, in turn languid, cadenced, or tumultuous, is regulated by exact directions" (Marinetti, as cited in

The tactile experiences allow me to penetrate deeper into the materiality of things. The materiality of a thing is not pre-given or determined beforehand but emerges in the tactile interaction. "The properties of materials are not fixed attributes of matter but are processual and relational." (Ingold, 2007, p. 1)

From the tactile panels, I switch to working with clay. I am specifically interested in how my fingers (hands) knead the clay, how they press themselves into the matter and how my touch is imprinted in the clay (Figure 49). Sarah Christie (n.d., p.1), a sculptural artist that works with clay, describes the process as "exploring the traces and expressions of touch, recording and materializing imprints and passages formed by touch in movement." I knead myself into the clay, leaving visible traces of my finger movements behind, impressing myself onto the material. The clay affords the kneading. Clay, one could argue, is a substance that resists my touch to a certain degree, while at the same time it provides tactile passages for the self to move through. Even more, the materiality of the clay confronts my creativity. Through the encounter between fingers and material, non-verbal narratives come into being[67].

Figure 49. Clay as an expression of touch © Carolien Hermans

From the clay, I move to the space. The last experiment involves the exploration of touch in relation to architectural space (walls, ceiling, floor, and objects such as chairs in the space). I am interested in how the floor and walls make contact with my body—how I can rest on the floor, in the walls and how to find comfort in them. And the other way around. How to remove my body from the floor as much as possible by using objects that support my weight and guide me into gravity (see Figure 50), I sense the persistence of the floor and the wall, as they resist my weight and force. They are solid, with a distinctive shape, and my body is not allowed to move through. However, I still experience the sinking into the floor and walls, relatively speaking then, as my body surrenders to gravity and finds relaxation in the floor and walls. Although vaporization and diffusion into the medium are not possible, my body rubs against the floor and the walls. The rubbing produces intensities and affects as my body relates sensitively and sensibly way to the floor and the walls. Tiny movements cause great

Antonello, 2014, p.38). For an example of a tactile board, see https://www.guggenheim.org/audio/track/filippo-tommaso-marinetti-sudan-parigi-1921

[67] By this I mean, that clay is a stiff, sticky and fine-grained material that allows for movements such as kneading, squeezing, wringing and moulding. The clay receives and resists (in a similar gesture) my tactile impressions. I press myself into the material, while at the same time the clay presses back on me. Together, we (the clay and me) create narratives that are in the first place sensorial and tactile.

shifts in the way I relate to the floor and the walls. Once again, sense-making arises in the interface between my body and the surfaces of the floor and walls.

Figure 50. Resting Places for Potential Body Parts © Carolien Hermans

Phase Two: Touch Workshop

I was invited to Chester University, to give a three-day workshop to ten dancers and theater makers (three male students and seven female students). The first day is the introduction day: the participants work alone on simple exercises that involve tactile awareness of (architectural) space and surroundings (such as objects in space). The second day involves exercises on interpersonal touch and a touch inquiry. On the last day we work with a touch score (see Table 5). Each day is described in detail below.

First Day of the Touch Workshop

We start the first day by exploring the notion of touch with the surroundings: the floor, the walls, corners, and objects in the space. The aim is to raise awareness of the way that the body is supported by the floor and the walls. A set of exercises is used to explore individually the points of contact with the surroundings: moving in a very tiny area or vice versa covering the entire floor with your body, touching the floor and walls with a specific body part (the right knee or left pinky) or with the whole body, the difference between a slow touch and a quick/sudden touch, touching with eyes closed (see Figure 51) and with eyes open, etc.

Figure 51. Sensing the floor and the wall with eyes closed © Carolien Hermans

We reflect on each exercise and share experiences:

- One participant mentions the difference between a continuous touch and a sudden or even unexpected touch. For example, laying with your back on the floor is a continuous touch while stamping with your feet on the ground is a sudden touch. The latter reaches awareness immediately while the former slumbers around in the mind.

- Another participant states that "*attention is not only given to the touch points at the surface of the body, but it also travels to the deeper layers of the body."* For example: touching the floor with the hand, is not only felt at the surface of the hand but all the way up, to the wrist, elbow, and upper arm. Awareness of touch is thus not restricted to contact points (i.e. the body surfaces that are in direct contact with the surroundings). We experience touch much deeper, as touch travels through the body and reaches organs and the internal tissues of the body (from epithelial tissue to connective tissues, muscle tissues, and nervous tissues).

- In the exercises, participants not only experience a heightened awareness of the sensation of touch, but also of the intention that guides the touch. Different intentions lead to different engagements in the touch experience.

- "*Tissues of the body are more sensitive when they encounter soft surfaces"* is another comment by a participant. Soft surfaces embrace the body, they are soothing and comforting. The body opens up to soft surfaces while it tends to shut off from sharp surfaces.

- One participant points to the difference between skin-to-floor contact and contact that is mediated by clothes. Touching the floor with bare feet or feet covered by socks provides an entirely different experience. "*Clothes make the touch experience more fuzzy*."

- In the exercise with the eyes closed, a participant mentions haptic experiences that exceed the architectural features of space (such as walls and floor). "*My body is touched in several ways not only by the contours of space but also by light and by temperature*." The warmth of the theater lights or draft near the windows are examples of haptic experiences that exceed the architectural.

- Attention magnifies the touch experience. *"It doesn't physically matter how small the space is that you touch: it is magnified internally, it grows because you attend to it."* The touch-field grows because attention is drawn to the micro experience. Another participant compares it with playing an instrument. "*When you play an instrument with your eyes closed, the instrument seems bigger*."

- The participants agree that moving with eyes open or eyes closed changes the experience of touch drastically. "*When I open my eyes, I notice that I approach touch more externally. It helps to close the eyes to internally locate and sense the touch,"* says a participant. With eyes closed, we navigate with our proprioceptive system. With eyes open, we navigate visually through space using external cues and cognitive maps (Massumi, 2002).

Second Day of the Touch Workshop

On the second workshop day, we work on interpersonal touch. We begin the day with touch games, such as the "chain tag game" (for further explanation see GamesWiki, n.d.). These type of games requires a *serious attention-to-having-fun*, a dedication to the rules of the game on the one side and a flow of energy and excitement on the other side (Hermans, 2018). The touch games create a sense of connectedness: the set of rules serves as an internal structure around which we structure and re-structure our bodies.

We continue the day with simple contact exercises where only hands are in contact, solely arms and shoulders, only the torsos, etc. We pay attention to leaning and counterbalancing while not using full body weight. In the afternoon we do a touch inquiry in pairs (see Figures 52 and 53). Several assignments have been written down on small pieces of paper. Each duo can choose what to work on. They can move to another assignment whenever they feel ready for a new challenge (see Table 4 for the written assignments). We reflect on the touch inquiry and share experiences.

First, we notice that in contrast to daily life we hardly use the hands in dance improvisation, but rather everything else from head to feet.

Second, in dance improvisation, the listening takes place with the whole body. It is as if eyes and ears are situated everywhere in the body—in your knee, in your toe, in your shoulder. This tactile awareness is a mode of seeing and listening with the body, an "embodied listening that turns the skin, fascia, organs, bones and fluids into ears" (Little, 2014, p. 249). Even more, touch cannot be reduced to the tactile sphere. "It courses through all senses as a modal relation. Haptic and visual, seeing and touch, fold into one another creating an assemblage that moves through […] the dancers." (Egert, 2019, p. 2) Some participants mention that they need visual guidance to fully engage in the touch experience.

1. Stick to one touch, repeat it, over and again and find something new in the repetition.
2. Absorb proximity. Take it in, spit it out.
3. Shift from a continuous touch to a sudden or unexpected touch. And the other way around.
4. Shift from local to global touch, and from global to local touch.
5. Can you be in a tactile nowhere? Try it.
6. How does touch travel through you?
7. How much weight can you take in?
8. How many layers or textures can you distinguish in the touch?
9. Return together to the first touch. And the second touch. Revisit it.
10. Be aware of micro-adjustments in the touching.
11. Find gaps and holes in bodies or space. Fill it with touch.
12. Touch without touching.
13. Decompose the touch: bring it back to its essence or its most basic 'form'.
14. Shift awareness from surface to depth in the touching (and the other way around).
15. What is the absolute minimum of touch (where you can hardly sense it anymore)?
16. What is the absolute maximum of touch (where you can hardly sense it anymore or take in)?

Table 4. Touch Inquiry

Figure 52. Hands only exercise © Carolien Hermans

Figure 53. An assemblage of body parts © Carolien Hermans

Third, tactile awareness is not a constant, stable process. During the touch inquiry, tactile awareness shrinks, grows, shuts down, opens up, etc. This depends on the intensity of the touch, as well as the location, scope, and duration of touch. Touch, we could say, is a manifold of movements. "Touch is neither linear nor uniform; it cannot be reduced to one movement, one relation or one sensation. Rather, it forms an assemblage of manifold relations, differences and events." (Egert, 2019, p. 2) One participant describes it as follows: "*Touch is far more fluid then I initially thought*."

Fourth, sometimes the touch is too much to absorb. This happens mostly when full body weight is used (for example, when you lie under a pile of bodies). A more experienced participant mentions that when the weight becomes too much, it helps to create a small space between your body and the other bodies to control the amount of weight that presses upon you. In full body contact, *it is impossible to attune to all individual touch points at once.* The touch experience becomes more holistic in full-body contact.

Fifth, the body is never in a tactile nowhere (Ratcliffe, 2008). Touch is always with us. In fact, the only moment when I am free of touch is when I jump in the air. In this micro-moment, I experience a sense of freedom: no ties, no connections, just temporarily floating in the air. However, even in this jump, I am not entirely free since I am still touched by the air that surrounds me. Don Idhe (1983, 99) speaks of a touch field, as a way to indicate how we are connected with the world: "When the world of my touch field touches and is touched by the surrounding world, I realize how intimate is the I-world relation in touch. Through touch, I am constantly in 'touch' with that which surrounds me."

Finally, we notice that dance improvisation itself magnifies the touch experience.

Although we are surrounded by touch in daily life, we are often not consciously aware of the touching and the being touched. In dance improvisation, the sensations and affects move into the foreground. According to Gerko Egert (2019, p. 2) "dance [within which I include dance improvisation] intensifies touch, it is not about variables such as speed or acceleration increasing linearly, but rather the relations and tensions that deepen." Tactile knowing and tactile sensing are a vital part of dance improvisational practice.

Third Day of the Touch Workshop

On the third and final day we work with a touch score (see Table 5). Some parts of the score have to be performed alone, some have to be executed with a partner, and some involve the whole group. Two important insights result from the touch score.

1. Give the floor a big hug. Alone.
2. Try to touch as much of the floor as possible. Cover the floor with your touch. Work together. Do it systematically: start from the left corner behind and end up in the right corner in the front.
3. Make a pile of bodies. Move into a pile and move out it again. Repeat.
4. Work together in a whole group. Bring one person to the other side without her touching the floor. No one is allowed to stand on his feet.
5. Pushing and pulling game: wrestle with another partner.
6. Whisper-game: someone starts with a touch, and hands it over to the person next to her, who hands it over to the person next to her – so that a chain of touch starts to evolve. In a circle or a line.
7. In-between the other scores: Try to touch someone without the person noticing it.
8. Return to the floor. Alone. Let the floor hug you.

Table 5. Touch Score

First of all, by using a touch score, the dance becomes more performative, as if the dancers are performing for an invisible public. Movements are framed within a set of rules, a score, and as a result sensations and perceptions intensify (Egert, 2019). The touching becomes a theatre of touching, where intensities and affects are dramatized and put to the front.

Second, all participants engage in the sense-making process. Bodies resonate with each other through coordinated interaction, and this process results in an intercorporeal dialogue, the intertwinement of living and lived bodies on a pre-reflective level (Merleau-Ponty, 1968). A participant describes it as follows: "*The skin grows, it starts to include/incorporate others."* Another participant refers to it as "*shared elasticity."* A form of bodily communication arises, a relational knowing, as we move with and are moved by others.

At some moments in the dance, the participants can no longer tell who initiates the action: who is leading and who is following. The participants navigate together, guided by implicit relational knowing (see Figure 54). In this delightful confusion, the interaction itself starts to take over. One participant describes her experience as follows: "*I no longer initiated my movements, I was moved by*

others." This "being moved" breaks up movement habits and patterns, it awakens curiosity and creativity.

Figure 54. Rolling on the floor © Carolien Hermans

Together the participants create an interval, a third party. In this interval, the lived bodies of the dancers "extend and form a common intercorporeality" (Fuchs & De Jaegher, 2009, p. 465). The third party is the in-between space where the potential resides. The potential exists in between bodies, in between movements. It is not something that a dancer can create alone, since it exceeds the body and is experienced at the threshold of inward and outward forces, intensities, and affects.

In the third party the relation is moved[68](Manning, 2007). The participants mould and sculpt their bodies to become a multisensed organism (Hermans, 2018). Together a shared body of experience is created. "Each lived body with its sensorimotor body schema reaches out, as it were, to be extended by the other." (Fuchs, 2016, p. 199) Boundaries expand, open up, and passages are created between the interiority and the exteriority of the body. A participant describes the experience as "*extending my body in such a way that it includes others, space and objects*." Another participant refers to this as *"incorporating others in the dance*." The body reaches out to embody the other, the space and objects in the space. Mutual incorporation is thus a process where bodies extend and reach outwards to orient themselves relationally in the world.

Conclusion

I have shown that touch is a relational act. To touch is to re-organise space and time, to invent worlds. Manning (2009) refers to this as "body-worlding," being and becoming one with the world through

[68] In contact improvisation, the third party refers to the rolling point of contact between two or more dancers. Through this rolling point of contact, the dance unfolds and a shared body is created. Any movement not only affects the individual constellation of the two dancers, but it foremost affects the relation.

movement and touch. In line with Egert (2019), we may conclude that three elements can be distinguished in the concept of touch: multiplicity, autonomy, and productivity. First, touch is not linear or uniform. It is manifold and always in a process of becoming. Second, touch resides in the in-between space, also referred to as the third party. Touch is autonomous, it flows between two or more agents. It does not belong to the individual agents, but it emerges in the interaction. Third, touch produces affects and intensities that do not find their origin in separate entities (agents).

In this chapter I have argued that dance improvisation brings attention to the tactile: creative movement practice requires sensitivity to the surfaces and textures of body-worlds. In dance improvisation, participatory sense-making takes place on a bodily level. Language only plays a subordinate role. Dance improvisation creates good circumstances for intercorporeality to occur, i.e. a dynamic coupling of living bodies through which shared sense-making arises. Affects, percepts, and knowledge intermingle in the experience of touch. Boundaries expand and bodies move into an ambiguous state, fluctuating between self and otherness.

Although the concept of participatory sense-making is usually restricted to human agents, I argue here that it can also take place between living beings and non-living beings. We move into a dialogue with the materiality of the world. The materiality of a thing is not locked inside the thing: it comes into existence through tactile encounters. It is in the interaction between my body surface and the surface of materials, that sense-making starts to arise. Ingold describes it accurately when he says that we are immersed in the materiality of the world. Human beings "swim in an ocean of materials" (Ingold, 2007, p.7). Even more, things can act back. The power of their agency lies in the materiality itself. Non-living things can thus participate in a shared sense-making process.

Dance improvisation has much to offer when it comes to the vital role of touch in sense-making processes. In educational terms, there is much to learn from creative engagements with touch, as touch is "one of our most refined senses of perception" (Bannon & Holt, 2012, p. 2). As previously stated, dance improvisation intensifies touch. It produces relational intensities and transforms the interaction process dramatically and radically.

The touch exercises mentioned throughout this chapter can be used in a diverse array of dance classrooms and are suitable for K-12 teachers as well as studio teachers. The advice is to structure the classes in a threefold way. First, start the workshop or class with tactile exploration (i.e. collecting tactile materials, tactile panels, working with clay or other sensorial materials, and a set of tactile assignments). In the second phase, the teacher introduces touch exercises in relation to space and objects in space. Games such as "the floor is lava" are good starters. Once the children are comfortable in touching their surroundings (i.e. rolling on the floor, sliding, using the wall as a counterweight, etc.), the teacher moves to interpersonal touch. Again, different kinds of games can be used (slap game, chain tag game) as a group warming-up. The class is then divided into smaller groups so that children can explore simple contact exercises in pairs. Playful pedagogical elements, such as "bring the balloon in pairs to the other side without using the hands," can be used to increase attention and motivation, and to bring a sense of joy and excitement in the classroom (Cohen & Waite-Stupiansky, 2011).

This chapter highlights the value of touch in a dance educational context and promotes to practicing and exploring touch in a creative way. This also means that ethical considerations should be taken into account. Within an educational context, touch should always be practiced in a safe and respectful way. Teachers should be sensitive to the needs of each child by maintaining integrity at all times and checking regularly with the children if they are still okay. When it comes to consent, children should be made aware of the right to refuse touch at any time and the teacher should discuss ways to communicate consent and non-consent, both verbally and non-verbally (Courtney & Noland, 2017; Risner & Schupp, 2020).

This paper has been written amidst the COVID-19 pandemic times. The outbreak has put an entirely different perspective on this research. We are rapidly developing a culture of no-touch. In public life, we do not only take a social distance of six feet, but we also hesitate to touch surfaces and objects such as door handles, desks, handrails, lift buttons, shopping carts, groceries, packages, communal surfaces at work, etc.

However, people are also becoming increasingly aware of the fact that touch is truly fundamental to humans. We cannot live, nor survive, without touch. Research shows that touch has a powerful effect on health, well-being and social bonding (Saunders et al., 2018). Through touch, we encounter a meaningful world. Through touch, we participate in a joint sense-making process. Touch itself has become a threat to our health. The longer the pandemic continues, the more likely it will be that we collectively develop negative associations with touch. Even when the virus fades out, this negativity will remain part of our collective memory.

It is therefore wise to invest in an education of touch—in touch that is safe and that is to be trusted. We need to learn to respect social distance in daily life while at the same time we should not become fearful of touch. COVID-19 has led to new social norms of haptic etiquette that focus on "distancing, on buffering touch, on layering skins" (Hamilton, 2017, p. 65), In this new situation, we should however not forget the importance of touch for human beings.

Touch is vital for growth, for developing a sense of self, for being and relating to the world. It is from tactile experiences that we learn to endow the world with meaning (Montagu, 1984). By stimulating awareness of the skin, we stimulate self-awareness and awareness of the world we live in. Touch experience is fundamental to our bodily self-understanding in relation to the world. In these changing times, we need to invest in a new culture of touch, one that is at once sensible and sentient.

Chapter 11. Re-Play/Re-Move: Creative Card Deck and Three Workshops

The last phase of my artistic research consists of the development of the Re-Play/Re-Move toolkit, an educational toolkit for children between 4 to 10 years old that consists of two elements: a creative card deck and three additional workshops. In this chapter, I discuss the background, objectives and theoretical context of the Re-Play/Re-Remove toolkit. The enactive account and the concept of participatory sense-making form the backbone of the Re-Play/Re-Move toolkit. I first return to the conceptual model that was introduced in chapter three. A sixth element is added to the model: qualitative movement dynamics with three parameters (time, space and force). Then, I introduce the Re-Play/Re-Move toolkit with the different categories, the pedagogical framework and its main objective. In addition, other examples of creative toolkits within the field of play, dance and performing arts are discussed: Sensorium Toolkit for Dance developed by ICK (2016), Play as Radical Practice developed by Albert Potrony (in 2016) and Playing Up, A Live Art Game for Kids and Adults by Sibylle Peters (2016). I close the chapter with some final thoughts on the role of creative movement exploration in the lives of young children.

Participatory sense-making model for physical play and dance improvisation

As the enactive account has already been thoroughly explained throughout this thesis, I will move directly to the concept of participatory sense-making. Participatory sense-making is a corporeal process in which information is shared and exchanged from one living agent to another living agent.

Physical play and dance improvisation can both be seen as situated practices in which sense-making processes are deeply embedded in the body and movement. As already described in chapter three, participatory sense-making consists of three highly interdependent elements: **attention, movement and affects.** The synchronization of attention, movement and affect leads to intentional activities in which individual sense-making is affected by domains of social sense-making (see Table 6).

ATTENTION	= selective openness to the surrounding field: active sensing (including self-sensing), responsiveness to others, self and world (Little, 2014). It is the capacity to respond and to be responded to. Attention is matching up the contents of our body-mind with the (objects of) the world (Ingold, 2018b).
MOVEMENT	= attending to the things in our surroundings can only occur when one joins and participates with them in movement (Ingold, 2018b). Sheets-Johnstone (2009) states that it is not action, but movement (animation) that is foundational for living. Action is a too-narrow concept, that "packages movement into a specific deed" (p.377).[69].
AFFECT	= a force, a "prepersonal intensity corresponding to the passage from one experiential state of the body to another and implying an augmentation or diminution in that body's capacity to act" (Massumi, 1987, p. xvi). Massumi locates affect in the relational dynamic, rather than the interiority of a psychological subject.

Table 6. Three elements of participatory sense-making: attention, movement and affect

[69] Sheets-Johnstone (2010) objects to the use of words like 'action' or 'behaviour' because these words only point to the goal-oriented nature of a movement, thereby dismissing the qualitative kinetic dynamics of a movement.

Towards a model of participatory sense-making: six additional components

The model follows the five components that I have described in chapter three: decision-making-in-action, rhythmic coordination/synchronization, kinaesthetic pleasure, creative potential and ambiguity/open-ended nature. In the model, I have added one extra component: qualitative movement dynamics (see Figure 55).

The main reason to insert the sixth component to the model is that movement is a core dimension of both physical play and dance improvisation. In both activities, the dynamic qualities of movement are put to the fore. Sheets-Johnstone (2012) gives the following description of the qualitative dynamics of a movement:

> The constellation of qualities inherent in movement imbues any movement with an overall readily apparent qualitative dynamic: its intensity, expansiveness, rigidity, unswervingness, suddenness, and so on are all variables - "observable parameters" of movement. Furthermore, and most importantly, the qualitative variables are not simply observable parameters but variables that are kinaesthetically felt by the individual who is moving. The movement, in turn, has a qualitatively felt dynamic. (2012, p.46)

Qualitative dynamics of movement encompasses not only the what of movement, but also and above all the how. The term 'qualitative movement dynamics' is closely related to Laban's notion of effort. Effort describes the subtle dynamic characteristics of a movement with respect to intention and intentionality. For example, punching someone in anger or reaching for a glass can be described in similar ways when it comes to body organisation, however, the amount of force, strength and intensity are very different. Effort is the intention, the feeling tone of a movement that is expressed in four motion factors: space, weight, flow and time (see Burton, 2016).

The sixth characteristic of participatory sense-making, therefore, is that all meaning-making processes are grounded in the *qualitative dynamics of movement*. The *qualitative dynamic of movement* consists of three parameters: time, space and force. The three parameters are shortly described below.

Time/Rhythm

In the participatory sense-making process, the agents synchronise movements in terms of rhythm and timing. Collective sense-making occurs through coordination and interaction rhythm. Interaction rhythm must be understood here as the rhythmical attunement of bodies on several levels of movements, such as gestures, postures and facial expressions. Rhythm, in this perspective, is more than a temporal regularity, a repeatable pattern, or a beat. It is a temporal pattern – a timing of movements – that spans across and between individuals in such a way that it can take a momentum of its own (Di Paolo et al., 2010).

According to Tortora (2006), every movement has a rhythm. Without rhythm, we would not be able to read movement, it would be like a sentence without punctuation marks.

> All movement has rhythm and phrasing. These characteristics enable a person to relate, interact, and express himself or herself in the surrounding world. Rhythm creates the emphasis in a movement, whereas phrasing marks the unfolding flow of a movement sequence […]. An individual uses particular phrasings of his or her moving body parts to produce a unique rhythmic spatial organisation that communicates feelings and information to the surroundings. (Tortora, 20006, p.145)

Koch (2014) makes a distinction between internal rhythms and external rhythms. The internal rhythms are connected to our internal organisation, with the beating heart as the pulse that moves our body forward. We have our inner biological clock, with inner rhythms (such as circadian rhythm), cycles and periodicity (like menstruation). Breathing, pulse rate and brain waves all have a rhythmical structure. These internal rhythms reflect our emotional/affective state (Koch, 2011). Besides our biological rhythm, our body is also rhythmically conditioned by social and cultural factors. The communicative aspects of rhythm are socially and contextually determined. Our sense of time is for example culturally conditioned. Each person negotiates in her own way between these internal and external rhythms: each person, therefore, develops her own idiosyncratic movement vocabulary with rhythms that reflect physical, biological and psychological needs in which social, cultural and ecological factors – even climate - play a role (Koch, 2011).

Space

The body relates to space differently than to other objects. We do not (only) capture space with our senses, but spaciousness is determined by our bodily situation. It is through our bodies that we have access to space. Merleau-Ponty (1962, p.5) writes the following:

> Our body is not in space like things; it inhabits or haunts space. It applies itself to space like a hand to an instrument, and when we wish to move about we do not move the body as we move an object, we transport it without instruments […] since it is ours and because, through it, we have access to space.

It is important to note here that space is not considered here as an objective, Euclidian space but as a lived space. Space does not exist outside of us, but space is "an experienced phenomenon of a delimited embodied enactment that is enacted" (Gallagher, Martínez Muñoz & Gastelum, 2017, p. 83). We experience space through the kinetic/kinaesthetic dynamics of a movement. For example, concepts such as 'near' and 'far' are rooted in the body and in movement. We experience that something is near when it enters our personal space. Reaching, stretching, grasping, extending, widening, lengthening and expanding are all words that point to the spatial dimension of a movement. Spatial perception and action are thus deeply intertwined: people do not neutrally perceive space but "people perceive the world around us as a function of how we would act in that world" (Schnall, 2011, p.150). In other words, affordances (Gibson, 1979) shape the way we perceive space. This is in line with the enactivist notion of meaning, as action-oriented, and taking place through the structural coupling between the agent(s) and the environment.

Spatial dimensions, such as near, far, high, and low, are not objective features of space but they are experienced through our direct interaction with the surroundings. They are experienced in pragmatic terms (Gallagher, Martínez Muñoz & Gastelum, 2017). For example, when I try to throw a ball in a basket, I perceive the nearness of the basket in terms of my corporeal skill (how skillful I am in throwing a ball) as well as my interest and bodily state (how much interest do I have in throwing the ball in the basket, and how much energy do I want to put in the action). Even more, the perception of space is also influenced by my mood and affective state. If I am tired, I might experience the basket as very far away. Our visual perception of space is thus also influenced by emotions, affects and our general state of being. Schnall gives the example of visual perception of steep hills: when people are exhausted, they perceive the hills as steeper than they are in reality (Schnall, 2011).

Even more, our experience of space is also influenced by social interaction. Joint action not only constitutes "a social context, but reorganises the experience of space" (Gallagher et al., 2017, p. 91). Through processes of synchronization and coordination, the agents co-modulate their experiences and this not only leads to shared sense-making processes but also reorganises the (collective and

individual) experience of space. For example, when two agents carry a couch up a narrow staircase, they will perceive the narrowness of the staircase in terms of their shared action. Bodies, actions and surroundings together constitute the experience of space. In other words, our experience of space is situated and intersubjective.

Force

Force is the amount of energy in a movement. Force refers to the way a movement is performed, the tone and texture of the movement and the amount of energy being invested. It is directly linked to the qualitative dynamics of a movement. Force/energy is a dynamic property of movement, it may change in the course of a movement (Sheets-Johnstone, 2012). It is also highly dependent on external forces (such as gravity, momentum, friction, the weight of other bodies, etc.).

In sum, there are three elements (attention, movement and affect) and six components (decision-making-in-action, rhythmic coordination and synchronization, kinaesthetic pleasure, creative potential, ambiguity/open-ended nature and qualitative movement dynamics) of the participatory sense-making process in physical play and dance improvisation. See Figure 55.

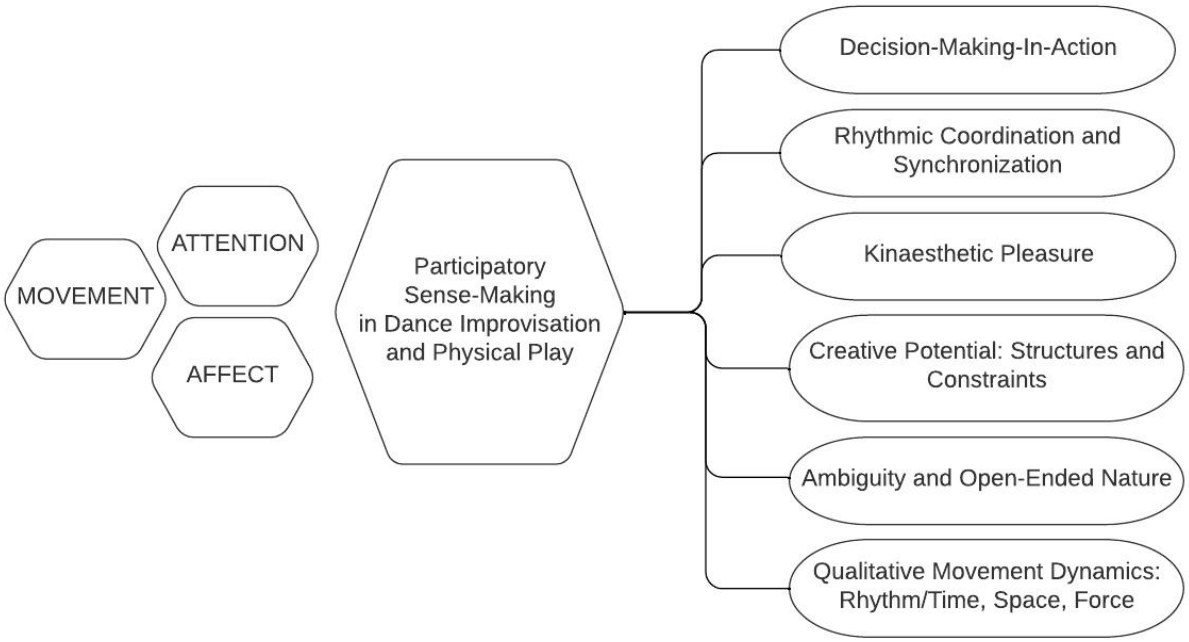

Figure 55. Participatory sense-making model, specifically devised for physical play and dance improvisation

Creative Card Deck and the PSM Model

The Re-Play/Re-Move toolkit consists of a creative card deck and three additional workshops[70]. The card deck is based on the PSM model. The card deck contains over 100 play and movement cards in eight categories (see Table 7). In addition to the card deck, three workshops have been developed.

The card deck is developed in close harmony with the model that is described above (see Figure 55). In the development of the workshops, I choose a different angle. The three workshops are closely related to my own artistic process since re-enactment once again is the starting point of creative movement exploration. However, this time it is not professional dancers who re-enact the

[70] See: https://www.researchcatalogue.net/view/1291603/1291604

physical play events of children, but children themselves are now going to re-enact existing artworks within the field of fine arts, performance art and dance. Three creative workshops have been developed. Each workshop has a different theme: one is dedicated to touching, the other to creative movement exploration and the third one to materials. The goal of the workshops is not to copy or imitate the dance or artwork, but to use it as a creative source for movement exploration.

At this phase of my research, I feel the need to reverse my working method in order to give young children the opportunity to relate in their own way to the artistic work of dance professionals and choreographers. Reversing the process is important since I want to establish a two-way dialogue between young children and dance professionals. Re-enactment is used now as an artistic tool that gives children the opportunity to leave their own mark, or affective trace, on a dance work. Creative dance workshops, especially in more traditional approaches, can sometimes be childish. The three workshops aim to embrace the creative potential of young children, to take them seriously and to see what we (as adults) can learn from them. It is also for this reason, that I included the work of some well-known choreographers and performance artists. This way, I invite and welcome a different way of thinking about the child that is more emancipatory, and that takes away predominant assumptions of the adult as the one that 'knows' and the child as 'immature and incapable' (Gibbons & Nikolai, 2019). I have chosen three themes for the workshop: touch, creative movement exploration and materials. The first workshop is inspired by the Touch Project. I use a similar set-up: starting with clay and tactile boards, then moving to drawing/performing (Trisha Brown) as a way to make contact with the floor, paper and body, and finally providing basic contact exercises in which children can explore the intersubjective dimensions of touch. In the workshop on creative movement exploration, I use dance works that take daily movement as a starting point for the artistic process. The creative movement workshop has a similar set-up as the category 'movement ecology' in the living archive. Basic movements such as running (Monty Python and Kopergieterij), walking (Richard Long), falling (Deniz Darzacq), climbing (Simone Forti), balancing/leaning (Trisha Brown), moving in small spaces (Willi Dorner) and impossible movements (Deborah Hay), are used as an t entrance point for further movement exploration. The third workshop takes materials/objects as the starting point for creative movement exploration. Children often incorporate open-ended materials in their play, and so do artists. In this workshop, I use materials that are easily available, safe and have multi-modal characteristics. Blankets, cylinder cardboards and tubes are examples of materials that can evoke a whole range of responses in each child[71].

The main goal of the Re-Play/Re-Move Toolkit is to *stimulate bodily creativity*. Physical play and dance improvisation can both be seen as creative movement practices. Already Huizinga (1955) argued that play and dance are in many aspects identical, and when we talk of play, we inherently talk about dance too. Caillois (2001) also points to the relation between dance and play. According to him, dance directly links to vertigo, the temporary disruption of perception that leads to disorientation, dizziness and the temporary destruction of stability. Dance is a form of disorderly movement that causes pleasure. Bodily play and dance can both be seen as kinetic/kinaesthetic happenings "in which the sheer exuberance of movement dominates and in which a certain freedom of movement obtains" (Sheets-Johnstone, 2005, para. 29).

Bodily creativity is here understood as the ability of children to express themselves in a kinetic/kinaesthetic way. The goal is to actively engage children and to trigger their curiosity. Most of the time simple, daily movements are used (such as walking, running, falling, balancing, climbing,

[71] Because of Covid-19, I was not able to test the toolkit in a school (which was my original plan). Some parts of the workshop on Touch and Tactility were tested with a small group of preschool children in the age of 3-5 years. See Hermans (2022).

etc.) – emphasizing the expressive quality of a movement instead of virtuosity. Re-Play/Re-Move invites children to explore their own, idiosyncratic way of moving. The aim is to expand and nourish children's interest in physical play, creative movement and dance improvisation. For that reason, the Re-Play/Re-Move Toolkit consists of movement games, playful exercises as well as improvisational tasks, i.e. tasks that build a connection with the real and imaginary world of young children. The as-if cards and the impossible action cards, for example, trigger imagination and allow children to intertwine the imaginary with the concrete kinetic/kinaesthetic dimensions of a movement.

I advocate "a pedagogy of listening and radical dialogue" (Rinaldi, as cited in Anttila & Sansom, 2012, p.205), where teachers carefully observe the creative process and personal growth of the children. This also means that we break with the traditional pedagogical hierarchy. Children themselves are considered the agents of their own creative process. Teachers learn alongside the children: they actively engage in the creative process both as a guide and as a resource[72]. Most importantly, the teachers (just like the children) should have a playful attitude, engaging with and expanding their own creative capacities – allowing imagination to come into full play. The teachers invite the children to experiment and play together, in a creative process of "moving, wondering and waving through a maze of possibilities and uncertainties" (Sheets-Johnstone, 2013, para. 11). As already mentioned before, physical experimentation and creative movement exploration are an intrinsic part of the lives of children. Although adults play and experiment too, play is the home ground of children. Play is what children do, it is their main project, and it is their way to express meaning and creatively engage with the world. It, therefore, seems only logical to give children full agency over their own creative movements and thoughts.

Finally, although it seems nowadays almost forbidden in our current society to do something just because it is fun - especially in the context of school curricula and learning outcomes - I advocate here a policy of fun (Bond, 2000; Stinson, 1997). In both physical play and dance improvisation children engage in the sheer joy of movement, in terms of power, energy and a sense of freedom. Karen Bond (2000) and Sue Stinson (1997) refer to this as 'fun of moving', and their research shows that children and youngsters most often describe dance as a fun activity. Fun here should not be understood in simple terms such as amusement or entertainment. The word fun covers the whole range of pleasures "from excitement and relaxation, to the enjoyment of contact in a social group, to the multi-sensory and intellectual satisfactions of creating, performing and watching dances" (Bond, 2000, p.7). Even more, fun is thus not something superficial nor is it a by-product of play and dance improvisation. Fun needs dedication, commitment and responsibility.

Creative movement exploration should first and foremost be an investment in the kinetic/kinaesthetic pleasures of the body. To engage with the body is to engage in the fun of running, balancing, climbing, jumping, falling, etc. Or to put it in the words of Maxine Sheets-Johnstone (2013, para.16): "Where movement and play come together, movement can be experienced as a kinetic joy ride".

[72] This is in line with the Reggio Emilia approach that was developed by pedagogue Loris Malaguzzi in collaboration with parents in the city of Reggio Emilia. The Reggio Emilia approach specifically focuses on early childhood education. It is an innovative and creative approach, centered around the idea of children's multiple languages (the so-called hundred languages). Teachers in the Reggio Emilia approach are also learners, just as children. Teachers are "collaborators and reflective practitioners who facilitate children's discovery and learning" (Westerberg & Vandermaas-Peeler, 2021p.1260). In the Re-Play/Re-Move toolkit, the teacher takes up a similar role.

Categories[73]	PSM Model	
RHYTHM	Rhythm/ Qualitative Movement Dynamics	8 cards
COLLABORATION	Rhythmic Coordination and Decision-Making-In-Action	8 cards
PATTERNS	Creative Potential: Structures/Constraints	16 cards
SPACE	Qualitative Movement Dynamics	10 cards
RITUALS	Creative Potential: Structures/Constraints	20 cards
AS IF	Ambiguity/Open-ended Nature	40 cards
VERB LIST	Qualitative Movement Dynamics/Affect	3 lists
IMPOSSIBLE ACTIONS	Ambiguity/Open-Ended Nature	14 cards

Table 7. Categories Creative Card Deck

Other toolkits and play practices

In this paragraph, I aim to sketch a broader context of the Re-Play/Re-Move Toolkit. Other toolkits and approaches have been developed to foster creativity, physical play and dance improvisation. For my artistic research, three projects/initiatives are relevant: the Sensorium Toolkit for Dance developed by ICK (2016), Play as Radical Practice developed by Albert Potrony (2016-2018) and Playing Up, A Live Art Game for Kids and Adults by Sibylle Peters (2016). All three will be discussed shortly below.

The Sensorium Toolkit is an instrument for dance teachers to facilitate creative movement exploration in pupils through the use of the senses (ICK, 2016). The toolbox is developed for participants from the age of 10, no prior dance experience is required. The Sensorium Toolkit is inspired by the artistic vision and choreographic practice of Emio Greco and Pieter C. Scholten[74]. They write:

> The Sensorium Toolkit gives teachers guidance during lessons in which the connection between body and mind is paramount. Images, sounds, smells and textures form the starting point for physical discovery and for the natural process of concentration, information processing, creative association, imagination and ultimately layered movement. (ICK, 2016 para. 2)

The toolkit consists of four categories of sensorial materials: seeing, feeling, hearing and smelling as well as playing cards, support cards and a manual. The manual not only explains how to work with the sensorial materials but also provides information on the role of the teacher, the structure of the class and background material. The toolbox is quite expensive (150 Euro) and therefore not available for everyone. I bought the box, also for my students at the Amsterdam University of the Arts, and what immediately stands out is the design and the careful selection of sensorial materials. There are vials with seven different smells, seven black velvet pouches with sensorial materials, fourteen sound fragments on a USB stick and seven visual cards. It feels like a box full of pleasant surprises and it certainly triggers the imagination and sensorial awareness. The goal of the toolkit is to translate sensorial stimuli into movement through imagination. For me, the Sensorium Toolkit is inspiring because of the combination of sensorial materials and play cards. It however differs from the Re-Play/Re-Move toolkit in many ways. First of all, Sensorium is intended for teachers who work with

[73] All categories of the card deck contribute and stimulate kinaesthetic fun/pleasure.

[74] See https://www.ickamsterdam.com/en/academy/kids-schools/sensorium-toolkit-21

participants from the age of 10. The Re-Play/Re-Move Toolkit targets a younger audience (4 to 10 years old). Even more, Sensorium is a dance tool that can be used for dance improvisation and choreography. The Re-Play/Re-Move toolkit, on the other side, takes creative movement exploration as its main objective and integrates play with dance. A final distinction is that Sensorium takes the sensorial as the starting point for movement exploration. Although the senses play a role in Re-Play/Re-Move too, the focus lies foremost on the different categories of participatory sense-making.

The second toolkit, Play as Radical Practice, is developed by Albert Potrony, a visual artist with a participatory practice examining ideas of community, identity and society (Serpentine Galleries, n.d.). Play as Radical Practice was commissioned by Serpentine Galleries' Changing Play Programme and developed during a 3-month residency at the Portman Early Childhood Centre. Potrony's approach is provocative and radical, he openly questions the compartmentalization of education and instead advocates a more holistic, creative approach that gives not only full authorship to the children but also underscores the significance of free play. Potrony works with open-ended materials such as transparent sheets, reflective rolls, foam tubes, etc. and he lets children develop their own ways of creative inquiry. He perceives children as "competent, complex and intelligent individuals, capable of participating in the values, beliefs and understandings that shape their lives" (Serpentine Galleries, n.d., p.5).

The toolkit is freely available and consists of a booklet, a 24-piece card game and an accompanying film. Each of the cards in the game contains an image, a provocation (a question, a quote or a statement), a theme (standardisation, space, chaos/order, relationships) and an action (shuffle, connect, match, deal, stack, discard, collect). The toolkit is described as an invitation to play, a conversation tool that has no rules. This last one is the most striking about the toolkit. The toolkit gives complete ownership to the children, as it has no specific rules, structures or boundaries. It is free, wild and messy. It is imaginative. It allows children to follow their own course of play, and as a result, imagination naturally coincides with the open-ended materials. Nothing is dictated, there are only suggestions. Teachers don't intervene but play along or aside. In the video[75] we see for example a girl who is entangled in a transparent sheet. First, it is a jail, a second later it is a tent, a house, and then it becomes a waterfall. Imagination jumps from one thing to another, in a cascade of associations that has no rational logic but springs from the playful interactions with the material. I am inspired by the open-ended approach of Play as Radical Practice and I appreciate its radicalness. Potrony's toolkit is in many ways radical because it not only encourages free, wild play of young children but it also invites teachers and parents to critically rethink the educational system. Re-Play/Re-Move similarly has an open approach where children are in the lead and full authorship is granted to the children.

There are however also differences between Play as Radical Practice and the Re-Play/Re-Move toolkit. First of all, Potrony's toolkit is entirely based on the concept of free play. Open-ended materials play an important role because they are vessels for imagination. In the Re-Play/Re-Move toolkit, materials play a role too (especially in the third workshop 'With Materials') but there are also sessions where no materials are used, and where the body/movement becomes the sole vehicle for creative exploration. Even more, Potrony's toolkit is dedicated to free play while the Re-Play/Re-Move toolkit takes physical play and dance improvisation as the vehicles for creative movement exploration. Finally, Play as Radical Practice is specifically developed for preschools (toddlers) where the Re-Play/Re-Move toolkit takes children between 4-10 years as the main target group.

The third and final toolkit/card set that I wish to discuss here is 'Playing Up, a Live art Game for Kids and Adults' developed by Sibylle Peters (2016) and produced in collaboration with Live Art

[75] See https://www.serpentinegalleries.org/whats-on/play-as-radical-practice/

Development Agency, Tate London, Best Biennal (Sweden) and Live Art UK[76]. Playing Up explores the cross-generational dimension of Live Art. Playing Up can be played with family, friends, neighbours, etc. It draws upon seminal works within the Live Art scene (such as the Guerilla Girls, Vito Acconci, Forced Entertainment, Marina Abramovic, etc.) and it takes the form of a card game that can be played with kids and adults together. There are six categories (body & perception, out & about, memories & collections, beings & things, dare & danger, science & thinking) and each card contains a specific Live Art piece. It is simple and easy to use: you select a card together, read it out loud and follow the instruction. It is fun to do and it can bring you into hilarious situations where you make up a ketchup fight, build your own What Happens Next Machine, make a tour around the neighbourhood, scream for five minutes or you follow a random person on the street.

The cardset only costs 10 pounds and is easily purchased from the website. I played the game with my daughter a couple of times, and as I said, it was fun to do and it brought us to unusual places. Even more, the card set provides a wonderful overview of the live art scene containing not only works from the sixties/seventies but also contemporary artists like David-Weber Krebs, Showcase Beat le Mot and Eva Meyer Keller are included. It's got humour and a certain lightness that makes it accessible for (young and older) children. The only thing I noticed is that you tend to move quite quickly through the cards, as instructions are short, and the idea is often more appealing than doing it in reality (for example letting your hair cut by a child, performing with an animal, walk an adult on a leash down the street are more thought-provoking than something you would do in reality).

In the Playing Up approach, children are perceived as competent beings who are perfectly capable of making their own decisions. Sybille Peters advocates a (pedagogical) approach that gives autonomy to the children and agency over their own creative experiments. Overall, Playing Up has been an inspirational source for me and of the three toolkits/card sets that have been discussed here, it overlaps the most with RePlay/ReMove. However, there are also significant differences. First of all, in both toolkits, existing artworks are the starting point for creative (movement) exploration. In Playing Up, however, the goal is to explore the cross-generational dimensions of live art. In Re-Play/Re-Move, the artworks (in the three workshops) are used as a way to access new, creative potential through the re-enaction of existing artworks in the field of dance and performance art. Second, Playing Up takes place in informal contexts (at home, on the street) while RePlay/ReMove covers both formal and informal contexts. Finally, Playing Up is concerned with live art but also conceptual art while RePlay/ReMove is specifically developed for creative movement exploration.

Finally

Although there are several toolkits available, RePlay/ReMove is the only toolkit that combines physical play with dance improvisation. The toolkit provides playful exercises, movement games and improvisation tools that foster creative movement exploration in children in the age of 4 -10 years old. The toolkit is based on the participatory sense-making model and combines imagination with physical movement tasks.

The pedagogical approach of RePlay/ReMove gives authorship to the children, providing them with means/materials to explore their own bodily creativity, agency and being in the world. It stimulates children to explore their own embodied ways of sense-making and relating to the world – and as such, it is a creative tool for children to learn about themselves, others and the world. As Anttila and Sansom state, both physical play and dance can be seen as conduits "to nurture playfulness, creativity, imagination, and motivation to learn, especially at that vital stage of young children's lives when these dispositions can begin to be diminished" (2012, p.191).

[76] http://playingup.thisisliveart.co.uk

That being said, it also must be noted that the RePlay/ReMove toolkit is still a work in progress. The next step is to test the RePlay/ReMove with children. Due to Covid-19, this has not been possible (only on a small scale). The toolkit should preferably be tested in formal situations (such as Dutch primary schools) as well as informal situations (closer to home). In the testing of the toolkit, it is important to not only involve dance teachers but also kindergarten teachers, (performing) artists and parents. In any case, children are in the lead. The eventual aim is to turn the RePlay/ReMove toolkit into an open-source toolkit where children themselves contribute and further develop the creative content.

Chapter 12. Final Remarks on Physical Play and Dance Improvisation as Participatory Sense-making Processes

In this final chapter I give a glance at the past and a glimpse of the future. First, I return to where it all started: close at home, with the spontaneous play events of my children. I describe physical play and dance improvisation as fluid practices where rhythm is intensified and experienced in the flesh. From here, I move to enactivism and the concept of participatory sense-making. I revisit the two research goals that I formulated in chapter one and I reflect on the possible contributions this research study has made to articulating the kinship between physical play and dance improvisation. I then return to the subquestions that I formulated in the first chapter, and I critically reflect on the three different phases of the research process: the living archive, the re-enactments and the Re-Play/Re-Move toolkit. I close the chapter with some suggestions for future artistic research.

Going back to the beginning: where it all started

At the beginning of this thesis, I wrote down how this artistic research is shaped around the messiness of daily life, as the physical play events of my own children form the departure point of my research. It is an art practice that takes place *close to home*, it is immediate and intimate, as I am a mother, artist and researcher at once. In many ways, these small instances of physical play can be seen as *micro-adventures*, the small little things in daily life that happen spontaneously and that trigger a playful state. Playfulness resides in the intimate, non-habitual connections that are temporarily established between the body and its surroundings. Play, one could say, is full of apparent contradictions. "It is lighthearted and exuberant, but also serious and intense." (Gordon & Esbjörn-Hargens, 2007a, p.1) It is spontaneous, but it also involves strategy and planning. It is safe and risky. It is actual and virtual. It requires attachment and detachment. It is easy and it is difficult. It is precisely play because these apparent contradictions can exist beside each other – and they can do so because play (just as dance improvisation) has no material interest, nor a direct goal (Huizinga, 1955). As a result, both play and dance improvisation take place within their own boundaries of time and space.

Even more, in play and dance improvisation participants can practice their skills and broaden their movement repertoire in ways that exceed the daily and habitual in every possible way. With this I mean, that a trained dancer has acquired a set of skills, such as the flying-low technique[77], that has hardly any (direct) purpose in daily life. The same is true for play: a child can be a very good spitter, or good at stone skipping, brilliant at talking like Donald Duck or excellent at cannonballing (Mouritsen, 1998). In daily life, this is of no importance at all, but in play it is.

For me, this is of the most important things of physical play and dance improvisation, namely to explore possibilities of movements (and skills) that have no direct purpose or function in daily life. First of all, physical play and dance improvisation allow us to expand and break from our habitual movement repertoire. Second of all, in both physical play and dance improvisation, movement is considered as a *meaningful experience* in and of itself (Sheets-Johnstone, 2003). In both physical play and dance improvisation there is a *kinetic urge*, an impulse and a necessity to move just for the sake of movement.

[77] The flying-low-technique of David Zambrano is a technique that uses simple movement patterns to move fluently and dynamically in and along the floor.

Even more, both physical play and dance improvisation can be seen as bodily activities in which *rhythm itself is intensified* through repetition and difference (Deleuze & Guattari, 1987). The players/dancers become sensitive to the not-yet, the in-between, the interval, or to what Manning (2009) calls 'the elasticity of the moment'. Rhythm is the vehicle through which the players/dancers engage with the not-yet. The players/dancers become sensitive to the possibility of change, of any rupture that manifests itself in patterns of rhythm (that are continuous and discontinuous at once).

This increased sensitivity to the not-yet is often accompanied by alertness, wide-awakeness, enthusiasm and readiness for surprise (Gordon & Esbjörn-Hargens, 2007b). And not to forget the thing that is often overlooked: *laughter*. Sheets-Johnstone (2003, p.415) is right when she states that it is not enough to say that play (or dance improvisation) is a pleasurable activity. Clearly, this is an understatement. Physical play is "most commonly, great and overriding fun" (p.414). Just watch a bunch of children jumping on a trampoline, and you will immediately notice how jumping itself as a movement is compelling, in a motivating as well as attention-getting sense (Sheets-Johnstone, 2003). Go to a playground, and you will notice that this physicality is accompanied by laughter and by noises such as yelling, screaming, squealing and even growling or grunting. Also in dance improvisation, movement is often accompanied by the making of sounds – from explicit breathing to vocal painting.

I suspect this is because laughter as well as expressive sounds are channels of affects - just as movement is. Laughter, expressive sounds and movement are capable of bypassing language, and because of this, they can directly tune into affects, intensities and forces. This is also the reason why play and dance improvisation are not 'just fun' – as if fun is merely something peripheral and marginal. Fun requires an open attitude and a willingness to break with the conventional frames of daily life. Throughout this thesis, I therefore refer to this as 'serious attention to having fun', because a playful attitude requires dedication, commitment and engagement in the affects/intensities that unfold at the moment.

According to Sheets-Johnstone (2003, p.418), kinetic fun is "engaging and delightful because it resonates in feelings of aliveness radiating dynamically through a kinetic/tactile-kinaesthetic body". Even more, affects and feelings of aliveness do not only resonate *through* the body but also resonate *in-between* bodies. The interaction dynamic itself brings forth affects, forces and intensities. Both dance improvisation and physical play can be seen as creative practices that take movement itself as the main vehicle for the co-regulation of intentions and affects. It is here where sense-making comes in.

Once more: physical play and dance improvisation as participatory sense-making processes

In this artistic research, I have explored the kinship between physical play and dance improvisation against the theoretical backdrop of enactivism and De Jaegher and Di Paolo's concept of participatory sense-making (2007). In chapter one, the following main research question was formulated: *What are the elements that constitute the participatory sense-making process of both physical play and dance improvisation?* In this paragraph, I discuss and answer this question.

The relation between enactivism and dance improvisation/physical play is twofold. First of all, enactivism can offer an inspiring theoretical framework for articulating the kinship between physical play and dance improvisation. Second, physical play and dance improvisation may, in turn, offer a creative source for examining and extending the enactive theory and the concept of participatory sense-making.

In this thesis, physical play and dance improvisation are seen as creative activities that take the kinetic/kinaesthetic dimensions of movement as the departure point of shared sense-making processes. Sense-making arises through a double-layered process of kinetically attuning to the movements of others while at the same time kinaesthetically attuning to one's own movements.

The concept of participatory sense-making (De Jaegher & Di Paolo, 2007) has been a fruitful concept throughout this artistic research. The concept is used to explain how sense-making emerges in the interactional dynamic. In this thesis, physical play and dance improvisation are both considered sense-making activities in which movement and perception/sensation are deeply intertwined, and where "a meaningful world is 'brought forth', or 'enacted', through a structural coupling with the environment" (Van der Schyff, 2015, p.2).

Physical play and dance improvisations are manifestations of life (Van der Schyff, 2015). In playing and dancing, we connect to our own bodies, to the surroundings and the bodies of others in a vitalizing way. You only have to jump a few times in the air or to run as fast as you can, and you understand how movement itself is a life force, how movement resonates with feelings of aliveness. Now if you jump together with someone else, for example on a trampoline, these life forces start to resonate with each other in such a way that new creative potentialities emerge.[78] In other words, the interaction dynamic itself becomes formative for the sense-making process.

In this artistic research, I identified three basic components that contribute to participatory sense-making in both physical play and dance improvisation (see Figure 55). Physical play and dance improvisation are activities that 1) take movement itself as the source for creative exploration, 2) are affectively charged and 3) bring attention to the kinetic/kinaesthetic and tactile aspects of the interaction.

In addition, I added six elements to the model. Physical play and dance improvisation are seen as *self-organisational practices* where movement is created in the moment. The players/dancers need to deal with structures and constraints of which some are set on forehand, while others arise during the creative process. *Decisions are made in the action*, using present resources while taking in the constraints, rules and adaptive pressures that emerge in the moment (Kimmel et al., 2018). Physical play and dance improvisation are both *open-ended*, the outcome is not set on forehand, and surprise, as well as the unexpected, are very much welcomed. However, this doesn't mean that there is no planning involved. Play and dance improvisation both require skill, training and preparation. Even more, the participants have to be increasingly sensitive to temporal changes, adjusting to what happens in the moment and forefeeling what comes next. Physical play and dance improvisation are therefore always forward-going. In both activities, movements, affects and intentions are (rhythmically) synchronised in resonance with others and with the direct surroundings. In other words, movements are organised through *the rhythmic coordination* of movements and affects. In this process, *creativity* emerges as a novel response to changing, situational and/or relational cues. Furthermore, the participatory sense-making process in physical play and dance improvisation is deeply rooted in the body and movement. Meaning arises through attunement to the ongoing *qualitative dynamics of movement* in terms of force/energy, time and space. Finally, in physical play and dance improvisation movement itself is *a source of pleasure*. Both are activities that open up "corporeal-kinetic possibilities "and "a space for innovation, a field in which creative energies can surge" (Sheets-Johnstone, 2003, p.418).

[78] As I have already argued elsewhere, even if you dance or play alone this is still considered a relational act. A jump, for example, can never be performed without a ground, without gravity, without the air. It is through the intimate connection between surroundings, things/materials and body that 'a relational shape shifting' can take place (Manning, 2009).

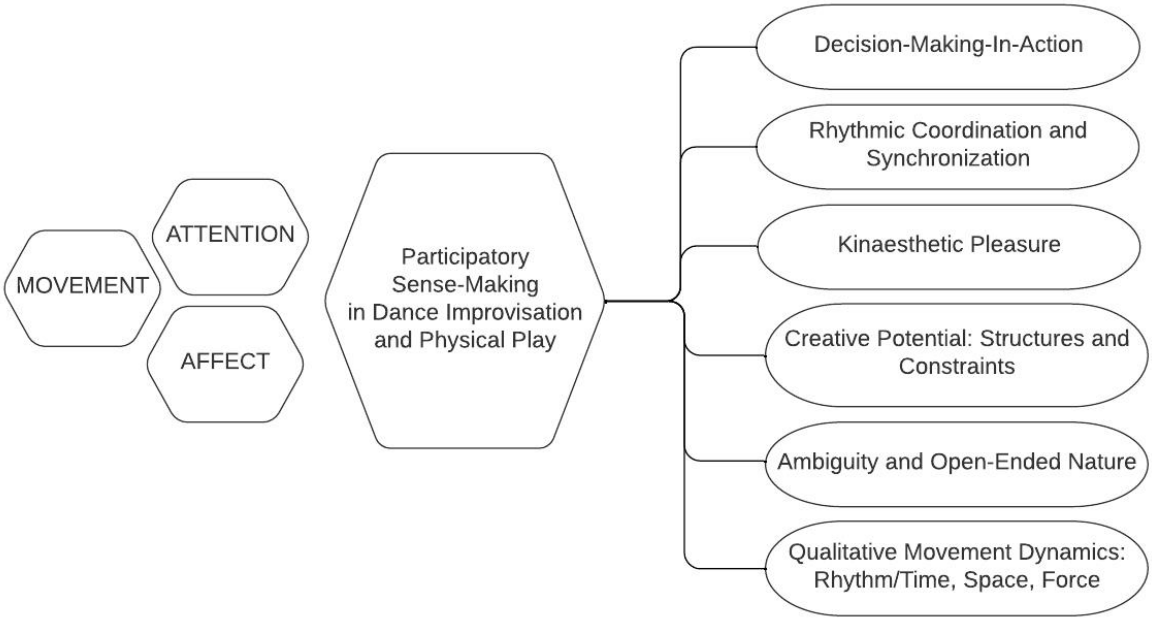

Figure 55. Participatory sense-making model for physical play and dance improvisation

This preliminary participatory sense-making model of physical play and dance improvisation is not yet complete. I do believe some ingredients are still missing. For example, although the model does point to the role of the kinetic/kinaesthetic and affective body in the sense-making process, I think more could be said about sensorial awareness – specifically how internal sensing and external sensing both contribute to the sense-making process. How are internal sensations transformed and externalized in movement with a qualitative dynamic? How can internally felt sensations and affects be expressed in movements? The role of imagery and narratives should be taken into account too. Imagery allows us to shift our experience, our current sensorial state, our engagement with others and our surroundings. For example, if a dance teacher gives the assignment to move explosively, it can help to give the image of boiling water. By linking imagery directly to the felt dynamics of a movement, new registers of sense-making become available. It is the entanglement of moving, sensing and imagining that gives rise to new values of sense-making (see Figure 56). It is also here where higher-order cognitive processes enter the picture[79].

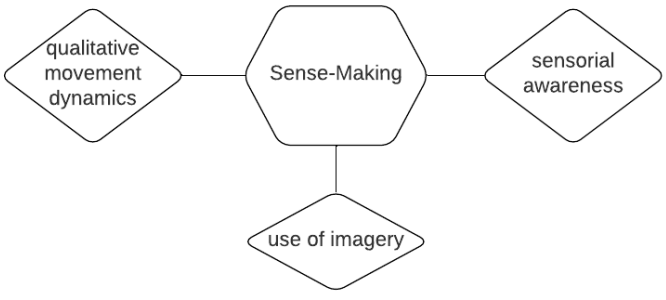

Figure 56. Sense-making: moving, sensing and imagining

[79] Anttila (2003) draws similarly a connection between imagination, movement and the sensing body. In reference to Damasio (1999) and Greene (1995), she argues that imagination is the production of new images/responses. It is the opening up of new possibilities that arise in the moment. Even more, imagination is multimodal, as it uses input from all the senses and movement. Through the ongoing dialogue between movement, imagination and sensation, new registers of meaning-making become available to us.

Enactivism: how meaning and values are generated in physical play and dance improvisation

The second line of thought in this final chapter is concerned with the question how physical play and dance improvisation, as unique participatory sense-making activities, can deepen and extend the enactive theory. As I already stated in the introduction chapter, enactivism has been criticized for not being able to account for higher-order cognitive processes such as memory, imagination and abstract problem solving. It seems as enactivism is bound to the here and now and that it can only explain basic (lower level) cognitive processes of sensorimotor engagements. Riding a bike for example can be easily explained by enactivism, but what about playing chess, solving a mathematical problem or planning a holiday trip? What about cognitive processes that have no specific locus, that deal with nowhere and no time (such as abstract thought)?

Di Paolo et al. (2010) argue that although enactivism is acknowledged in many sectors, it is still not water-proof when it comes to higher-order cognitive activities where meaning is detached/decentred from its actual context. Di Paolo et al. mention the following activities that allow for ambiguity of meaning: play, dance, music and ritual. Since physical play and dance improvisation are the key concepts of this artistic research, it might very well be possible that this artistic research can contribute and extend the enactive approach to more complex cognitive activities.

I consider physical play and dance improvisation as special cases of participatory sense-making. Since both activities bypass language, and therefore straightly tap into the kinetic/kinaesthetic and affective dimensions of experience, they serve as good candidates to understand how meaning-making is embodied, situated and relational. Let me give a concrete example of a rough-and-tumble play between my son and one of his friends. The event took place more than six years ago. My son was eleven years old at that time, and so was his friend. It was a Saturday afternoon: the boys had just returned from a hockey game and were still very excited and energized. They both collected a few pillows and then started to attack each other on 'the battlefield' (the blue carpet) in our living room. They placed a pouf in the middle: this pouf marked the center of the battlefield. With every attack, the two boys started to collect more materials. They only used soft and safe materials that would not harm the other person. The friend for example took a blanket from the couch and threw it over his shoulder. 'I am the king' he declared, 'and you are a servant' which resulted in another attack.

A few things can be said about this play event. First of all, as already becomes clear in the example, the concrete situation is infused with new meaning. We see how in the play event new, associative frames of meaning emerge. The blanket has become a cloak, the blue carpet a battlefield and the pouf is now a war zone. What is even more relevant is that it is not the objects as such, nor language that allows for ambiguous meaning-making. It is the *entanglement of movements and affects* that allow for the creative unfolding of potentialities.

There is more. The boys have just come home from a hockey game, they are still excited and in for a good (playful) fight. This can best be described as an elevated sense of aliveness, an unresolved excitement and a bodily readiness for more. The air is vibrant with movements and affects that have not found their proper expression yet. In their play, the boys together find openings and passages for these felt forces and intensities. Here we see how sense-making unfolds through the dynamic entanglement of "moving and being-moved, affecting the other and being-affected" (Mühlhoff, 2015, p.1002). My son and his friend, together, are moving the relation. Within this interval, openings and passages are produced through which intensities and affective forces flow back and forth. Meaning itself resides entirely in the corporeal domain: in other words, values are expressed and come into being through the qualitative dynamics of a movement (such as speed, force, range, and direction). Repetition and difference play a role here too. My son and his friend repeat the attack over and over again: they prepare for the fight, take their starting position and look each other

in the eye thereby suspending the moment of attack, then comes the release, the play fight and the resolution. There is a moment of relaxation, when they are just laying on top of each other, then they scramble up again, collect their weapons, take up their starting position and get ready for another fight. It is important to note that this is not a repetition of sameness, but a *repetition of difference*, that is, within the repetition pure forces and sensibilities are experienced (Deleuze, 1994; Deleuze & Guattari, 1987). Repetition is here seen as an *intensifying of rhythm*. Repetition is a virtual force that accelerates/decelerates time, alters space and transforms the meaning-making process.

New associative frames of meaning arise within this relational entanglement. These associative frames can be expressed in words ('I am the king') but words (language) are not necessary for the unfolding of the play event. When the two boys enter the living room and take their position at the two opposites of the carpet, they don't say: 'This is the battlefield and we are now going to fight'. No, it is in the (shared) physicality, that the boys take a leap out of the conventional frame (this is a carpet) and pick up a new associative frame (this is a battlefield). They can use language to confirm this new imaginary frame, but it is certainly not necessary. Instead, they use all kind of body signals (such as laughing and play-face) to make clear that they now enter together a new imaginary zone.

In dance improvisation pretty much the same thing happens, but now the sense-making process is even more abstract and ambiguous. Dancers engage in movement, purely for *the sake of moving*. They reach out, not to grab something but for the sake of reaching. They roll on the floor pure for the sake of rolling. They jump in the air pure for the sake of jumping. Just as in play, the sense-making process entirely resides in the kinetic/kinaesthetic-affective domain. The tensional, affective qualities that are already present in daily life actions (think for example of sawing a piece of wood, running to catch the bus, lifting a heavy stone) are intensified. This is because movements are stripped off their daily function. What remains is the (immediate) qualitative structure of movement – "its intensity, expansiveness, rigidity, unswervingness, suddenness, etc." (Sheets-Johnstone, 2012, p.46). Now, since each movement has an affective tone, we can immediately see how dance improvisation unleashes affects, intensities and forces. As I have argued throughout this thesis, affects do not only resonate between two or more living bodies but also between bodies, materials and surroundings. All participate in the creation of meaning (see also pages 109 and 117).

Now the most important question here is, how higher-order processes are involved in the process of meaning-making. As I already stated earlier (see page 19) lower-level cognitive activities often deal with the here and now (such as skills and goal-oriented action) while higher-level cognitive activities have no locus (such as abstract thought). One important condition for higher-order processes is that meaning is ambiguous, it is not tied down to the situation. Di Paolo et al. (2010) refer to this as "the capacity to 'unstick' meanings from a given situation and 'stick' novel ones onto" (p.36). The example above shows how experience is bracketed in such a way that new associative frames arise.

Figure 57 shows how new values[80] might emerge in the sense-making process of both physical play and dance improvisation. Physical play and dance improvisation are ways to experiment with and to re-invent different bodily ways of connecting with self, others and environment. Both activities require a willingness to throw off existing (situational) constraints and to welcome new constraints. By moving the constraint, new potentialities arise. Even more, both physical play and dance improvisation can detach "experiences from their context of origin, creating a new frame that allows for greater freedom, interactivity, and creative possibilities" (Gordon & Esbjörn-Hargens, 2007b, p.65). Through the bracketing of (existing) frames, the participants step outside the actual frame and incorporate new, associative frames (the virtual).

[80] See footnote 32, page 50, for an explanation of value and value generation.

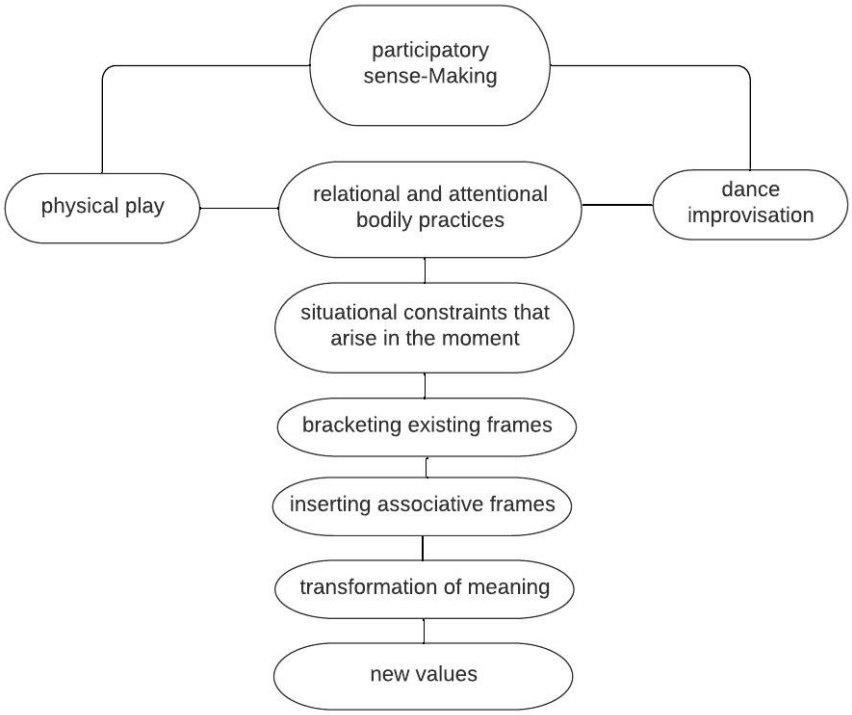

Figure 57. Value-making in the sense-making process of physical play and dance improvisation

I hope to have shown in this paragraph that physical play and dance improvisation can enrich the enactive approach – specifically when it comes to participatory sense-making processes. However, it would go too far to state that the "scaling-up problem", i.e. the problem of not being able to account for higher-order processes such as abstract reasoning, imagination, counterfactual reasoning and complex problem-solving, has now been solved (Gallagher, 2019, p.805).

There are still some unresolved issues. First of all, in this artistic research, the focus lies on tacit, bodily knowledge. Play and dance move beyond language, they tune directly into the lived experience of every agent that is involved. As a result, the sense-making process in physical play and dance improvisation is not only highly ambiguous and fluid but also to a certain extent ungraspable, hidden and 'silent'. Meaning is expressed through corporeal concepts and except for some verbal comments ('I am the king now and you the servant'), there is no 'evidence' of how new values and associative frames arise within the interaction. Physical play and dance improvisation are both creative activities that bypass language and that take bodily interaction as a central source for meaning-making processes. In both activities, "non-symbolic sensations generated by physical action and multisensory engagement become interconnected with symbolic knowing, and lead towards complex meaning-making processes within the social and cultural world" (Anttila, 2019, p. 81). In future research, it would be worthwhile to examine how non-symbolic sensations are linked to symbolic knowing[81]. This could be done by asking the participants (children as well as dancers) to verbalize their experiences in terms of sensations and thoughts while they are playing and dancing (for example with a mobile recording device).

[81] Lakoff and Johnson (1980) have explained the role of embodiment in abstract thinking. According to them, we develop image schemas (i.e. recurrent patterns that structure our ongoing activities) based on our lived experience. Image schemas operate in-between abstract, propositional structures and concrete images. The perceptual and sensorial information is stored in image schemas that in turn give rise to a conceptual representation.

Second of all, the concept of participatory sense-making is usually applied to daily interactions that require some sort of collaboration. However, physical play and improvisational dance differ from daily actions in several ways. First, everyday actions are goal-oriented while both play and dance do not serve a direct, immediate goal. Second, communication in physical play and dance improvisation does not rely as much on language as most of our daily interactions do. The meaning-making process in physical play and dance improvisation is foremost concerned with corporeal, non-linguistic forms of understanding that are grounded in the kinetic-kinaesthetic body (Sheets-Johnstone, 2003). Third, physical play and dance improvisation are open-ended activities: process and outcome are not pre-defined and usually there is a limited set of rules/constraints. As a result of these three characteristics, the sense-making process in physical play and dance improvisation remains inherently ambiguous and fluid. We can however not assume that this is true for all participatory sense-making activities. Fluid and ambiguous meaning-making may only occur in activities that are not clearly goal-oriented. In that case, physical play and dance improvisation do merely serve as special examples of participatory sense-making since their intrinsic characteristics are not shared by all PSM activities.

A third challenge is to map how internal processes and external processes both contribute to the sense-making process. Sense-making is not something that takes place outside us. We are active autonomous agents that not only attune to a given situation but also to our selves. The sense-making *moves through us*, we internally process our meaningful encounters with others and with the world. And while it moves through us, we also change it, adapt it – we bring our own selves into play. Sense-making therefore should be explored and examined exactly at the threshold of inner and outer forces.

This being said, I still believe that both physical play and dance improvisation offer powerful ways to examine and enrich the enactive approach. My artistic research is only a first and small step in this direction. Future research is needed here. I suggest that a multidisciplinary team of artists/dancers, play experts, philosophers and cognitive scientists (from the field of enactivism) is necessary to tackle these questions. Even more, practice-led (artistic) research, i.e. research that taps straight into the experiential, meaningful dimensions of both physical play and dance improvisation, could potentially offer rich insights on this topic.

Artistic research: a method that is intimate and distant at once

The type of research that I have been pursuing for the last four years, is artistic, practice-based research that is open-ended, self-critical and contextual (Hannula, Suoranta & Vadén, 2014). The artworks are considered both the research and the object of the research. "Artistic research is characteristically *not research about* or *of* but a participatory act and reflection with a strong performative element" (p.4, original emphasis). As a result, the researcher is both an insider (since the artwork is inseparably tied up to the artist) and an outsider (by taking distance and reflecting upon its practice).

As I already stated in the beginning, the research started close to home. Almost all physical play events are captured in and around my home, embedded in daily life, and with an intimacy that stands in sharp contrast with the positivist research paradigm. This is specifically the case in the first phase of my research. In the second and third phase of my research, I have created more distance by moving further away from home and inviting others (dancers/dance students/dance teachers) to join in. But even with this distance, my artistic research in all phases is immediate, close at hand and intimate. With this I mean that the research is bound up with me, and as a result, it sits uneasily with traditional concepts of research such as objectivity and reproducibility. It also raises questions about what kind of knowledge is produced.

In line with Ingold (in reference to Guattari, 2016), I perceive artistic research as "a process not of iteration but of *itineration* […] It carries on, as life does, not closing in on solutions but ever

opening to new horizons." Research - seen in this light - is a process of opening up, of tapping into a never-ceasing experiental flux that takes its own course. Artistic research is embedded, it is situated, it is embodied: it taps straight into the experiential dimensions of our living bodies. It is a living practice. Artistic research is "the articulation of the unreflective, non-conceptual content enclosed in aesthetic experiences, enacted in creative practices and embodied in artistic products" (Borgdorff, 2012, p. 168). Both Borgdorff (2012) and Ingold (2016) state that artistic research is an open undertaking that foregrounds living experience. For this reason, there is no definite conclusion, only "openings that let us in" (Ingold, 2016, p.4).

Now the question arises of how the embodied and living content of artistic research can be articulated in a linguistic-conceptual framework (Borgdorff, 2012). My worry here is that a linguistic framework (such as this thesis) might override the embodied nature of the artistic, and become the predominant mode of signification – in much the same way as a title and a short explanatory text of an artwork in a museum can take away and annihilate the initial, embodied response to the artwork. In an ideal situation, the two types of knowledge (pre-reflective embodied knowledge and conceptual/propositional knowledge) would complement and enrich each other but in Western society, the conceptual/propositional tends to be a dominating, colonializing force – as we so often forget that we are bodies and that we are sensuous beings. Borgdorff (2012, p.171) states that artistic research is the acceptance of this paradoxical situation of both nearness (the pre-reflective embodied experience) and distance (the reflective conceptualization):

> Artistic research articulates the fact that our natural relationship with things we encounter is more intimate than what we can know. At the same time, it also familiarizes us with the fact that those things are in some way foreign to us. In art, we sense something of our pre-reflective intimacy with the world, while realising simultaneously that we will never explicitly understand what lies there in such plain view.

These two forces, intimacy and distance, are in a constant push and pull. We reach out for this intimacy but are never able to entirely grasp it, let alone explicitly understand it. For me, it is enough, that at least some of its immediacy and intimacy remains throughout the artistic research process – that the living archive, the re-enactments and the Re-Play/Re-move toolkit still carry traces of this aliveness, that all my writings have not silenced them.

The three phases of the artistic research

The following research question was central to my thesis:

> What are the shared elements of participatory sense-making within physical play and dance improvisation?

The research focused on three areas of investigation corresponding to the three phases of the research (living archive, re-enactment and toolkit):

1) Photography as a medium to explore the elements of participatory sense-making in children's physical play.
2) The use of photographic imagery and re-enactment in exploring the shared elements of participatory sense-making through dance improvisation.
3) The application of the shared elements of participatory sense-making in a toolkit for creative movement exploration for children between the age of 4-10 years.

In the first phase which started in 2013, I collected photographs of the physical play of my own children, sometimes with their friends and neighbor kids. This has resulted in a living archive that consists of more than a hundred photographic sequences and stand-alones. In line with Auslander (2008), I consider the photographs as more than just records or traces: the photographs are artefacts that contribute to the performativity of the original play events. Even more, the photographs are artistic as well as ethnographic. In my research, the living archive forms a creative (re-)source for gaining a tacit understanding of the different elements that make up the participatory sense-making process in children's physical play.

My conclusion is that photographs can indeed be used as a medium to explore artistically the elements of participatory sense-making in children's physical play. Although at first glance video might be more appropriate than photographs in capturing play, I maintain that the power of photography lies in its ability to pause time and capture moments that would otherwise pass unnoticed. Photography creates both nearness and distance: it draws the spectator in while at the same time it makes the spectator aware of his/her outsider position. Photography thus never creates a neutral space: the spectator re-experiences the original play event through the framing and the compositional choices of the photographer. In this sense, the photographs do not only (re-)present the original play event but also make me present (as a photographer, dancer and mother). In other words, if you look at the photographs, you do not only see playing children, you also see me, the photographer. The photographs, therefore, are highly subjective, intuitive and particular. They reveal elements of participatory sense-making, but only in a momentary, fleeting way. In line with Ingold (2012), the photographs *correspond with* the play events, they exist along, as material traces that open up new paths and directions. The photographs carry the events further, by making them present in another medium. The photographs depart from the original play event but in their actualization, they develop their own course and (multiple) direction.

In this artistic research, I used photography as a creative tool to capture the corporeal aspects of physical play. In chapters 7, 8 and 9, I described and analysed three different play events and their re-enactments: rough-and-tumble play, animal becoming and the hotel dance. Here, I pursue three lines of thought that I believe are vital for the sense-making process in children's physical play. First of all, sense-making is a highly relational process. Even if children play alone, they still draw intimate connections between the self and the materiality of the world. Although the concept of participatory sense-making is usually restricted to intersubjective encounters, I argue that sense-making is a process where one *participates in the world*. To participate is to open up to the materiality of the world. It is in the interaction between the body surface and the surface of (human and non-human) materials, that sense-making starts to emerge. Sense-making is thus always a conversation of the flesh.

Even more, physical play is often described as a combination of play and physical vigor. Based on my analysis, however, physical play is just as much an imaginary act as it is a concrete-physical act. Through combining the concrete and the imaginary sense-making becomes a transformational act. Gordon and Esbjörn-Hargens (2007b) refer to this as the bracketing of frames, the moment when boundaries and constraints become fluid. This allows the players to engage and experiment with the possibilities that emerge in the moment. A blanket may transform into the wings of a bird, the tail of a fish or the fur of a fluffy animal. Physical play is a corporeal activity that is glued to a specific situation but at the same time, it is capable to detach given, situational constraints and adapting new constraints that allow for more creative freedom. Sense-making in physical play is thus a process where one *participates in the concrete as well as in the imaginary realm*.

Finally, my research illuminates how physical play often takes on shape through patterns of repetition. This repetition is not directed towards sameness but towards difference. What is repeated is the unrepeatable (Deleuze, 1994). For example, when the four boys (see chapter 7) jump on the blue mat, they repeat this action over and again. However, each jump differs from the jump before – not in

the overall sense but the little details. It is my belief, that young children learn to know themselves, others and the world through (an almost endless) repetition of physical actions. Physical play increases the bodily sensitivity of young children through rhythmic patterns of repetition and variation. Sense-making, one might say, is a process where *one participates in (co-modulated) rhythmic, repetitive patterns* that (re-)organise and (re-)structure the lived experience.

The second phase of my artistic research consisted of three re-enactments and the Touch Project. In this phase of my research, the living archive became a source for the creation of new work. A group of professional dancers was asked to respond to the affective and bodily traces captured by the set of photographs.

In the artistic process, I have specifically chosen re-enactment as an artistic method to examine how traces of physical play can serve as a creative source for movement improvisation. I didn't want to treat physical play and dance improvisation as independent, isolated phenomena since I was foremost interested in the intersecting lines, in the crossing, in the blurry and messy boundaries between the two. I thus started close at home and then expanded the artistic research to the improvisational practice of dance professionals.

The re-enactments aimed to explore how affects, intensities and forces can travel through different bodies in physical play and dance improvisation – with the use of a set of photographs. Mühlhoff's notion of affective resonance (2015) was used to understand the dynamic entanglement between moving and being moved, affecting and being affected by the material traces (i.e. the photographs) of the archive. Although affective resonance usually refers to the affective interplay that is experienced by the interactants in face-to-face contact, I used the term to understand how affects can travel through different bodies without direct interaction. I asked the dancers to respond to the affective traces captured by the set of photographs – allowing it to resonate within their own bodies. I consider my research therefore as an addition to Mühlhoff's theory in two ways. First of all, affects do not only resonate in the direct interaction of two or more moving bodies, since affective traces and residues can also be transported through other material sources (such as photographs). Second, affective resonance is a gripping force that not only arises in the dynamic interplay between human bodies but can also be experienced in the interaction with our surroundings. The re-enactment of the hotel dance is a good example of this. The theatrical setting (couch, chair, lamp, carpet, side table) doubles with the original hotel setting in such a way that the two surroundings start to resonate with each other. The settings are gripped together, and this dynamic entanglement opens up channels of affects, intensities and forces.

I have two final thoughts about this phase of my artistic research. First of all, there is still much to learn about the role of touch (and the haptic sense) in the participatory sense-making process. The Touch Project has taught me that touch is not only the oldest but also the most intimate of our senses. Touch establishes an immediate connection with self, others and with the world. To touch means to temporarily reside in otherness, to dwell in betweenness. Participatory sense-making is so much more than "the coordination of intentional activity in interaction" (De Jaegher & Di Paolo 2007, p.13): *it is a willingness to touch and to be touched by otherness,* a with-ness, a togethering, a temporal moving along with each other (Ingold, 2017).

Second, the sense-making process in physical play and dance improvisation is a fluid process that moves in two directions: outside in and inside out. Due to kinaesthetic awareness, movements are not only "outwardly visible, as linear trajectories" but they are also felt inwardly (Ingold, 2017, p.38). These inward and outward forces are in constant dialogue with each other. This is also the case in the three re-enactments. Each re-enactment started with incorporating specific gestures and postures that were displayed in the set of photographs. This outer congruence allowed the dancers to establish deeper sensorial connections between their own bodies and the set of photographs. The pose or

gesture served as an entrance, a way in. By moving into the kinetic configuration of a movement or pose, the dancers established active connections between what was outwardly visible (the pose or gesture) and inwardly felt. Anttila refers to this as "sensing and dialoguing with our own bodies" (2003, p.104), a process of listening that involves both interiority and exteriority. In other words, participatory sense-making is a process where interiority and exteriority continuously fold into each other. To participate in sense-making is t*o attend and listen to these double-sided forces that draw us inside, yet at the same time push us outside*.

The third phase of my research involved the development of the Re-Play/Re-Move toolkit for children between 4-10 years. The toolkit has two components: a creative card deck and three additional workshops. The creative card deck consists of over 100 cards that are loosely based on the PSM model that I developed (see Figure 55). The three workshops are closely related to my own artistic process since re-enactment once again is the starting point of creative movement exploration.

The toolkit is loosely based on the different elements of the PSM model. It is not a literal translation and although the eight categories of the toolkit resonate with the model, they also divert from it (see Table 7). The cards are meant as an invitation for young children to engage with the body and with movement playfully and creatively. Besides categories such as 'space', 'rhythm', 'collaboration' and 'patterns' that have a direct relation with the PSM model, I therefore invented more thought-provoking categories such as 'impossible actions' and the 'as if cards' that help children to establish deeper connections between moving, sensing and imagining.

In future artistic research projects, I would like to further examine the role of imagination in the participatory sense-making process of physical play and dance improvisation - in terms of how we re-structure and re-organise our experience, and how we build up a sense of continuity between past experiences and present experiences. How can imagery open up new registers of meaning-making?

I am thus interested in how imagination can be a source for creative movement exploration, and vice versa, how movement itself can be a source for imagination. In the Re-Play/Re-Move toolkit the category 'as-if' and 'impossible actions' are examples of how imagination can trigger specific movements. Playful instructions such as '*as if your hands are resting on a cloud*' or '*as if the ceiling is slowly coming down'* can foster new ways of moving and sensing. In the future, I would like to refine these categories and create, together with the children, a set of cards that trigger creative movement on a deeper bodily level – thereby avoiding mimicry or imitation. In recent research (Hermans, forthcoming) among dance teachers, I found that detailed instructions are very important. One teacher, for example, starts her creative movement sessions with exercises that bring awareness to the breath. Then she introduces basic 'grounding' exercises that lower the centre of gravity and strengthen the core. In the next step, she adds some imagination. She gives assignments and suggestions that often have to do with animals. Like being a cat with a spine that is mobile and flexible and an imaginary tail that you can use as a counterbalance during quick movements. These detailed instructions prevent the child from just imitating a cat by providing sensory and bodily details of the cat-becoming.

As I already stated before, creative movement exploration is foremost an attentional practice. A core element of both physical play and dance improvisation is transforming images, affects and thoughts into movement and vice versa, transforming movement into images, affects and thoughts. I believe that the intimate connection between inner felt sensations/affects/thoughts and external movements is the breeding ground for lived experience and sense-making. It is through movement that we (re-) structure and (re-)organise our worlds. It is through movement that we develop a sense of agency. Movement itself is foundational for any sense-making process. We must not forget that sensations, affects and thoughts are born in movement – and that life itself is intimately connected with movement. Creative movement exploration allows young children to experience the body, not as

a mere instrument or a habitual routine, but to grasp the body in sensory-kinetic terms and to foster kinaesthetic awareness. Both physical play and dance improvisation (as creative movement practices) are powerful ways to engage with the body in a kinetic-kinaesthetic way and to experience how movement itself is at the heart of all sense-making processes.

The societal relevance of dance improvisation and play

This final paragraph is not so much a final conclusion but a prelude to whatever will come next and to what is not written down in this thesis. I want to take the opportunity here to look at my research topic ('the shared elements of participatory sense-making in physical play and dance improvisation') from a wider, societal angle. The aim of this final paragraph is not to deliver a cohesive argumentation, but to follow several lines of interrelated thought that take their own course and direction.

This research is part of a body of writing on the role of the body in sense-making processes. The topic reaches beyond the arts to a wider societal context as both improvisation and play are part of everyday life. Ingold and Hallam (2007) state that improvisation is ubiquitous in life.

> Our claim is not just that life is unscripted, but more fundamentally, that it is unscriptable. Or to put it another way, it cannot be fully codified as the output of any system of rules and representations. This is because life does not pick its way across the surface of a world where everything is fixed and in its proper place, but is a movement in a world that is crescent. (Ingold & Hallam, 2007, p.12)

Each human being has to work out and invent their own way of living. Improvisation, and inherently also play, are thus vital forces in life. Following Ingold and Hallam (2007) four things can be said about improvisation, and consequently about play: they generate diverse forms of culture, they are relational, they are temporal and they are practices we simply do.

There are several aspects of both dance improvisation and play that point to relevance beyond the arts. First of all, *dance improvisation and physical play take movement as the main vehicle for sense-making processes.* In Western society, we still too often take the mind as the central organ for thinking and being, and there is much to learn from practices that take movement as the vehicle for shared sense-making processes. Physical play and dance improvisation are both embodied practices that strengthen the connection between the mental, the emotional and the physical – and as such they have much to offer when it comes to health and wellbeing. Already in chapter 10, I pointed to the importance of touch for social bonding and well-being, and the Covid-19 pandemic has made us even more aware of not only the importance of touch but also of taking care of our bodies. Active engagement in play and dance improvisation has the potential to promote, enhance and maintain wellbeing – in a physical as well as mental sense. The systematic review of Alexa Sheppard and Mary Broughton (2020) shows that active participation in dance (but also music) promotes and encourages healthy behaviours such as physical exercise, managing stress, autonomy and social bonding. Physical play and dance improvisation provide participants with positive and creative ways to align the mind with the body. In many (but not all)[82] ways, both play and dance improvisation can be seen as practices of care where we attend and become response-able to self, others and surroundings in an embodied way (Midgelow, 2019).

Even more, dance improvisation and play are not so much styles but practices that take the 'possible' and 'the virtual' as starting point for creative movement exploration (Midgelow, 2019). Both can be seen as practices of "*dwelling in possibility*" in a personal as well as political sense (Cooper Albright, 2019, p.86). Improvisation and play are processes that are necessarily incomplete,

[82] Play and dance improvisation do not always provide positive, or pleasurable experiences, see also page 16.

never entirely finished, and always open to change. Improvisation and play are "always in the making" (Ingold & Hallam, 2007, p.3). The ambiguous nature of dance improvisation and physical play can perhaps help us to cope with a rapidly changing world, not so much on a global but on a personal, human-to-human, level. Cooper Albright (2019) states that dance improvisation can teach us to cope with major (and often unplanned) life events since it fosters cognitive flexibility and openness to face the things that cross our path.

> Improvisation is a philosophy of life, albeit not one based on a specific doctrine, or system of beliefs. Rather, it is another way of relating to one's experience – a willingness to explore the realm of possibility not in order to find the correct solution but to simply find out. (Cooper Albright, 2019, pp. 86-87)

Improvisation is movement that finds its shadow in another movement. Tapping straight into the lived experience, improvisation does not fixate things but it takes change and transformation as the vehicle for sense-giving processes. Physical play and dance improvisation orient our attention towards what happens in the (next) moment. Both are temporal practices that take the not-yet as the starting point for a shared adventure. Even more, since both physical play and dance improvisation deal with dynamic exchange, it questions and refuses any static definition of self, of others and world. This can be seen as a political act since both improvisation and physical play challenge and question fixed identities and social positions.

Dance improvisation and physical play are significant for human experience because both are *relational*. This relationality is not defined by words or symbolic representations but relationality is expressed in and through movement. Both dance improvisation and physical play are practices that draw meaningful lines between internal and external sources. Participants open up to others and surroundings, yet at the same time, they become sensitive to what goes on inside – on a sensorial, affective and reflective level. The attunement to internally and externally felt forces and intensities, this fluidity, this constant crossing-over of self and other(ness), requires an openness of the body. In other words, dance improvisation and physical play are practices through which we can learn how to move together in a meaningful way, amidst a field of inner and outer forces. (This doesn't mean that there is always harmony: clashes, discordances and awkward, uneasy moments are an intrinsic part of any play event or improvisational session).

This brings me to another aspect of dance improvisation and physical play. As soon as we open up our bodies, we become vulnerable – since opening up means that we allow ourselves to be affected by external forces. Sheets-Johnstone (2003, p.412) considers physical play and dance improvisation as ways of "coming to grip with our vulnerabilities". Through play and improvisation, we not only learn and *get acquainted with our own vulnerabilities but also with the vulnerabilities of others*. In other words, in play and improvisation we put our vulnerability on the line. It allows us:

> […] to experience first-hand the ultimately fragile bodies we are. It is a self-teaching exercise in corporeal care and survival, not only corporeal care of ourselves and our own survival, but corporeal care of others and their survival. (p.413)

However, this could also be said of other movement practices, such as aikido or sports. The main difference is that physical play and dance improvisation are both creative practices. "Somatic awareness intersects with imaginative possibility (or is it somatic possibility intersects with imaginative awareness?) such that cultural meaning becomes more fluid, although never abstracted." (Cooper Albright, 2019, p.94) Both physical play and dance improvisation open new registers of meaning-making through *the tight connection between movement and our imaginative reservoirs*. It is

the intersection between imagination and movement that overrides the functional, even if only for a moment. It is the coming together of somatic awareness with imaginary possibility that takes us out of our daily routine and brings us back to the challenges of the moment. It makes us attentive to possibilities that arise in the moment. I believe that these imaginative reservoirs together with movement practice, not only bring us closer to ourselves, but also to others and to the planet we live on.

In another way, dance improvisation and physical play can give us embodied opportunities to explore the notion of *freedom within constraints.* In times where democracy and freedom of speech are(once again) contested, it seems all the more important to invest in practices that foster but also critically reflect on the notion of freedom. According to Danielle Goldman, freedom is necessarily tied up with constraint. Freedom is not the breaking of structures or rules but it is a learned and trained ability to move and respond to an ever-shifting world. For Goldman, dance improvisation is the "imaginative, expressive negotiation with constraint" (2010, p. 27). She considers constraints as tight spaces: through improvisation we try to stretch these tight spaces. Goldman thus moves away from popular ideas of freedom as the expression of an authentic self, as something that comes over us and illuminates us. By binding freedom to constraint, we become aware that freedom is something that we do (and not only believe), something we practice that requires negotiation and awareness of existing constraints. Improvising with constraint is thus something we are confronted with in our daily life, as we encounter other people in the street, in the office, in school or any other institution.

However, this is not only a hooray story. Yes, I am excited about the potential of both physical play and dance improvisation, as becomes clear from the above. But there is also work to do. Physical play and dance improvisation are social practices that are embedded in socio-historical and material conditions. Norms of race, gender, class, and ability underly each instance of movement. Much of what has been written on play and dance improvisation targets a white and well-educated audience – and my research is no different in this respect[83]. To finish this final chapter, I would like to press the need for research that takes cultural diversity (in terms of gender, race, SES and ability) into account. Anttila, Martin and Svendler-Nielsen (2019) speak of dialogical, third spaces that allow us to become aware of the sociocultural norms that are at play in creative movement education, and that invite us to move beyond fixed entities, categorising and labelling. Knowledge of cultural differences and underlying socio-cultural norms (race, gender, SES, ability) in both play and dance improvisation, can help us in creating a supportive and inclusive environment. Education that is sensitive to differences, might in turn foster acceptance of self and others. Creative movement education can help young children to get in touch with their bodily felt sense – and from there they can connect to the world and to others. It allows children to experiment with possible selves and possible others. Using the body and imagination as the main sources, creative movement exploration can open up new pathways of being, thinking, feeling and relating. This way we can move beyond dichotomic and non-inclusive ways of thinking. Both physical play and dance improvisation, as creative practices, allow us to engage with the not-yet. It is here where being turns into becoming, where imagination and movement join forces, where the unexpected springs from the expected, the unplanned from the planned, and the unknown from the known. It is here that our fluid sense of self can relate in a creatively and openly with others and with the world.

[83] Some scholars have done research into the cultural aspects of play and dance improvisation. For some good reading, I refer to the work of Goldman (2010), Anttila (2019), Anttila, Svendler Nielsen & Burridge (2020), Stinson (2005), Bjorbækmo (2011), Rettig (1995), Gaskins (2015), Çakirer & Agustí (2014), and Zachopoulou, Trevlas & Tsikriki (2004).

Bibliography

Abadía, M.C. (2018). New Materialisms: Re-Thinking Humanity Within an Interdisciplinary Framework. *Special Issue of Inter-Cultural Philosophy, Phenomenological Anthropology, Psychiatry, and Psychotherapy in Theory and Practice*, 168-183. DOI: https://doi.org/10.11588/icp.2018.1.48071

Abrams, M.B., Schaefer, S.S., & D. Ness (2020). *Child Parent Research Re-Imagined*. Leiden: Brill.

Adler, P., & Adler, P. (1999). Parent-As-Researcher: The Politics of Researching in Personal Life. *Qualitative Sociology, 1*(19), 35-58. DOI:10.1007/BF02393247

Antonello, P. (2013). Out of touch. F.T. Marinetti's Il tattilismo and the Futurist Critique of Separation. In E. Adamowicz and S. Storchi (Eds), *Back to the Futurists* (pp. 38-55). Manchester: Manchester University Press.

Antilla, E. (2003). A Dream Journey to the Unknown: Searching for Dialogue in Dance Education. Acta Scenica 14. Helsinki: Theatre Academy.

Anttila, E. (2007). Mind the Body: Unearthing the Affiliation Between the Conscious Body and the Reflective Mind. In L. Rouhiainen (Ed.), *Ways of Knowing in Dance and Art* (pp. 79-100). Helsinki: Theatre Academy.

Anttila, E. (2019). Migrating Pedagogies: Encountering Immigrant Pupils Through Movement and Dance. *International Journal of Critical Pedagogy, 10*(1), 75-96.

Anttila, E. & Sansom, A. (2012). Movement, embodiment and creativity. In O. Saracho (Ed.). *Contemporary Perspectives in early childhood education* (pp. 179–204). Charlotte, NC: Information Age Publishers.

Anttila, E., Martin, R., & Svendler-Nielsen, C. (2019). Performing difference in/through dance: The significance of dialogical, or third spaces in creating conditions for learning and living together. *Thinking Skills and Creativity, 31*, 209-2016. https://doi.org/10.1016/j.tsc.2018.12.006

Auslander, P. (2006). The performativity of performance documentation. *PAJ, A Journal of Performance and Art, 28*(3), 1-10. DOI: 10.1162/pajj.2006.28.3.1

Bannon, F., & Holt, D. (2012). Engaging with Touch: Transformative Learning in Dance. In *Dance, Young People and Change: Proceedings of the daCi and WDA Global Dance Summit*, edited by S. Stinson, C. Svendler Nielsen, & S-Y Liu. Taiwan: Taipei National University of the Arts, 14 – 20 July. http:// www.ausdance.org/.

Bateson, G. (1972). *Steps To an Ecology of Mind*. Chicago: University of Chicago Press.

Bennett, J. (2010). *Vibrant Matter: A Political Ecology of Things*. Durham: Duke University Press Books. DOI: 10.1080/00335630.2015.994892

Bermúdez Pascual, B. (2011). *The Double Skin/Double Mind Interactive Installation*. Research Catalogue. Accessed December 4, 2021, https://www.researchcatalogue.net/view/8247/8248

Bermúdez Pascual, B. (2016). Performing archives: New ideas on dance documentation and the archive. *Príncipe de Viana (PV), 266*, 1-17.

Bjorbækmo, Schrøder, W. (2011). "My Own Way of Moving" - Movement Improvisation in Children's Rehabilitation. Phenomenology & Practice, 5(1), 27-47.

Black, S. (2020). 31 Days Old - Performance, Family and Ethics. *Journal for Artistic Research, 22*. Accessed February 24, 2021, https://www.researchcatalogue.net/view/562823/562824/0/0

Blom, L.A., & Chaplin, T. (1988). *The Moment of Movement: Dance Improvisation.* Pittsburgh: University of Pittsburgh Press.

Bluemink, M. (2020). *Gilbert Simondon and the Process of Individuation.* Philosophy Monthly, 34. Accessed June 20, 2021, https://epochemagazine.org/34/gilbert-simondon-and-the-process-of-individuation/

Bolt, B. (2016). Artistic Research: A Performative Paradigm? *Parse, 3*, 129-142. Accessed December 5, 2021, https://parsejournal.com/article/artistic-research-a-performative-paradigm/

Bond, K.E. (2000). *Revisioning Purpose: Children, Dance and the Culture of Caring*. Keynote address presented at the Dance and the Child International (daCI), Regina, Saskatchewan, Canada.

Bond, K. E., & Stinson, S.W. (2000). "I Feel Like I'm Going to Take Off!": Young People's Experiences of the Superordinary in Dance. *Dance Research Journal, 32*(2), 52-87. DOI: https://doi.org/10.2307/1477981

Borgdorff, H. (2012). *The conflict of the faculties: Perspectives on Artistic Research and Academia.* Leiden: Leiden University Press.

Bower, M., & Gallagher, S. (2013). Bodily affects as prenoetic elements in enactive perception. *Phenomenology and Mind, 4*(1), 78–93. DOI: https://doi.org/10.13128/Phe_Mi-19591

Bowlby, J. (1973). *Attachment and Loss: Vol. 2. Separation, Anxiety and Anger*. New York: Basic Books.

Bradbury-Jones, C., & Taylor, J. (2015). Engaging with children as co-researchers: challenges, counter-challenges and solutions. *International Journal of Social Research Methodology, 18*(2), 161–173. DOI: http://dx.doi.org/10.1080/13645579.2013.864589

Braun, M. (2013). Muybridge, authorship, originality. *Early Popular Visual Culture, 11*(1), 41-51. DOI: http://dx.doi.org/10.1080/17460654.2012.756644

Breakall, S. (2007). Perspective: Negotiating the Archive. Tate Paper, 9, https://www.tate.org.uk/research/publications/tate-papers/09/perspectives-negotiating-the-archive

Brown, L. (2007). Becoming-Animal in the flesh: Expanding the Ethical Reach Of Deleuze and Guattari's Tenth Plateau. *PhaenEx, 2*(2), 260-278. DOI: https://doi.org/10.22329/p.v2i2.247

Buckwalter, M. (2010). *Composing While Dancing: an Improviser's Companion,* Wisconsin: The University of Wisconsin Press.

Burton, S.J. (2016). Movement Analysis in Observation and Generation of Affective Movement. *Living Architecture Systems Group*, 92-99. Accessed December 29, 2021, http://papers.cumincad.org/data/works/att/lasg_whitepapers_2016_092.pdf

Caillois, R. (1961). *Man, Play and Games* (M. Barash, Trans.). New York: Free Press of Glencoe. (Original work published 1958)

Çakirer, H., & Agustí, M. (2014). *Talking with the teachers about inclusion through play in multicultural early childhood education context*. Murcia: Universidad de Murcia,

Caprino, F. (2017). Physical and Social Play of Preschool Children with and without Coordination Difficulties: Preliminary Findings. *British Journal of Occupational Therapy, 74*(7), 348-354. DOI: https://doi.org/10.4276/030802211X13099513661199.

Caronia, A. (2014). Never Twice in the Same River: Representation, History and Language in Contemporary Re-enactment. In A. Caronia, J. Jansa & D. Quaranta (Eds.), *RE: akt! Reconstruction, Re-enactment, Re-port* (pp. 5-17). Brescia: Link Editions.

Cascio, C., Moore, D., & McGlone, F. (2019). Social touch and human development. *Developmental Cognitive Neuroscience, 35*, 5-11. DOI: https://doi.org/10.1016/j.dcn.2018.04.009

Catalano, H. (2018). The Importance of Free Play in Early Childhood and Primary School Education: Critical Analysis for Romania. *Educational Research Applications*: ERCA-150. DOI: 10.29011/2575-7032/100050

Charmatz, B. (2009-2018). *Musée de la Danse*. Accessed May 5, 2021, http://www.museedeladanse.org/fr.html

Chartrand, T., & Bargh, J. (1999). The Chameleon Effect: The Perception-Behaviourlink and Social Interaction. *Journal of Personality and Social Psychology, 76,* 893-910. DOI: https://psycnet.apa.org/doi/10.1037/0022-3514.76.6.893

Chiu, S-H, & Anderson, G. (2009). Effect of Early Skin-to-skin Contact on Mother-preterm Infant *Interaction through 18 Months: Randomized Controlled Trial. International Journal of Nursing Studies, 46* (9), 1168–80. DOI: 10.1016/j.ijnurstu.2009.03.005

Christie, S. (n.d.). Research and Workshops. Accessed April 5, 2020, http://www.sarahchristie.net

Clough, P. T. (2008). (De)Coding the Subject-in-Affect. *Subjectivity, 23*(1), 140-155. DOI: 10.1057/sub.2008.16

Coan, J., Schaefer, H., & Davidson, R. (2006). Lending a Hand: Social Regulation of the Neural Response to Threat. *Psychological Science, 17*(12), 1032–39. DOI: 10.1111/j.1467-9280.2006.01832.x

Cohen, L., & Waite-Stupiansky, S. (2011). *Play: A Polyphony of Research, Theories, and Issues*. Lanham, MD: University Press of America.

Condon, W.S. (1975). Multiple responses to sound in dysfunctional children. *Journal of Autism and Childhood Schizophrenia, 5,* 37-56. DOI: 10.1007/BF01537971

Condon, W.S., & Ogston, W. (1971). Speech and body motion synchrony of the speaker-hearer. In D. Horton and J. Jenkins (Eds.), *The Perception of Language (*pp. 150–84). Columbus, OH: Charles E. Merrill.

Cooper Albright, A. (2013). *Falling, Performance Research, 18*(4), 36-41. DOI: https://doi.org/10.1080/13528165.2013.814333

Cooper Albright, A. (2019). Life Practices. In V. Midgelow (Ed.), *The Oxford Handbook of Improvisation in Dance* (pp. 85- 107). Oxford: Oxford University Press.

Cooper Albright, A., & Gere, D. (Eds.) (2003.). *Taken By Surprise: A Dance Improvisation Reader*. Connecticut: Wesleyan University Press.

Courtney, J., & Noland, R. (2017). *Touch in Child Counselling and Play Therapy: An Ethical and Clinical Guide*. New York: Routledge.

Cross, I. (2014). Music and communication in music psychology. *Psychology of Music*, 42(6), pp. 809–19. DOI: https://doi.org/10.1177%2F0305735614543968

Damasio, A. (1999). *The Feeling of what Happens: Body and Emotion in the Making of Consciousness*. New York: Harcourt Brace & Company.

Darzacq, D. (2007). *La Chute.* Laurence Miller Gallery. Accessed December 27, 2021, http://www.laurencemillergallery.com/artists/denis-darzacq

Da Silva Junior, J. (2017), *Reflections on Improvisation, Choreography and Risk-Taking in Advanced Capitalism*. Helsinki: University of the Arts Helsinki, Theatre Academy.

Davis, M. (1975). *Towards understanding the intrinsic in body movement.* New York: Arno Press.

De Bruin, L., & De Haan, S. (2009). Enactivism & Social Cognition: In Search of the Whole Story. *Cognitive Semiotics, 4*(1), 225-250. DOI: 10.1515/cogsem.2009.4.1.225

De Jaegher, H. (2009). Social Understanding Through Direct Perception? Yes, by Interacting. *Consciousness and Cognition, 18*(2), 535–542. DOI: https://doi.org/10.1016/j.concog.2008.10.007

De Jaegher, H. & Di Paolo, E. (2007). Participatory Sense-Making: An enactive approach to social cognition. *Phenomenology and the Cognitive Sciences, 6*(4), 485-507. DOI: https://doi.org/10.1007/s11097-007-9076-9

Dekker, A. (2017). *Lost and Living (in) Archives: Collectively Shaping New Memories.* Amsterdam/Rotterdam: Valiz & Piet Zwart Institute.

Delafield-Butt, J.T., & Trevarthen, C. (2015). The ontogenesis of narrative: from moving to meaning. *Frontiers in Psychology*, 6: 1157. DOI: https://doi.org/10.3389/fpsyg.2015.01157

Deleuze, G. (1994). *Difference and repetition*. (P. Patton, Trans.). London: Athlone Press. (Original work published 1968)

Deleuze, G., & Guattari, F. (1987). *A Thousand Plateaus: Capitalism and Schizophrenia* (B. Massumi, Trans.). London: Continuum. (Original work published 1980)

De Spain, K. (2003). The cutting edge of awareness: Reports from the inside of improvisation. In A. Cooper Albright and D. Gere (Eds.), *Taken By Surprise: A Dance Improvisation Reader* (pp. 27-41). Connecticut: Wesleyan University Press.

De Spain, K. (2014). *Landscape of the Now: A Topography of Movement Improvisation.* Oxford: Oxford University Press.

De Valk, L. (2015). *Designing for open-ended play*. Doctoral thesis. Eindhoven: Eindhoven University of Technology.

Dey, M., & Sarco-Thomas, M.(2014). Framing the Gap: Contact [and] Improvisation. *Journal of Dance and Somatic Practices, 6*(2), 119-128. DOI: 10.1386/jdsp.6.2.119_2

Di Paolo, E. (2007). Play, enaction and the dialectics of worldmaking. *Toward a Science of Consciousnes*s *Conference*, Budapest, Hungary, 23-27 July. Accessed January 19, 2019, https://ezequieldipaolo.files.wordpress.com/2011/10/play-abstract.pdf

Di Paolo, E., Rohde, M., & De Jaegher, H. (2010). Horizons for the enactive mind: Values, social interaction, and play. In J. Stewart, O. Gapenne and E. A. Di Paolo (Eds.), *Enaction: Towards a New Paradigm for Cognitive Science* (pp. 33-87). Cambridge, MA: MIT Press,

Di Pietro, J. (1981). Rough and Tumble Play: A Function of Gender. *Developmental Psychology*, *17*(1), 50-58. DOI: https://psycnet.apa.org/doi/10.1037/0012-1649.17.1.50

Dimberg, U. (1990). Facial Electromyography and Emotional Reactions. *Psychophysiolog*y, *27*, 481–494. DOI: https://psycnet.apa.org/doi/10.1111/j.1469-8986.1990.tb01962.x

Egert, G. (2019). *Moving Relation: Touch in Contemporary Dance*. London: Routledge.

Ellis, S., Blades, H., & Waelde, Ch. (2018). *A World of Muscle, Bone & Organs: Research and Scholarship in Dance*. Coventry: C-Dare, Coventry University, Institute for Creative Enterprise.

Enzewor, O. (2008). Archive Fever: Photography between History and the Monument. In O. Enzewor (Ed.), *Archive Fever: Uses of the Document in Contemporary Art* (pp. 11-49). Göttingen: Steidl.

Erickson, J. (1999). Goldberg Variations: Performing Distinctions. *PAJ: A Journal of Performance*

and Art, 21(3), pp. 98.

Fagen, R. (1981). *Animal play behaviour*. New York: Oxford University Press.

Field, T. (2001). *Touch*. Cambridge: MIT Press.

Field, T. (2010). Touch for Socioemotional and Physical Well-being: A Review. *Developmental Review, 30* (4), 367–83. DOI: 10.1016/j.dr.2011.01.001

Fingerhut, J. (2012). The Body and the Experience of Presence. In J. Fingerhut and S. Marienburg (Eds.), *Feelings of Being Alive* (pp.167-199). Berlin: Gruyter-Verlag.

Finnegan, R. (2005). Tactile communication. In C. Classen (Ed.), *The Book of Touch* (pp. 18–26). Oxford: Berg.

Fitzgerald, R., Graham, A., Smith, A., & Taylor, N. (2010). Children's participation as a struggle over recognition: Exploring the promise of dialogue. In B. Percy-Smith & N. Thomas (Eds.), *A handbook of children and young people's participation: Perspectives from theory and practice* (pp. 293–305). Abingdon: Routledge.

Fogel, A. (1993). *Developing Through Relationships: Origins of Communication, Self and Culture*. London: Harvester Wheatsheaf.

Foster, H. (2004). The Archival Impulse. *October, 110,* 3-22. Cambridge: MIT Press.

Foster, S. (2003). Improvisation in Dance and Mind. In A. Cooper Albright & D. Gere (Eds.), *Taken by Surprise: A Dance Improvisation Reader* (pp. 3–12). Middletown, CT: Wesleyan University.

Fuchs, T. (2016). Intercorporeality and Interaffectivity. *Phenomenology and Mind,* 11, 194-209. DOI: https://doi.org/10.13128/Phe_Mi-20119

Fuchs, T., & De Jaegher, H. (2009). Enactive Intersubjectivity: Participatory sense-making and mutual incorporation. *Phenomenology and the Cognitive Sciences*, *8*(4), 465-486. DOI: https://doi.org/10.1007/s11097-009-9136-4

Fuchs, T., & Koch, S.C. (2014). Embodied affectivity: on moving and being moved. *Frontiers in Psychology, 5*: 508. DOI: https://doi.org/10.3389/fpsyg.2014.00508

Gadamer, H.-G. (1960). *Truth and Method*. London: Bloomsbury Publishing.

Gallace, A., & Spence, C. (2008). The Science of Interpersonal Touch: An Overview. *Neuroscience and Biobehavioural Reviews, 34*(2), 246–59. DOI: 10.1016/j.neubiorev.2008.10.004

Gallagher, S. (2001). The Practice of Mind: Theory, Simulation or Primary Interaction? In E. Thompson (Ed.), *Between ourselves: Second-person issues in the study of consciousness* (pp. 83–108). Exeter: Imprint Academic.

Gallagher, S. (2004). Understanding interpersonal problems in autism: Interaction theory as an alternative to theory of mind. *Philosophy, Psychiatry, and Psychology, 11*(3), 199–217. DOI: 10.1353/ppp.2004.0063

Gallagher, S. (2005). Intentionality and intentional action. *Synthesis Philosophica, 40*(2), 319–26.

Gallagher, S. (2010). Joint attention, joint action, and participatory sensemaking. *Alter: Revue de Phénoménologie*, 18, 111–24. DOI: https://doi.org/10.4000/alter.1637

Gallagher, S. (2018). A well-trodden path : From phenomenology to enactivism. *Filosofisk Supplement, 3*, 1-9.

Gallagher, S. (2019). Precis: Enactivist Interventions. *Philosophical Studies, 176*, 803–806. DOI: https://doi.org/10.1007/s11098-018-01230-8

Gallagher, S., Martínez Muñoz, S., & Gastelum, M. (2017). Action-Space and Time: Towards an Enactive Hermeneutics. In B.B. Janz (Ed.), *Place, Space and Hermeneutics* (pp. 83-96). New York: Springer. DOI: 10.1007/978-3-319-52214-2_7

Gallagher, S., & Varela, F. (2003). Redrawing the map and resetting the time: Phenomenology and the cognitive sciences. *Canadian Journal of Philosophy, 12*(3), 93–132. DOI: 10.1080/00455091.2003.10717596

GamesWiki (n.d.). *Chain Tag*. Accessed April 5, 2020, http://www.games-wiki.org/wiki/Chain_tag/

Gansterer, N., Cocker, E., & Greil, M. (2018). *Choreo-graphic Figures: Deviations from the Line*. Berlin: de Gruyter.

Gaskins, S. (2015). Childhood practices across cultures: Play and household work. In L. A. Jensen (Ed.), *The Oxford handbook of human development and culture: An interdisciplinary perspective* (pp. 185–197). Oxford University Press.

Gasser-Haas, O., Sticca F., & Wustmann Seiler, C. (2020). Poor Motor Performance – Do Peers Matter? Examining the Role of Peer Relations in the Context of the Environmental Stress Hypothesis. *Frontiers in Psychology: 11*. DOI: https://doi.org/10.3389/fpsyg.2020.00498

Gibbons, A., & Nikolai, J. (2019). Participatory approaches to physical activity and dance research with early childhood teachers. *Australasian Journal of Early Childhood, 44*(3) 298–308. DOI: 10.1177/1836939119855217

Gibson, J. J. (1979). *The ecological approach to visual perception.* Boston: Houghton-Mifflin.

Glossary (n.d.). Accessed December 27, 2021, http://www.rhizomes.net/issue5/poke/glossary.html

Godard, H., & Bigé, R. (2019). Moving-Moved/A Study in Gravity. In S. Paxton (Ed.), *Drafting Interior (*89–104). Lisboa: Culturgest.

Goldman, D. (2010). *I Want to Be Ready: Improvised Dance as a Practice of Freedom.* University of Michigan: Ann Arbor.

Goldoni, G. (2014). *Ethic and Photographic: Sally Mann*. Bachelor thesis. London: College of Communication.

Gordon, G., & Esbjörn-Hargens, S. (2007a). Are We Having Fun Yet? An Integral Exploration of the Transformative Power of Play. *Journal of Humanistic Psychology, 47*(2), 198-222. DOI: https://journals.sagepub.com/doi/abs/10.1177/0022167806297034

Gordon, G., & Esbjörn-Hargens, S. (2007b). Integral Play: An Exploration of the Playground and the Evolution of the Player. *AQAL, Journal of Integral Theory and Practice, 2*(3), 62-104.

Greene, M. (1995). *Releasing the imagination: Essays on education, the arts, and social change*. San Francisco: Jossey-Bass.

Griffiths, L. (2014). *Dance and the Archival Body: Knowledge, Memory and Experience in Dance Revival Processes.* Doctoral Thesis. Leeds: University of Leeds.

Gulledge, A., Gulledge, M., & Stahmann, R. (2003). Romantic Physical Affection Types and Relationship Satisfaction. *American Journal of Family Therapy, 31*(4), 233–42. DOI: https://doi.org/10.1177/1468794116672913

Hackett, A. (2017). Parents as Researchers: Collaborative Ethnography with Parents. *Qualitative Research, 17*(5), 481-497. DOI: https://doi.org/10.1177/1468794116672913

Hall, S. (2001). Constituting an Archive. *Third Text, 15*(4), 89 -92.

Hallam, E., & Ingold, T. (2017). *Creativity and Cultural Improvisation.* Oxford/New York: Berg.

Hamilton, S. (2017). Rituals of Intimate Legal Touch: Regulating the End-of-Game Handshake in Pandemic Culture. *The Senses and Society, 12*(1), 53–68. DOI: https://doi.org/10.1080/17458927.2017.1268821

Hammershøj, L. Geer (2021). Creativity in children as play and humour: Indicators of affective processes of creativity. *Thinking Skills and Creativity, 39*, 1-10. DOI: https://doi.org/10.1016/j.tsc.2020.100784

Hannula, M., Suoranta, J. & Vadén, T. (2014). *Artistic Research Methodology: Narrative, Power and the Public*. New York: Peter Lang.

Harker, C. (2005). Playing and affective time-spaces. Children's Geographies, 3(1), 47-62. DOI: https://doi.org/10.1080/14733280500037182

Henricks, T. (2008). The Nature of Play: An Overview. *American Journal of Play, 1*(2), 157-179.

Hermans, C. (2018). Joint Action and Joint Attention: Dance Improvisation and Children's Physical Play as Participatory Sense- making Activities. *Choreographic Practices, 9*(2), 311 - 332. DOI: https://doi.org/10.1386/chor.9.2.311_1

Hermans, C. (2019). Becoming Animal: Children's Physical play and Dance improvisation as Transformative Activities that Generate Novel Meanings. *Journal of Dance & Somatic Practices,11*(2), 157-175. DOI: https://doi.org/10.1386/jdsp_00003_1

Hermans, C. (2021). To Touch and to Be Touched: Interconnectedness and Participatory Sense-making in Play and Dance Improvisation. *Journal of Dance Education* .DOI*:* https://doi.org/10.1080/15290824.2020.1836647

Hermans, C. (2022). Between Scribbling and Writing: The Line that is on its way. *Drawing: Research, Theory, Practice, 7*(1), 39-58. https://doi.org/10.1386/drtp_00078_1

Hewes, J. (2014). Seeking Balance in Motion: The Role of Spontaneous Free Play in Promoting Social and Emotional Health in Early Childhood Care and Education. *Children, 1,* 280-301. DOI: 10.3390/children1030280

Heyward, A. (2015). *How to Write a Dance: Remy Charlip and the problems of dance notation.* The Paris Review. Accessed December 29, 2020, https://www.theparisreview.org/blog/2015/02/04/how-to-write-a-dance/

Hsu, L. (n.d.). Play, Games, and Sports Contests: Clarification through Rules. Accessed November 16, 2021, https://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.1007.3514&rep=rep1&type=pdf

Hughes, B. (2002). *A Playworker's Taxonomy of Play Types, 2nd edition*. London: PlayLink.

Huizinga, J. (1955). *Homo Ludens: A study of the play-element in culture*. Boston: Beacon Press.

ICK (2007). *Capturing Intention.* Accessed May 5, 2021, https://www.ickamsterdam.com/en/academy/dance-professionals/capturing-intention-82

ICK (2016.). *Sensorium Toolkit.* Accessed August 24, 2021, https://www.ickamsterdam.com/en/academy/kids-schools/sensorium-toolkit-21

Idhe, D. (1983). *Sense and Significance*. Atlantic Highland: Humanities Press.

Ingold, T. (2007). Materials against Materiality. *Archaeological Dialogues, 14*(1), 1–16. DOI:10.1017/S1380203807002127

Ingold, T. (2016). From science to art and back again: The pendulum of an anthropologist. *Anuac, 5*(1), 5-23.

Ingold, T. (2017). *Correspondence: Knowing From the Inside*. Aberdeen: University of Aberdeen.

Ingold. T. (2018). Anthropology Between Art and Science: An Essay on the Meaning of Research. *Field: A Journal of Socially-Engaged Art Criticism*, Issue 11. Accessed March 22, 2021, http://field-journal.com/issue-11/anthropology-between-art-and-science-an-essay-on-the-meaning-of-research

Ingold, T., & Vergunst, J.L. (2016). *Ways of Walking: Ethnography and Practice on Foot.* London: Routledge.

International Council on Archives (n.d.). *What are archives?* International Council on Archives, accessed December 12, 2020, https://www.ica.org/en/what-archive

Jansen, A. Giebels, E., Van Rompay, T., & Junger. M. (2018). The Influence of the Presentation of Camera Surveillance on Cheating and Pro-Social Behaviour. *Frontiers in Psychology, 9*: 1937. https://doi.org/10.3389/fpsyg.2018.01937

Jensen, T. (2014). Emotion in Languaging: Languaging as Affective, Adaptive, and Flexible Behaviour in Social Interaction. *Frontiers in Psychology, 5*:720. DOI: https://doi.org/10.3389/fpsyg.2014.00720

Johnson, M. (2015). Embodied Understanding. *Frontiers in Psychology, 6*: 875. DOI: https://doi.org/10.3389/fpsyg.2015.00875

Kabuto, B. (2008). Parent-research as a process of inquiry: An ethnographic perspective. *Ethnography and Education, 3*(2), 177–194. DOI: https://doi.org/10.1080/17457820802062433

Kampmann Walther, B. (2003). Playing and Gaming: Reflections and Classifications. *The International Journal of Computer Game Research, 3*(1). Accessed November 15, 2021, http://www.gamestudies.org/0301/walther

Kane, E., & Petrie, P. (2014). Becoming-player in school-age childcare. *Reconceptualizing Educational Research Methodology, 5(*1), 18-31. DOI: https://doi.org/10.7577/rerm.947

Karoff, Skovjberg, H. (2013). Play Practices and Play Moods. *International Journal of Play, 2*(2), 1-11. DOI: http://dx.doi.org/10.1080/21594937.2013.805650

Kennedy-Behr, A., Rodger, S., & Mickan, S. (2011). Physical and Social Play of Preschool Children with and without Coordination Difficulties: Preliminary Findings. *British Journal of Occupational Therapy, 74*(7), 348-354. DOI: https://doi.org/10.4276/030802211X13099513661199.

Ketelaar, E. (2006). Everyone an Archivist. In N. Bütikofer, H. Hofman, & S. Ross (Eds.), *Managing and Archiving Records in the Digital Era: Changing Professional Orientations* (pp. 9-14). Baden: Hier + Jetzt.

Ketelaar, E. (2007). Archives in the Digital Age: New Uses for an Old Science. *Archives & Social Studies: A Journal of Interdisciplinary Research, 1*(0), 167-191.

Ketelaar, E. (2008). Archives as Spaces of Memory. *Journal of the Society of Archivists, 29*(1), 9 - 27. DOI: http://dx.doi.org/10.1080/00379810802499678

Kharel, D. (2015). Visual Ethnography, Thick Description and Cultural Representation**.** *Dhaulagiri Journal of Sociology and Anthropology, 9,* 147-160. DOI: https://doi.org/10.3126/dsaj.v9i0.14026

Klein, J. (2017). What is artistic research? *JAR, Journal for Artistic Research.* Accessed December 18, 2021, https://www.jar-online.net/en/what-artistic-research

Kimmel, M., Hristova, D., & Kussmaul, K. (2018). Sources of Embodied Creativity: Interactivity and Ideation in Contact Improvisation. *Behavioural Sciences, 8*(6): 52. DOI: https://doi.org/10.3390/bs8060052

Koch, S. C. (2011). Basic body rhythms and embodied intercorporeality: from individual to interpersonal movement feedback. In W. Tschacher & C. Bergomi (Eds.), *The Implications of Embodiment: Cognition and Communication* (pp. 151-171). Exeter: Imprint Academic.

Koch, S. C. (2014). Rhythm is it: effects of dynamic body feedback on affect and attitudes. *Frontiers in Psychology, 5*: 537. DOI: https://doi.org/10.3389/fpsyg.2014.00537

Kozel, S. (2017). *The Archival Body: Re-enactments, affective doubling and surrogacy. The New Human.* Accessed January 17, 2021, https://medium.com/the-new-human/the-archival-body-re-enactments-affective-doubling-and-surrogacy-448815d62c07

Lambert, V., & Glacken, M. (2011). Engaging with children in research: Theoretical and practical implications of negotiating informed consent/assent. *Nursing Ethics, 18*(6), 781-801. DOI: https://doi.org/10.1177/0969733011401122

Lavoie, S. (2018). *Modern Photography Is Changing How We Remember Our Lives.* Accessed December 28, 2020, https://onezero.medium.com/modern-photography-is-changing-how-we-remember-our-lives-4b59adab4a2e

Lakoff, G., & Johnson, M. (1980). *Metaphors We Live By*. Chicago: The University of Chicago Press.

Le Grange, L. (2018). What is (post)qualitative research? *South African Journal of Higher Education, 32*(5), 1-14. DOI:10.20853/32-5-3161

Lepecki, A. (2010). The Body as Archive: Will to Re-Enact and the Afterlives of Dances. *Dance Research Journal, 42*(2), 28-48 .DOI: https://doi.org/10.1017/S0149767700001029

Lester, S. (2013). Playing in a Deleuzian Playground. In E. Ryall, W. Russell & M. Maclean (Eds.), *The Philosophy of Play* (pp. 130-140). London/New York: Routledge.

Little, N. (2014). Restructuring the selfsensing: Attention training in contact improvisation. *Journal of Dance & Somatic Practices, 6*(2), 247-259. DOI: https://doi.org/10.1386/jdsp.6.2.247_1

Maclaren, K. (2014). Touching Matters: Embodiments of Intimacy. *Emotion, Space and Society, 13*, 95–102. DOI: https://doi.org/10.1016/j.emospa.2013.12.004

Malaquin-Pavan, E. (1997). Therapeutic Benefit of Touch-massage in the Overall Management of Demented Elderly. *Recherche en soins infirmiers, 49*, 11–66.

Malinin, L.H. (2019). How Radical Is Embodied Creativity? Implications of 4E Approaches for Creativity Research and Teaching. *Frontiers in Psychology,* 10: 2372. DOI: https://doi.org/10.3389/fpsyg.2019.02372

Malloch, S. & Trevarthen, C. (2008). *Communicative Musicality: Exploring the Basis of Human Companionship*. Oxford: Oxford University Press.

Mann, S. (1992). *Immediate Family.* New York: Aperture Foundation.

Manning, E. (2007). *Politics of Touch: Sense, Movement, Sovereignty*. Minneapolis: University of Minneapolis Press.

Manning, E. (2009). *Relationscapes: Movement, Art, Philosophy*. Cambridge: MIT Press.

Manning. E (2014). Wondering the world directly– or, how movement outruns the subject. *Body & Society, 20*(3&4), 162–188. DOI:10.1177/1357034X14546357

Marinetti, F.T. (1921). *The Manifesto of Tactilism*. Accessed December 27, 2021, http://peripheralfocus.net/poems-told-by-touch/manifesto_of_tactilism.html

Massumi, B. (1987). Notes on the translation and acknowledgments. In G. Deleuze and F. Guattari (Eds.), *A Thousand Plateaus: Capitalism and Schizophrenia,* transl. by B. Massumi, (pp. xvi-xix). Minneapolis: University of Minnesota Press.

Massumi, B. (1995). The Autonomy of Affect. In *Cultural Critique, 31, The Politics of Systems and Environments,* Part II (pp. 83-109). Minneapolis: University of Minnesota Press.

Massumi, B. (2002). *Parables of the Virtual*. London: Duke University Press. DOI: https://doi.org/10.1215/9780822383574

Mattens, F. (2009). Perception, Body, and the Sense of Touch: Phenomenology and Philosophy of Mind. *Husserl Studies, 25*(2), 97–120. DOI: 10.1007/s10743-009-9054-x

Maturana, H.R., & Varela, F.J. (1980). *Autopoiesis and Cognition: The Realization of the Living*. Dordrecht: Reidel Publishing Company.

McGann, M. (2007). Enactive Theorists Do It On Purpose: On why the enactive approach demands an account of goals and goal-directedness. *Phenomenology and the Cognitive Sciences, 6*, 463–483. https://doi.org/10.1007/s11097-007-9074-y

McConnell, A.R., Brown, C., Shoda, T., Stayton, L., & Martin, C. (2011). Friends with Benefits: On the Positive Consequences of Pet Ownership. *Journal of Personality and Social Psychology, 101*(6), 1239–52. DOI: https://doi.org/10.1037/a0024506

Merleau-Ponty, M. (1962). *Phenomenology of Perception* (C. Smith, Trans.). London: Routledge. (Original work published 1945)

Merleau-Ponty, M. (1968). *The Visible and the Invisible* (A. Lingis, Trans.). Evanston: Northwestern University Press.

Midgelow, V. (2012). Nomadism and Ethics in/as Improvised Movement Practices. *Critical Studies in Improvisation, 8*(1), 1-12. DOI: https://doi.org/10.21083/csieci.v8i1.2001

Midgelow, V. (2019). Introduction – Improvising Dance: A Way of Going About Things. In V. Midgelow (Ed.), *The Oxford Handbook of Improvisation in Dance* (pp. 40-84). Oxford: Oxford University Press.

Millar, S. (1968). *The psychology of play*. Oxford: Penguin Books.

Montagu, A. (1984). The Skin, Touch and Human Development. *Clinics in Dermatology, 2*(4), 7–26. DOI: https://doi.org/10.1016/0738-081X(84)90043-9

Mouritsen, F. (1998). *Child Culture – Play Culture.* Odense: Department of Contemporary Cultural Studies Odense University.

Mühlhoff, R. (2015). Affective resonance and social interaction. Phenomenology and the Cognitive Sciences, 14, 1001–1019. DOI: https://psycnet.apa.org/doi/10.1007/s11097-014-9394-7

Nakagawa, Y. (2000). *Education for Awakening: An Eastern Approach to Holistic Education*. Brandon: Education Renewal.

Nicolopolou, N. (1993). Play, Cognitive Development, and the World: Piaget, Vygotsky, and Beyond. *Human Development, 36,* l -23.

Noë, A. (2015). *Strange Tools: Art and Human Mind*. New York: Hill and Wang. DOI: https://doi.org/10.1093/mind/fzw060

Nye, B. D. & Silverman, B. G. (2012). Affordance. In N. M. Seel (Ed.),*Encyclopedia of the Sciences of Learning* (pp. 179-183). New York: Springer. DOI: 10.1007/978-1-4419-1428-6_369

O'Connor, D., McCormack, M., Robinson, C., & O'Rourke, V. (2017). Boys and girls come out to play: Gender differences in children's play patterns. *EDULEARN17 Proceedings*, 4713-4719. DOI: 10.21125/edulearn.2017.2042

Oke, A. (2017). Keeping time in dance archives: moving towards the phenomenological archive space. *Archives and Records, 38*(2), 197-211. DOI: https://doi.org/10.1080/23257962.2016.1274255

Opie Archive (n.d.). *The Iona and Peter Opie Archive*. Accessed December 27, 2021, https://www.opiearchive.org

Pallant, C. (2006). *Contact Improvisation: An Introduction to a Vitalizing Dance Form.* Jefferson: McFarland & Company Inc. Publishers.

Parviainen, J. (1998). *Bodies Moving and Moved: A Phenomenological Analysis of the Dancing Subject and the Cognitive and Ethical Values of Dance Art.* Tampere: Tampere University Press.

Parviainen, J. (2003). Bodily Knowledge: Epistemological Reflections on Dance. *Dance Research Journal, 34*(1):11.

Paterson, M., Dodge, M., & MacKian, S. (2012). Introduction: Placing Touch within Social Theory and Empirical Study. In M. Paterson and M. Dodge (Eds.), *Touching Space, Placing Touch* (pp. 1–28). Williston, VT: Ashgate.

Pellegrini, A.D., & Smith, P.K. (1998). Physical Activity Play: The Nature and Function of a Neglected Aspect of Play. *Child Development, 69*(3), 577-598. DOI: 10.1111/j.1467-8624.1998.tb06226.x

Pellis, S.M., & Pellis, V.C. (1996). On Knowing It's Only Play: The Role of Play Signals in Play Fighting. *Aggression and Violent Behaviour, 1*(3), 249–268. DOI: https://doi.org/10.1016/1359-1789(95)00016-X

Pellis, S.M., & Pellis, V.C. (2017). What is play fighting and what is it good for? *Learning & Behaviour, 45*, 355–366. DOI: https://doi.org/10.3758/s13420-017-0264-3

Peters, S. (2016). *Playing Up: a Live Art Game for Kids and Adults*. Accessed December 27, 2021, https://www.thisisliveart.co.uk/publishing/playing-up-a-live-art-game-for-kids-and-adults/

Piaget. J. (1962). *Play, dreams and imitation in childhood* **(**C. Gattegno & F. M. Hodgson, Trans.). New York: Norton. (Original work published 1945)

Pink, S. (2008). Mobilising Visual Ethnography: Making Routes, Making Place and Making Images. *Forum Qualitative Social Research (FQS), 9*(3): 36. DOI: https://doi.org/10.17169/fqs-9.3.1166

Playing the Archive (2017-2019). Accessed December 31, 2020, https://playingthearchive.net/about/

Polanyi, M. (1966). *The Tacit Dimension*. New York: Doubleday & Company.

Potrony, A. (2016-2018). *Play as Radical Practice.* Accessed December 27, 2021, https://www.serpentinegalleries.org/whats-on/play-as-radical-practice/

Protevi, J. (2011). Larval subjects, autonomous systems and E. coli chemotaxis. In L. Guillaume & J. Hughes (Eds.), *Deleuze and the Body* (pp. 29–52). Edinburgh: Edinburgh University Press.

Psypost (2020). *Coronavirus Is Fostering A Culture of No Touching — A Psychologist Explains Why That's A Problem.* Accessed April 1, 2020, https://www.psypost. org/2020/03/coronavirus-is-fostering-a-culture-of-no- touching-a-psychologist-explains-why-thats-a-problem– 56171.

Quaranta, D. (2014). RE:akt! Things that Happen Twice. In A. Caronia, J. Jansa & D. Quaranta (Eds.), *RE: akt! Reconstruction, Re-enactment, Re-port* (pp. 43-53). Brescia: Link Editions.

Ratcliffe, M. (2008). Touch and Situatedness. *International Journal of Philosophical Studies, 16*(3), 299–322. DOI: https://doi.org/10.1080/09672550802110827

Ravn, S. (2020). Investigating Dance Improvisation: From Spontaneity to Agency. *Dance Research Journal, 52*(2), 75-87. DOI: 10.1017/S0149767720000182

Read, C., & Szokolszky, A. (2020). Ecological Psychology and Enactivism: Perceptually-Guided Action vs. Sensation-Based Enaction. *Frontiers in Psychology, 11*: 1270. DOI: https://dx.doi.org/10.3389%2Ffpsyg.2020.01270

Resnik, D.B. (2009). Parent-Investigators: A Dilemma. *JAMA, 301*(20), 159-2161. DOI: 10.1001/jama.2009.728

Rettig, M. (1995). Play and Cultural Diversity. *The Journal of Educational Issue of Language Minority Students, V.15*. Boise: Boise State University.

Rinaldi, C. (2006). The Pedagogy of Listening: The Listening Perspective from Reggio Emilia. Accessed September 7, 2021, https://static1.squarespace.com/static/526fe9aee4b0c53fa3c845e0/t/540fce31e4b00c94d884e002/1410321969279/Pedagody+of+Listening+-+Rinaldi+-+Fall+2001.pdf

Risner, D., & Schupp. K. (2020). *Ethical Dilemmas in Dance Education: Case Studies on Humanizing Dance Pedagogy*. Jefferson: McFarland & Company Inc.

Rodriquez, H. (n.d.). The Playful and the Serious: An approximation to Huizinga's *Homo Ludens.* Accessed January 11, 2018, http://gamestudies.org/0601/articles/rodriges

Röhricht, F., Gallagher, S., Geuter, U., & Hutto, D. D. (2014). Embodied cognition and Body Psychotherapy: The construction of new therapeutic environments. *Sensoria: A Journal of Mind, Brain & Culture, 10*(1), 11-20. DOI: 10.7790/sa.v10i1.389

Rothfield, P. (2013). Beyond Habit: The Cultivation of Corporeal Difference. *Parrhesia, 18*, 100-112.

Rubidge, S. (1998). Embodying Theory. Paper presented at the *Practice as Research and Research as Practice Seminar*: The Laban Centre, London, June 1998. Accessed September 17, 2018, https://www.sensedigital.co.uk/writing/EmbodTheory.pdf

Sansom, A. (2009). Mindful pedagogy in dance: honouring the life of the child. *Research in Dance Education, 10*(3), 161-176.DOI: https://doi.org/10.1080/14647890903324170

Sarco-Thomas, M. (Ed.) (2020). *Thinking Touch in Partnering and Contact Improvisation: Philosophy, Pedagogy, Practice*. Cambridge: Cambridge Scholars Publishing

Saunders, B., Riesel, A., Klawohn, J., & Inzlicht, M. (2018). Interpersonal Touch Enhances Cognitive Control: A Neurophysiological Investigation. *Journal of Experimental Psychology: General, 147*(7), 1066–77. DOI: https://doi.org/10.1037/xge0000412

Sawyer, R.K, & DeZutter, S. (2009). Distributed Creativity: How Collective Creations Emerge from Collaboration. *Psychology of Aesthetics, Creativity, and the Arts, 3*(2), 81-92. DOI: https://psycnet.apa.org/doi/10.1037/a0013282

Schnall, S. (2011). Embodiment in Affective Space: Social Influences on Spatial Perception. In T.W. Schubert & A.Maass (Eds.), *Spatial Dimensions of Social Thought* (pp.131-152). Volume 18 in the series Applications of Cognitive Linguistics. Berlin: De Gruyter Mouton. https://doi.org/10.1515/9783110254310.129

Schwab, M. (2019). Expositionality. In P. de Assis & L.D Errico (Eds.), *Artistic Research: Charting a Field in Expansion* (pp. 27-45). London and New York: Rowman & Littlefield.

Schwab, M., & Borgdorff, H. (2014). Introduction. In M. Schwab & H. Borgdorff (Eds.) *The Exposition of Artistic Research Publishing Art in Academia* (pp. 1-8). Leiden: Leiden University Press.

Seigworth, G.J. (2003). Fashioning a stave, or, singing life. In J.D. Slack (Ed.), *Animations of Deleuze and Guattari* (pp. 75–105). New York: Peter Lang.

Seigworth, G.J., & Gregg, M. (2010). An Inventory of Shimmers. In M. Gregg & G. Seigworth, *The Affect Theory Reader* (pp. 1-29). Durham: Duke University Press.

Seigworth, G.J. (2011). From Affection to Soul. In C.J. Stivale (Ed.), *Gilles Deleuze: Key Concepts* (2d ed., pp. 181-191). Ithaca: McGill-Queens University Press.

Serpentine Galleries (n.d.). *Play as Radical Practice*. London: Serpentine Galleries.

Sheets-Johnstone, M. (1999a). *The Primacy of Movement*. Amsterdam/Philadelphia: John Benjamins Publishing Company.

Sheets-Johnstone, M. (1999b). Emotion and movement. A beginning empirical- phenomenological analysis of their relationship. *Journal of Consciousness Studies, 6*, 259-277.

Sheets-Johnstone, M. (2003). Child's Play: A Multidisciplinary Perspective. *Human Studies, 26*(4), 409-430. DOI: 10.1023/B:HUMA.0000003668.23164.7d

Sheets-Johnstone, M. (2005). 'Man Has Always Danced': Forays into the Origins of an Art Largely Forgotten by Philosophers. *Contemporary Aesthetics, 3*, 1-26.

Sheets-Johnstone, M. (2009). Animation: the fundamental, essential, and properly descriptive concept. *Continental Philosophy Review, 42*, 375–400. DOI: 10.1007/s11007-009-9109-x

Sheets-Johnstone, M. (2010). *Maxine Sheets-Johnstone on movement.* Accessed August 21, 2021, https://relationalimplicit.com/zug/transcripts/Sheets-Johnstone-2010-05.pdf

Sheets-Johnstone, M. (2012). From Movement to Dance. *Phenomenology and the Cognitive Sciences, 11*(1), 39–57. DOI: 10.1007/s11097-011-9200-8

Sheets-Johnstone, M. (2013). Movement as a Way of Knowing. *Scholarpedia, 8*(6): 30375. DOI: doi:10.4249/scholarpedia.30375

Sheets-Johnstone, M. (2014). Thinking in Movement: Response to Erin Manning. *Body & Society, 20*(3&4), 198-207. DOI: https://doi.org/10.1177/1357034X14547395

Sheets-Johnstone, M. (2015a). Embodiment on Trial: A Phenomenological Investigation. *Continental Philosophy Review, 48*(1), 23-39. DOI: https://doi.org/10.1007/s11007-014-9315-z

Sheets-Johnstone, M. (2015b). *The Phenomenology of Dance,* 15th ed. Philadelphia: Temple University Press. (Original work published 1966)

Simon, C. (2002). Introduction: Following the Archival Turn. *Visual Resources, 18*(2), 101-107. DOI: https://doi.org/10.1080/01973760290011770

Singh, A., & Misra, N. (2009). Loneliness, Depression and Sociability in Old Age. *Industrial Psychiatry Journal, 18*(1), 51–55. DOI: 10.4103/0972-6748.57861

Siobhan Davies Dance (2009). *Siobhan Davies Replay.* Accessed May 5, 2021, https://www.siobhandaviesreplay.com

Sheppard, A., & Broughton, M.C. (2020). Promoting wellbeing and health through active participation in music and dance: a systematic review. *International Journal of Qualitative Studies in Health and Well-being, 15*(1):1732526. DOI: 10.1080/17482631.2020.1732526.

Slee, P. T. (1995). Bullying in the playground: The impact of inter-personal violence on Australian children's perceptions of their play environment. *Children's Environments, 12*(3), 320–327.

Smelik, A. (2016). Gilles Deleuze: Bodies-without-Organs in the Folds of Fashion. In A. Rocamora & A. Smelik (Eds.), *Thinking Through Fashion. A Guide to Key Theorists* (pp. 165-183). London: I.B. Tauris.

Smyth, M. (1984). Kinaesthetic Communication in Dance. *Dance Research Journal, 16* (2), 19-22. D https://doi.org/10.2307/1478718

Smyth, M. & Anderson, H.I. (2000) Coping with clumsiness in the school playground: social and physical play in children with coordination impairments. *British Journal of Development Psychology, 18*(3), 389-413. DOI: https://doi.org/10.1348/026151000165760

Spariosu, M. (1989). *Dionysus Reborn: Play and the Aesthetic Dimension in Modern Philosophical and Scientific Discourse*. Cornell: Cornell University Press.

Stein, E.W. (2011). Improvisation as Model for Real-Time Decision Making. In F. Burstein, P. Brezillon & A. Zaslavsky (Eds.), *Supporting Real Time Decision Making:* The Role of Context in Decision Support on the Move (pp.13-32). Berlin/Heidelberg: Springer Science & Business Media.

Stern, D.N. (1985). *The interpersonal world of the infant.* New York: Basic Books.

Stinson, S.W. (1990). Dance education in early childhood. *Design for Arts in Education, 91*(6), 34-41. DOI: 10.1080/07320973.1990.9934836

Stinson, S.W. (1997). A question of fun: Adolescent engagement in dance education. *Dance ResearchJournal*, *29*(2), 49-69. DOI: https://doi.org/10.1080/07320973.1990.9934836

Stinson, S. (2005). The Hidden Curriculum of Gender in Dance Education. *Journal of Dance Education, 5(*2), 51-57. DOI: 10.1080/15290824.2005.10387285

Storli, R. (2013). Characteristics of indoor rough-and-tumble play (R&T) with physical contact between players in preschool. *Nordic Early Childhood Education Research Journal*, 1-15.

St. Pierre, E.A. (2021). Why Post Qualitative Inquiry? Post Qualitative Inquiry, the Refusal of Method, and the Risk of the New. *Qualitative Inquiry*, *27*(1), 3–9. DOI: https://doi.org/10.1177/1077800419863005

Summa, M. (2020). Joy and Happiness. In T. Szanto & H. Landweer (Eds.), *The Routledge Handbook of Phenomenology of Emotion* (pp. 416-425). New York: Taylor & Francis.

Surman, G. (2016). I Love My Baby and My Baby Loves Me… / Play. In E. Underwood- Lee & L. Simiç (Eds.), *Live Art and Motherhood, A Study Room Guide on Live Art and the Maternal* (pp.19-21). London: Live Art Development Agency.

Sutton-Smith, B. (1966). Piaget on Play: A Critique. *Psychological Review*, *73*(1), 104-110. DOI: https://psycnet.apa.org/doi/10.1037/h0022601

Sutton-Smith, B. (1997). *The Ambiguity of Play.* Cambridge: Harvard University.

Svendler Nielsen, C. (2009). Children's Embodied Voices: Approaching Children's Experiences Through Multi-Modal Interviewing. *Phenomenology & Practice*, *3*(1), 80-93. DOI:10.29173/pandpr19822

Svendler Nielsen, C., & Burridge, S. (Eds.) (2020). *Dancing Across Borders: Perspectives on Dance, Young People and Change*. London: Routledge. https://doi.org/10.4324/9781003008569

Tai, K., Zheng, M., & Narayanan, Y. (2011). Touching a Teddy Bear Mitigates Negative Effects of Social Exclusion to Increase Prosocial Behaviour. *Social Psychological and Personality Science, 2*(6), 618-626. DOI: 10.1177/1948550611404707

Tanaka, S. (2011). The notion of embodied knowledge. In P. Stenner, J. Cromby, J. Motzkau, J. Yen, & Y.Haosheng (Eds.), Theoretical psychology: Global transformations and challenges (pp. 149-157). Concord: Captus Press.

Tanaka, S. (2015). Intercorporeality as a theory of social cognition. *Theory & Psychology, 25*(4), 455–472. DOI: 10.1177/0959354315583035

Thayer, S. (1982). Social touching. In W. Schiff & E. Foulkes (Eds.), *Tactual Perception* (pp. 263–305). Cambridge: Cambridge University Press.

Thompson, E. (2005). Sensorimotor subjectivity and the enactive approach to experience. *Phenomenology and the Cognitive Sciences*, *4*(4), 407–27. DOI: https://doi.org/10.1007/s11097-005-9003-x

Thompson, E. (2007). *Mind in Life: Biology, Phenomenology, and the Sciences of Mind*. Cambridge/London: Harvard University Press.

Thompson, E. & Stapleton, M. (2009). Making sense of sense-making: reflections on enactive and extended mind theories. *Topoi*, 28, 23-30. DOI: 10.1007/s11245-008-9043-2

Torrance, S, & Schumann, F. (2019). The spur of the moment: what jazz improvisation tells cognitive science. *AI & SOCIETY, 34*, 251–268. DOI: https://doi.org/10.1007/s00146-018-0838-4

Tortora, S. (2006). *The dancing dialogue: Using the communicative power of movement with young children.* Baltimore: Brookes.

Tufnell, M., & Crickmay, C. (1990). *Body Space Image: Notes Towards Improvisation and Performance*. Cornwall: Hartnolls Ltd.

Van Alphen, E. (2008). Archival Obsessions and Obsessive Archives. In M.A. Holly & M. Smith (Eds.), *What Is Research in the Visual Arts? Obsession, Archive, Encounter* (pp. 65-84). London: Yale University Press.

Van der Schyff, D. (2015). Music as a Manifestation of Life: Exploring Enactivism and the 'Eastern Perspective' for Music Education. *Frontiers in Psychology, 6*: 345.
DOI: https://doi.org/10.3389/fpsyg.2015.00345

Van der Schyff, D., Schiavio, A., Walton, A., Velardo. V., & Chemero, A. (2018). Musical creativity and the embodied mind: Exploring the possibilities of 4E cognition and dynamical systems theory. *Music & Science, 1*, 1–18. DOI: https://doi.org/10.1177/2059204318792319

Van Winden, D., van Rijn, R., Savelsbergh, G., Oudejans, R., & Stubbe, J. (2021). The Association Between Stress and Injury: A Prospective Cohort Study Among 186 First-Year Contemporary Dance Students. *Frontiers in Psychology: 12*. DOI: 10.3389/fpsyg.2021.770494

Vannini, P. (2015). Non-Representational Research Methodologies: An Introduction. In P. Vanini (Ed.), *Non-Representational Methodologies Re-Envisioning Research* (pp. 1-19). New York/London: Routledge.

Varela, F.J. (1987). Laying down a path in walking. In W. Thompson (Ed.), *Gaia: A Way of Knowing. Political Implications of the New Biology* (pp. 48–64). Hudson: Lindisfarne Press.

Varela, F. J., Thompson, E., & Rosch, E. (1993). *The Embodied Mind*. Cambridge: The MIT Press.

Vygotsky, L.S. (1967). Play and its role in the mental development of the child. *Soviet Psychology, 12*, 6- 18.

Westerberg, L., & Maureen Vandermaas-Peeler, M. (2021) How teachers, peers, and classroom materials support children's inquiry in a Reggio Emilia-inspired preschool. *Early Child Development and Care, 191*(7-8), 1259-1276. DOI: https://doi.org/10.1080/03004430.2021.1881075

Westgeest, H.F., & Augusto, R. (2020). Preserving the Performativity of Performance Art While Respecting Ephemerality. *Museologia & Interdisciplinaridade, 9*(18), 75-93.

Whatley, S. (2014). Digital inscriptions and the dancing body: expanding territories through and with the archive. *Choreographic Practices, 5*(1), 121-138. DOI: 10.1386/chor.5.1.121_1

Williams, M. (2020). *This Artwork Changed My Life: Sally Mann's "Immediate Family*". Accessed May 13, 2021, https://www.artsy.net/series/artworks-changed-lives/artsy-editorial-artwork-changed-life-sally-manns-immediate-family

Williams, S. (2019). *Finding Focus: Using External Focus of Attention for Practicing and Performing Music* [PhD thesis]. Leiden: ACPA. Accessed January 10, 2022, https://www.universiteitleiden.nl/en/research/research-output/humanities/finding-focus---using-external-focus-of-attention-for-practicing-and-performing-music

Winnicott, D. (2005). *Playing and Reality*. Middlesex: Penguin Books.

Yatuv, I. (2016). *Contakids*. Accessed August 21, 2020, http://www.contakids.com.

Yiakoumaki, G.N. (2009). *Curating Archives, Archiving Curating.* Doctoral thesis. London: Goldsmiths.

Yu, G. (2008). Documentation: Ideas and Applications from the Reggio Emilia Approach. *Teaching Art Journal, 6(*2), 34-42. DOI: https://doi.org/10.1080/15411790801910735

Zachopoulou, E., Trevlas, E., & Tsikriki, G. (2004). Perceptions of gender differences in playful behaviour among kindergarten children. *European Early Childhood Education Research Journal, 12*(1), 43-53, DOI: 10.1080/13502930485209301

Zaporah, R. (1995). *Action Theater: The Improvisation of Presence.* Berkely: North Atlantic Books.

Summary Dutch

Fysiek Spel en Dansimprovisatie: Beweging als de Betekenisvolle Verbinder tussen Zelf en Wereld

Fysiek spel en dansimprovisatie kunnen beide gezien worden als een vorm van creatieve bewegingsexploratie. Beide activiteiten nemen het lichaam als uitgangspunt voor de betekenisvolle ervaring waarbij taal slechts een ondergeschikte rol speelt. Verschillende auteurs wijzen op de overeenkomsten tussen fysiek spel en dans. Hector Rodriquez (z.d.) stelt dat de ritmische actie-reactie patronen in spel een sterke overeenkomst vertonen met dans. Volgens Maxine Sheets-Johnstone (2005) kan dans gezien worden als de voortzetting van het fysiek spelgedrag van kinderen. Zowel fysiek spel als dansimprovisatie zijn kinetisch-kinesthetische activiteiten waarin de pure uitbundigheid van beweging overheerst.

In dit artistiek promotieonderzoek kijk ik specifiek naar hoe betekenisgeving in zowel fysiek spel van kinderen als de dansimprovisatie praktijk van professionals tot stand komt. Ik maak daarbij gebruik van het concept '*deelnemend zingeven'* (in het Engels 'participatory sense-making) dat door Hanne de Jaegher en Ezequiel di Paolo (2007) is ontwikkeld. Deelnemend zingeven gaat er vanuit dat betekenisgeving niet zozeer een individueel, mentaal proces is maar dat betekenissen voortvloeien uit de interactie met de ander en de wereld.

Dit filosofische-wetenschappelijke uitgangspunt sluit nauw aan bij het enactivisme, een stroming in de cognitiewetenschappen die stelt dat cognitie niet zozeer een intern, mentaal verschijnsel is maar het resultaat is van de dynamische relatie tussen een organisme en zijn omgeving. Enactivisme biedt een alternatief voor traditionele modellen die cognitie opvatten als een intern informatie verwerkend proces waarbij perceptie en actie vooral als input en output dienen van een intern, cognitief proces. Het enactivisme stelt daarentegen dat cognitie niet los gezien kan worden van ons belichaamd handelen in de wereld. De grondleggers van het enactivisme, Humberto Maturana en Francisco Varela (1980), gebruiken het begrip *autopoiese* (zelfbehoud en zelforganisatie) als theoretische fundament voor hun theorie. Door een netwerk van processen houdt het organisme zichzelf in stand. In het enactivisme is zingeving een interactief en belichaamd proces. Lichaam, context en (de geleefde) ervaring spelen aldus een cruciale rol in het zingevende proces. Zingeving zit diepgeworteld in onze bewegingen: betekenissen komen tot stand door het ritmisch coördineren van onze acties.

Hier komen fysiek spel en dansimprovisatie om de hoek kijken. In beide activiteiten vormt beweging immers het uitgangspunt voor zingeving. In dit onderzoek staat daarbij de volgende hoofdvraag centraal: *Wat zijn de gemeenschappelijke componenten van het deelnemend zingevend proces in het fysiek spel van kinderen en de dansimprovisatie van professionals?* Ik onderzoek deze vraag zowel vanuit de literatuur als vanuit de artistieke praktijk. Vanuit het literatuuronderzoek kom ik tot een vijftal componenten. In fysiek spel en dansimprovisatie gaat het om 1) een real-time proces waarbij belichaamde beslissingen in het moment genomen worden, 2) het kinesthetisch plezier waarin beleving en beweging in voortdurende verbinding met elkaar staan, 3) het ritmisch coördineren van bewegingen en handelingen, 4) creatieve exploratie vanuit regels en structuren die enerzijds van tevoren zijn vastgelegd en anderzijds in het moment zelf ontstaan en 5) een ambigu proces waarin

betekenissen meerduidig zijn. Op basis van het artistiek onderzoek voeg ik daar later nog een zesde component aan toe: de kwalitatieve bewegingsdynamiek (tijd, kracht en ruimte) die de zeggingskracht van een beweging bepaalt.

De hoofdvraag vormt tevens het uitgangspunt voor de artistieke praktijk die drie verschillende fasen omvat: 1) het levend archief, 2) de re-enactments en 3) de ontwikkeling van Re-Play/Re-Move – een toolkit voor creatieve bewegingsexploratie voor kinderen tussen de 4 en 10 jaar. Over een periode van ruwweg vijf jaar (2013-2018) heb ik een fotoverzameling aangelegd van zowel de spontane, fysieke spelmomenten van mijn kinderen in hun directe leefomgeving als geënsceneerde spelmomenten. Mijn artistiek werk resoneert daarmee onder meer met fotografe Sally Mann en performancekunstenaars zoals Grace Surman en Sarah Black. Het levend archief bestaat uit zowel losse foto's (stand-alones) als bewegingssequenties. Het archiveren is een iteratief, open en onvoltooid proces dat continue aan verandering onderhevig is.

In de tweede fase van het artistiek onderzoek zijn professionele dansers en dansstudenten aan de slag gegaan met het archiefmateriaal. Dit heeft geleid tot een drietal re-enactments. Het doel van re-enactment is niet het letterlijk nabootsen van het origineel (in de zin van kopiëren of imiteren) maar het aanboren van nieuw creatief potentieel. In dit onderzoek heb ik re-enactments specifiek gebruikt om te onderzoeken hoe het deelnemend zingevingsproces in zowel fysiek spel als dansimprovisatie tot stand komt. Er is daarbij onder meer gekeken naar: gedeelde aandacht, gedeelde lichamelijkheid (intercorporaliteit), de transformerende kracht van zowel spel als dansimprovisatie, hoe affecten en intensiteiten tussen verschillende lichamen resoneren en hoe van daaruit nieuwe betekenissen ontstaan. Tot slot heb ik het *Touch Project* ontwikkeld, een project dat zich op het snijvlak van spel en dansimprovisatie bevindt en waarin de rol van aanraking wordt onderzocht in het zingevend proces.

In de derde fase van het artistiek proces is *Re-Play/Re-Move* ontwikkeld, een creatieve toolkit voor kinderen in de leeftijd van 4 tot 10 jaar. De toolkit neemt het reeds genoemde model van 'Deelnemend zingeven in fysiek spel en dansimprovisatie' als uitgangspunt en voegt daar een zesde component aan: de kwalitatieve bewegingsdynamiek (met de elementen ritme/tijd, kracht en ruimte). De toolkit kent twee onderdelen: een kaartenset met bewegingsopdrachten en drie workshops met de thema's 'Aanraking', 'Creatieve bewegingsexploratie' en 'Materialen'. In de drie workshops wordt opnieuw gewerkt met het principe van re-enactment. Ditmaal zijn de rollen echter omgedraaid: kinderen gaan aan de slag met bestaand werk van choreografen en performancekunstenaars.

Concluderend kan gesteld worden dat het fysieke spel van kinderen en de dansimprovisatie praktijk van professionals, veel handvatten bieden om het concept 'deelnemend zingeven' in de diepte te onderzoeken. In beide activiteiten komen belichaamde betekenissen tot stand door de innige verstrengeling tussen beweging en affect. Betekenisgeving is een belichaamd proces waarin door middel van ritmische interacties niet alleen gevoelswaarden en belevingen (affecten, intensiteiten, krachten) worden uitgewisseld, maar ook worden gegenereerd. Beweging zelf vormt de basis voor het zingevend proces. Creatieve bewegingsexploratie kan ieder mens dus helpen om de dagelijkse bewegingsroutine te doorbreken en aandacht te hebben voor de kinetisch/kinesthetische en tactiele dimensies van beweging. Het biedt een krachtige mogelijkheid om vanuit het lichaam en vanuit beweging in (dynamische) verbinding te staan met zelf, ander en de wereld.

Summary English

Participatory Sense-making in Physical Play and Dance Improvisation: Drawing Meaningful Connections Between Self, Others and World

Physical play and dance improvisation can both be seen as forms of creative movement exploration. Both activities take the body as the starting point for a meaningful experience in which language plays only a secondary role. Several authors explicitly draw analogies between play and dance improvisation. Rodriquez states that play consists of transindividual processes of action and reaction 'which often takes on a to-and-fro quality reminiscent of dance' (n.d., p.2). Sheets-Johnstone points to the intimate relationship between play and dance. She considers play as a "kinetic happening in which the sheer exuberance of movement dominates and in which a certain freedom of movement obtains" (Sheets-Johnstone, 2005, para. 29). Both dance and movement are connected to play: dance in fact can be seen as the continuation of children's natural movement-exploration.

In this artistic doctoral research, I specifically look at the meaning-making process in both children's physical play and the dance improvisation practice of professionals. In doing so, I make use of the concept of '*participatory sense-making'* developed by Hanne de Jaegher and Ezequiel di Paolo (2007). Participatory sense-making assumes that meaning-making is not a solely individual activity but meaning is generated in the interaction with others and the world.

This philosophical-scientific premise is closely aligned with enactivism, a movement in cognitive science that claims that cognition is not so much an internal, mental phenomenon as it is the result of the dynamic relationship between an organism and its environment. Enactivism offers an alternative to traditional models that conceive of cognition as an internal information processing process in which perception and action serve primarily as inputs and outputs. Enactivism, on the other hand, argues that cognition cannot be separated from our embodied actions in the world. The founders of enactivism, Humberto Maturana and Francisco Varela (1980), use the concept of *autopoiesis* (self-preservation and self-organisation) as the theoretical foundation for their theory. Through a network of processes (at many different levels) the organism maintains itself. In enactivism, sense-making is an interactive and embodied process. Body, context, and (the lived) experience thus play a crucial role in the sense-making process. Sense-making is deeply rooted in our movements: meanings come about through the rhythmic coordination of our actions.

This is where physical play and dance improvisation come in. After all, in both activities, movement is the starting point for sense-making. In doing so, this study focuses on the following main question: *What are the common components of the participatory sense-making process in children's physical play and professionals' dance improvisation?* I explore this question from both literature and artistic practice. From the literature review, I arrive at five components. In physical play and dance improvisation, it involves 1) a real-time process in which embodied decisions are made in the moment, 2) the kinaesthetic pleasure in which experience and movement are in constant connection with each other, 3) the rhythmic coordination of movements and actions, 4) creative exploration from rules and structures that are predetermined on the one hand and arise in the moment itself on the other, and 5) an ambiguous process in which meanings are indeterminate.

The main question also forms the starting point for the artistic practice that includes three different phases: 1) the living archive, 2) the re-enactments and 3) the development of Re-Play/Re-Move - a toolkit for creative movement exploration for children between the ages of 4 and 10. Over a period of roughly five years (2013-2018), I built a photo collection of both my children's spontaneous, physical moments of play in their immediate environment and staged moments of play. In doing so,

my artistic work resonates with, among others, photographer Sally Mann and performance artists such as Grace Surman and Sarah Black. The living archive consists of single photographs (stand-alones) and motion sequences. Archiving is considered here as an iterative, open, and incomplete process that is subject to continuous change.

In the second phase of the artistic research, professional dancers and dance students began working with the archival material. This led to three re-enactments. The goal of re-enactment is not to imitate the original (in the sense of copying or imitating) but to tap into new creative potential. In this study, I have used re-enactments specifically to explore how the participatory sense-making process is established in both physical play and dance improvisation. Among other things, the following were taken into account: shared attention, shared physicality (intercorporeality), the transformative power of both physical play and dance improvisation, how affects and intensities resonate between different bodies, and how new meanings emerge from there. Finally, I developed the *Touch Project*, a project at the intersection of play and dance improvisation that explores the role of touch in the sense-making process.

In the third phase of the artistic process, *Re-Play/Re-Move* was developed, a creative toolkit for children aged 4 to 10. The toolkit takes the already mentioned model of 'participatory sense-making in physical play and dance improvisation' as a starting point and adds a sixth component: qualitative movement dynamics (with the elements of rhythm/time, force and space) to the model. The toolkit has two components: a card set with movement tasks and three workshops with the themes of 'Touch,' 'Creative Movement Exploration,' and 'Materials'. The three workshops will again work with the principle of re-enactment. This time, however, the roles are reversed: children get to work with existing work by choreographers and performance artists.

In conclusion, I maintain that the physical play of children and the dance improvisation practice of professionals offer many tools to explore in-depth the concept of 'participatory sense-making. In both activities, embodied meanings come about through the intimate entanglement between movement and affect. Meaning-making is an embodied process in which values and experiences (affects, intensities, forces) are exchanged, but also generated. The movement itself is the basis for the sense-making process. Creative movement exploration can thus help each person to break the daily movement routine and pay attention to the kinetic/kinaesthetic and tactile dimensions of movement. It offers a powerful opportunity to engage with the body in a creative way and to experience how movement itself is at the heart of all sense-making processes.

Appendix I: Biography

Name: Carolien Hermans
Place and date of birth: 23-04-1969, Oss

In 1987 I was a student at the Fontys Dance Academy, teaching department expressionistic dance. I decided however to pursue an academic carrier and in 1994 I graduated cum laude at the Catholic University of Nijmegen, department of Orthopedagogy. My thesis, under the guidance of Prof. Dr. De Bruyn, focussed on decision-making processes in multidisciplinary teams. In the same period, I obtained a propedeuse in History of Art, also at the Catholic University of Nijmegen. From 1994-1998 I worked as a junior researcher and teacher in the same department. Next to my research into decision-making processes, I taught various subjects amongst which, Method and Observation, Perception and Observation, Argumentation, Introduction to Pedagogy etc.

It was only in 1996 that I picked up dancing again. From 1998-2000, I was a student at the School for New Dance Development, Amsterdam. In 2002, I was selected for the prestigious master's program Dance Unlimited (now DAS Choreography), a study into choreography and new media, from which I graduated in June 2004. As a performer, I have been involved in several physical theatre companies among which Warner & Consorten. I also presented my own artistic work at several national and international festivals, like 'Internationales Solo-Tanz-Theater Festival', Stuttgart; Dance Screen, Monaco; Il coreografo Elletronico, Napels; Festival for Young Choreographers in Venezuela, and others. I won the first price in the webdance competition organised by the NPS (Dutch Public Television Station).

From 2004-2009, I worked at the Lectoraat Art Theory and Research, as well as the Lectoraat Art Practice and Development, at the Amsterdam School of the Arts. Since 2010, I am a senior lecturer and researcher at the Amsterdam University of the Arts and Utrecht University of the Arts.

Appendix II: Informed Consent Forms

1.Informed Consent Form: Spontaneous Play Events

Betreft: Fotomateriaal ten behoeve van archief

Geachte,

Middels deze brief willen we u toestemming vragen om de foto's die tijdens informele spelmomenten van uw kind zijn genomen, te mogen gebruiken als archief materiaal voor het artistieke promotie onderzoek van Carolien Hermans.

Voordat u kunt antwoorden of u wel of niet uw toestemming verleend willen we u eerst verder informeren over het doel en de opzet van het onderzoek. Deze brief is bedoeld om de informatie rustig te kunnen doorlezen. Belangrijk is dat deelname aan het onderzoek vrijwillig is en dat u op elk moment kunt besluiten uw deelname in te trekken.

Doel van de spelsessie
In dit artistieke bewegingsproject worden de onderliggende (gedeelde) principes van het natuurlijke, spontane spel van kinderen/jongeren onderzocht als ook de improvisatie praktijk van professionele dansers – vanuit het standpunt van *embodied cognition.* Het uiteindelijke doel is om inzicht te krijgen in hoe kinderen/jongeren en professionele dansers betekenis geven aan de wereld vanuit het lichaam/lijf – en welke rol creativiteit hierin speelt.

Vrijwilligheid van deelname
Als uw kind of u niet wil dat het materiaal in het archief wordt opgenomen, dan zullen de foto's worden verwijderd uit de bestanden en worden vernietigd.
Mocht u na het lezen van deze brief nog vragen hebben, neem dan contact op met Carolien Hermans.
Als u besluit mee te werken, gelieve dan dit formulier te ondertekenen.

Met vriendelijke groet,

Mw. Drs. C. Hermans

Toestemming onderzoek

Naam: …….

Ouder/verzorger van: …….

Verklaar dat ik dit formulier gelezen heb en:

Ik verklaar hierbij op voor mij duidelijke wijze te zijn ingelicht over de aard en methode van het onderzoek, zoals beschreven in de informatiebrief.
Ik verklaar bevoegd te zijn om te tekenen voor deelname van het kind/jongere aan het bedoelde onderzoek.
Gelieve aan te kruisen wanneer u met onderstaande akkoord gaat:

☐ Ik geef toestemming om het fotomateriaal te gebruiken van mijn kind voor de doelen die in de informatie(brief) staan. Ik geef ook toestemming om de gegevens nog 5 jaar* na afloop van dit onderzoek te bewaren voor nadere analyse (indien van toepassing);
☐ Ik geef toestemming dat het fotomateriaal waarop mijn kind herkenbaar in beeld is, gebruikt wordt voor een online publicatie, presentatie of workshop over het onderzoek.

..... .
Handtekening ouder/verzorger

*De termijn van vijf jaar wordt in de wetenschap standaard aangehouden, zodat andere onderzoekers de gelegenheid hebben de oorspronkelijke gegevens te controleren.

2.Informed Consent: R&T Play Four Boys Conservatory

Geachte,

Middels deze brief willen we u en uw zoon toestemming vragen om het fotomateriaal dat tijdens informele spelmomenten zijn genomen, te mogen gebruiken als achtergrondmateriaal voor het artistieke promotie onderzoek van Carolien Hermans.

Voordat u kunt antwoorden of u wel of niet uw toestemming verleend willen we u eerst verder informeren over het doel en de opzet van het onderzoek. Deze brief is bedoeld om de informatie rustig te kunnen doorlezen. Belangrijk is dat deelname aan het onderzoek vrijwillig is en dat u op elk moment kunt besluiten uw deelname in te trekken.

Doel van de spelsessie
In dit artistieke bewegingsproject worden de onderliggende (gedeelde) principes van het natuurlijke, spontane spel van kinderen/jongeren onderzocht als ook de improvisatie praktijk van professionele dansers – vanuit het standpunt van *embodied cognition.* Het uiteindelijke doel is om inzicht te krijgen in hoe kinderen/jongeren en professionele dansers betekenis geven aan de wereld vanuit het lichaam/lijf – en welke rol creativiteit hierin speelt.

Vrijwilligheid van deelname
Als uw kind of u niet wil dat het materiaal in het archief wordt opgenomen, dan zullen de foto's worden verwijderd uit de bestanden en worden vernietigd.
Mocht u na het lezen van deze brief nog vragen hebben, neem dan contact op met Carolien Hermans.
Als u besluit mee te werken, gelieve dan dit formulier te ondertekenen.

Met vriendelijke groet,

Mw. Drs. C. Hermans

Toestemming onderzoek

Naam: …….

Ouder/verzorger van: …….

Verklaar dat ik dit formulier gelezen heb en:

Ik verklaar hierbij op voor mij duidelijke wijze te zijn ingelicht over de aard en methode van het onderzoek, zoals beschreven in de informatiebrief. Ik verklaar bevoegd te zijn om te tekenen voor deelname van het kind/jongere aan het bedoelde onderzoek.

Gelieve aan te kruisen wanneer u met onderstaande akkoord gaat:

☐ Ik geef toestemming om het fotomateriaal te gebruiken van mijn kind voor de doelen die in de informatie(brief) staan. Ik geef ook toestemming om de gegevens nog 5 jaar* na afloop van dit onderzoek te bewaren voor nadere analyse (indien van toepassing);

☐ Ik geef toestemming dat het fotomateriaal waarop mijn kind herkenbaar in beeld is, gebruikt wordt voor een online publicatie, presentatie of workshop over het onderzoek.

..... .
Handtekening ouder/verzorger

..... .
Handtekening jongere

*De termijn van vijf jaar wordt in de wetenschap standaard aangehouden, zodat andere onderzoekers de gelegenheid hebben de oorspronkelijke gegevens te controleren.

3.Informed Consent Re-Enactment Hotel Dance

Paula Guzzanti
Re-enactment of hotel dance: an improvisation imagery task
10 July 2018

Assignment/Explanation of the assignment by mail:
So here is a small explanation of the improvisation imagery task. One step in my research is to spontaneously capture the physical play (and also dance) of children. This material I then hand over to professional dancers, with the aim to re-enact an event of which they initially were not part of. The aim is not to imitate the material but to come to an embodied actualization of children's play.

I am specifically interested in energy, intensity, affects, having fun/enjoying, being in the moment and also in excessiveness and overabundance.

In your case, I would like to ask to re-enact a hotel-dance of my daughter. Some time ago I went with my daughter (Lisa, at that time 11 years old) to a conference in Coventry where we did a performance lecture together on 'the animal body'. When we were back at the hotel (in Coventry) my daughter spontaneously started to dance and I captured that with the camera. I refer to this little instant dance as 'hotel dance'.

What I would like to ask you is the following: look at the pictures first, choose images that resonate or appeal to you (in whatever way, you don't have to explain this, the resonance can be entirely on an affective non-linguistic level) and then you try to recapture the energy, intensities and affects, or just something that grabs you and takes you along. It's quite important that you don't think to much about it, so that the body and the affects it produces guide you.

It would be quite important to capture this little improvisation, preferable by pictures or video.
If you feel any hesitations or if you have questions, please let me know.

Kind regards, Carolien

Informed Consent:|

☐ I give permission to use the images/video for research purposes as well as for publication in an academic journal

☐ I give permission to use the insights (thoughts/ideas) that were shared in the artistic Experiment

☐ I give permission to use my name in the publication

4.Informed Consent Participants Touch Workshop

Touch Workshop: 8-10 March 2019
University of Chester

Participants:
Hannah Kelly
Malaika Sarco-Thomas
Richard Sarco-Thomas
Ha Young
Pierre Alexandre Bouvery
Eva Bru
Annika Lübbert
Sean Fitton
Sofie Hub

This workshop is part of an artistic research that explores the relationship between (group) movement improvisation and the aesthetics of play through the senses. We will explore notions such as the touch field, intercorporeality, and co-agency through the sharing of weight, energy, strength and balance. We will explore group improvisation, contact, and play as a zone of proximity, a vitalizing site. In this workshop we will move, write and reflect. We will explore approaches to working with contact and improvisation individually and in small groups, as a form of co-agency. Writing, moving and reflecting will intermingle with each other: we will write with our bodies and think within movement. The sessions are aimed toward performers with all levels of experience.

Your participation in this workshop is voluntary. It is up to you to decide whether or not to take part in this study. If you decide to take part in this study, you will be asked to sign a consent form. After you sign the consent form, you are still free to withdraw at any time and without giving a reason. If you withdraw from the study before data collection is completed, your data will be returned to you or destroyed.

See also risk assessment form.
Kind regards,

Mw. Drs. C. Hermans

Hereby, I give permission:
☐ to take photographs of me and to use the images for research purposes as well as for publication in an academic journal
☐ to use the insights (thoughts/ideas) that we shared during the workshop, in an anonymous way

5.Informed Consent: First-year students MTD

Dance Improvisation Workshop with Carolien Hermans
15 March 2018

Amsterdam University of the Arts
Department: Modern Theater Dance (MTD)
First-year-students

Participants:
Alberto Quirico
Björn Bakker
Lian Frank
Lucie Rutten
Oriane Gidron
Simon Lelièvre
Fons Dhossche
Catharina Paiva
Laura Costa
Oscar Valenza

This workshop is part of an artistic research that explores the relationship between (group) improvisation and physical play. The rough-and-tumble play of four boys will be used as starting point for dance improvisation. Through a set of images. The dancers will re-enact and re-construct the original play event. The aim is to get a deeper insight into the underlying mechanisms of both physical play and dance improvisation – using embodied cognition and the concept of participatory sense-making as a theoretical framework.

Hereby I give permission to:

☐ I consent voluntarily to be a participant in this workshop and that insights will be used for this artistic research project

☐ I hereby give permission to use the photo's for research purposes, for the archive, as well as for publication in academic journals and reports