

DON'T FORGET TO BREATHE!

A study on the notion of breath in the work of Emio Greco and Pieter C. Scholten



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Summary: Don't forget to breathe! A study on the notion of breath in the work of Emio Greco and Pieter C. Scholten.

This thesis examines the understanding of breath by choreographers Emio Greco and Pieter C. Scholten. With the aim of a new understanding of Greco and Scholtens' oeuvre, the role of breath was studied in several layers of their work.

Firstly, the connection between respiration and the EG|PC philosophy "between brain and movement" is examined. In relation to this philosophy, specific attention has been paid to the book "The Forgetting of Air by Martin Heidegger" by Luce Irigaray and to the theory on the relationship between body and mind by Baruch Spinoza. After, the EG|PC performance *Appearance* is analyzed with a focus on breath. Hereby, both the dramaturgical choices with regard to breath and the breathing technique of the dancers is studied. Several interviews with dancers from the Ballet National de Marseille are used to reinforce my arguments. Then, the role of respiration in the DS/DM dancing method by Greco and Scholten is investigated. I focused on the relationship between breath and the movement quality of the dancer but also on breath as a metaphor in the communication between dancers. Finally, the DS/DM installation is studied with regard to breath. Inspiration was taken from Ben Spatz' "What a Body Can Do" to critically evaluate the DS/DM installation.

This thesis shows that the embodied knowledge of breath does not only play a big role in the work of Greco and Scholten but is also crucial for the understanding of their oeuvre. As they consider breath to be the ultimate connection between brain and movement, between inside and outside, a focus on this subject generates a better understanding of the relationship between the dancer and his/her own body, the space and other dancers.

Breathe, breathe in the air
Don't be afraid to care
Leave but don't leave me
Look around and choose your own ground

Pink Floyd - Breathe

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Introduction

The phenomenon of breath evokes many sorts of associations. Breathing can be physiological, spiritual, experiential, symbolical and much more. Breath, and therefore also air, is necessary for every human being alive. Air is inherent in all what is living and determines for a great part what our planet looks like: without air there would be no fire, no wind, no humans and no science.

Breathing is also fundamental for spiritual practices such as yoga and meditation. The teaching of yoga and meditation is based on ancient Buddhist traditions and believes in a “bi-directional relationship between mind and breath, such that one can affect the mind and consciousness through manipulation of the breath.”¹ These breathing methods are nowadays often used to deal with our busy lives in which there is no time to breathe. Think for example of the, at the moment very popular, Mindfulness courses. In these courses, meditation techniques (on breathing) are practiced which claim to resolve stress-related problems, burn outs and depressions. These courses create an awareness of personal thoughts and feelings and an understanding of the nature of our surroundings can help one make a connection between the inside and the outside. This is not only a spiritual goal, it is also literally what breathing does, namely: bringing the outside in and the inside out. The inhalation evokes a movement of air that flows into the lungs, into the body, through the body and then out of the lungs, out of the body. This biological process described of movement is studied by physiology. The physiology of breathing focusses on the lungs, and then mainly on the inspiration and the expiration of air. From this point of view, breathing aims to deliver oxygen where it is needed in the body and removes excess carbon dioxide. Besides, it describes all the different spaces of the body and the different steps of how the air enters the lungs, how the chest moves and how the air moves through the human body.²

One can conclude that breathing is an element that crosses the borders of many sorts of (research)fields. However, in the field of humanities, and more specific in the field of dance

¹ Brown, Richard and Patricia Gerbarg. “Yoga Breathing, Meditation and Longevity.” *Annals of the New York Academy of Sciences*, 1172 (2009): 55.

² Gorska, Magda. “Breathing Matters. Feminist Intersectional Politics of Vulnerability.” PhD diss., Linköping University, 2016: 43.

studies, breathing is an infrequently addressed subject.³ This is quite remarkable as breath is in general considered to be an important element in the practice of dance.⁴ There have been many choreographers who feel inspired by breath and air. Martha Graham for instance, based her most fundamental movement “contraction” and “release” on the cycle of breath, and Doris Humphrey based her method of “fall” and “recovery” on the pattern of breath.

Two choreographers who currently concentrate their work on the use of breath are Emio Greco and Pieter C. Scholten, two directors and founders of the international choreographic platform ICK.⁵ The importance of breath in their work is present in several layers such as in their Double Skin/Double Mind (DS/DM) dance method, in the DS/DM installation and in their performances. As will be explained later in this thesis, the DS/DM method can be considered as the basis of the work of Greco and Scholten. The fact that air is such an important element of the method makes it resonate throughout their whole oeuvre.

Already since their meeting in 1995 Greco and Scholten started to pay particular attention to philosophies on embodied knowledge and they rapidly came to the conclusion that they were both looking for a new perspective on the dancing body. The conceptual body and the virtuosic body were there, but at that moment there was no attention yet for the intuitive body. An intuitive body, Greco and Scholten explain, is “a body that is in movement and that is naturally capable of generating multi-layered meanings by itself”.⁶ Both aspire a new dramaturgy of the body, and it is this quest that is the driving force behind their choreographies.

The creation of their DS/DM method began by the creation of the DS/DM workshop in 1998. This workshop, created for the international Theatre Festival in Vienna, challenges participants to create a new awareness of the body and mind, and creates new ways of

³ There should be noted that Dr. Laura Karreman published recently her PhD on dance and motion capture in which she dedicates a whole chapter to breath:
Karreman, Laura. “The Motion Capture Imaginary: Digital renderings of dance knowledge.” PhD diss., Ghent University, 2017.

⁴ See for instance the result of several interviews with dancers on breath by Laura Karreman in “The Motion Capture Imaginary”, 228.

⁵ Greco and Scholten set up their company Emio Greco | PC (short: EG|PC) in 1996, which became part of ICK in 2009. The abbreviation EG|PC is still used to indicate their collaboration.

⁶ “Emio Greco | Pieter C. Scholten.” *ICK dans Amsterdam* – 15-01-2017
<http://www.ickamsterdam.com/nl/artiesten/choreografen/artistiek-directeuren/emio-greco-pieter-c-scholten-1ICK>.

dealing with the body.⁷ Many different young dancers have already followed this workshop and for some time now the workshop is a fixed element of the Modern Theatre Dance department at the Amsterdam School of the Arts.⁸ In 2009 the research group Capturing Intention, with the initiative of Greco and Scholten, presented among others the DS/DM installation. This installation was developed by research group member Chris Ziegler and is a virtual and interactive version of the DS/DM workshop.⁹ Dance students learn important principals of the work of Greco and Scholten in a different, technological environment. The presence of the dancing body in the DS/DM installation makes it an interesting subject concerning the relationship between the embodied technique of breathing and the technology of the installation. A question raised concerning the issue above is whether the installation is able to transfer the understanding of breath conveyed by Greco and Scholten.

As breath plays such an important role in their method it might be no surprise that it is also very much present in their choreographies. In 2016 Greco and Scholten created the performance *Extremalism* to celebrate their 25th anniversary. Writer and journalist Judith Boessen mentions that at some point in *Extremalism* the dancers synchronize their breath and start breathing together. At this moment in the performance there is no music: it is the breath of the dancers that is creating the rhythm. She concludes her article by saying that breathing together also means living together, because the dancers of the Ballet National de Marseille consider their company as a community.¹⁰ Following Boessen's statement it is not only the work of Emio Greco and Pieter C. Scholten that is concerned with the notion of breath but also the environment in which they work.

In order to get a clear idea of the vision on breath by Emio Greco and Pieter C. Scholten, the following main question was chosen: In what way can the understanding of breath by Emio

⁷ "Double skin/Double mind." *ICK dans Amsterdam* – 20-01-2017

<http://www.ickamsterdam.com/en/academy/education/ick/double-skin-double-mind-20>

⁸ "Opleiding Moderne Theaterdans." *Academie of Theatre and Dance* – 22-01-2017

<http://www.ahk.nl/atd/dance-programmes/modern-theatre-dance/>

⁹ *ICK dans Amsterdam*, "Double skin/Double mind."

¹⁰ Boessen, Judith. "Ademen doe je samen." [2016] *Theater aan het Vrijthof* – 22-01-2017

http://www.theateraanhethvrijthof.nl/files/1014/5267/9922/Artikel_Jeroen_-_Ballet_National_de_Marseille__ICKamsterdam.pdf

Greco and Pieter C. Scholten lead to a new way of understanding their work? This question shall be answered by, first of all, describing one of the rare philosophies on breath *L'oubli de l'air chez Martin Heidegger* by Luce Irigaray. Also, I will argue how the importance of the embodied technique of breath is reflected in one of the basic EG|PC philosophies: "between brain and movement". After, the thesis will slowly zoom in on the work of Greco and Scholten. The second chapter will apply the knowledge gained in the first chapter and apply it on the new EG|PC performance *Appearance*. Hence, this chapter contains a performance analysis in which the role of breath will be studied. The experiences of the dancers themselves, regarded the role of breath in dance, will also be incorporated as they can give us insights in how and why a certain pattern of breath is used. After, we continue zooming in by concentrating the third chapter on the method of breath by Greco and Scholten in their Double Skin/Double Mind workshop. We make thus the step from a performance on stage to a training in the studio. The ideas and philosophies behind the performance of breath on stage will be clarified by asking the question: how does the breathing method of Greco and Scholten lead to a new awareness of the body and mind? The knowledge gained from the third chapter about the DS/DM method will be used and compared to information about the DS/DM installation in the fourth chapter. This part of the thesis will clarify the relationship between the embodied technique of breath and the technological DS/DM installation.

By step by step analyzing the use of breath in the work of Greco and Scholten, this thesis attempts to gain new insights in their work by getting to know more about their vision on breath. As breath forms an important element in the work of many choreographers, I believe that a better understanding of the function of breath in the work of a choreographer can lead to a better understanding of his/her work in general.¹¹ And it is in this thesis that I will respond to this challenge by examining the work of Greco and Scholten.

¹¹ Besides EG|PC, choreographers such as Martha Graham, Doris Humphrey, Anna Teresa de Keersmaecker and William Forsythe paid particular attention to breath.

1. The importance of air: from Luce Irigaray to EG|PC

This chapter will introduce the embodied subject of breath as a philosophical research topic in dance studies and more specifically in the study on the work of Greco and Scholten.

Hereby, I will try to answer the following questions: How can we understand breath as an embodied knowledge? And how does this knowledge function in the debate of dance and more specifically in the dance of Emio Greco and Pieter C. Scholten? In order to answer these questions and to develop a satisfactory contribution to the new research area of breath in dance, I decided to address the philosophical theory on “the forgetting of air” by Luce Irigaray, a theory that does not only express the necessity of air for human beings but also for philosophical research. After, the theory about the relationship between body and mind by Baruch Spinoza will be used to connect Irigarays’ aerial theory with the work of Greco and Scholten, with the aim of gaining new insights in the breathing method of the two choreographers.

1.1 The forgetting of air

It must be noted that there are few books published concerning the topic of breath. An exception is feminist philosopher Luce Irigaray, who in 1983 published her book *L’oubli de l’air de Martin Heidegger* (The Forgetting of Air in Martin Heidegger). In this book Irigaray criticizes the work of Martin Heidegger for being too much “founded in the solid”.¹² Apart from focusing on earth, Irigaray proposes to give more importance to the element of air. In this aerial intervention the body and its breathing become the center of attention.

The fact that Martin Heidegger is unable to leave the element of earth more concretely leads to the conclusion that Heidegger is not able to theorize beyond metaphysics.¹³ Western metaphysics has a tradition that goes back to pre-socratic philosophies and is characterized by the fact that earth is seen as a privileged element as it would be solid and reliable. Therefore, Heidegger argues that earth can be the only element that is able to offer a “dwelling place for human ek-sistence.”¹⁴ The more fluid elements –

¹² Gorska, 25.

¹³ Grammatikopoulou, Christina. “Remembering the air: Luce Irigaray’s ontology of breath.” *Interactive* – 20-05-2017

<http://interactive.org/2014/05/irigaray-air/>

¹⁴ Mortensen, Ellen. *Touching Thought: Ontology and Sexual Difference*. Lanham: Lexington Books, 2002: 89.

water, air and fire – are, thus, attributed to be of less importance and are even regarded with distrust.

Irigaray does not agree with this opinion and dedicates a big part of her oeuvre to exactly the elemental, an oeuvre in which *L'oubli de l'air chez Martin Heidegger* would be the first book, completely concentrated on air. In this work, Irigaray states that Heidegger does not realize *in what* his thinking takes place, so he forgets to pay attention to the atmosphere of air.¹⁵ Being is in air as well as thinking is in air, she argues. Furthermore, when studying “logos” (speech) like Heidegger does, one should not forget the importance of air because we are not able to think without air as well as not being able to talk without this element. Therefore, speech will not be able to exist without air.¹⁶ In *L'oubli de l'air chez Martin Heidegger* Irigaray takes the importance of air even one step further by claiming that air is of crucial importance - we need air to breathe, we need air to live. We cannot live in absence of the element of air.

L'air n'est il pas le tout de notre habiter en tant que mortels? Y a-t-il un demeurer plus vaste, plus spacieux et même plus généralement paisible que celui de l'air? L'homme peut-il vivre ailleurs que dans l'air ? Ni dans la terre, ni dans le feu, ni dans l'eau, il n'y a un habiter possible pour lui.¹⁷

In this quote from Irigaray it becomes clear how much she values air. What will there be without air? No science, no fire, no breath, no life. Besides, breath is not only a necessity for life, it is also an obligation. At birth, a baby is given breath, and since this moment it cannot just stop breathing, we cannot hide our breath, we are obliged to breathe and to share the air with others.

The reason why air has been neglected for such a long time explains Irigaray by the fact that air is not visible to the human eye. And as it is not visible, we tend to neglect it. In this way, western thinking has been creating a void “by using up the air for telling without

¹⁵ Ibidem.

¹⁶ Grammatikopoulou, “Remembering the air: Luce Irigaray’s ontology of breath.”

¹⁷ Irigaray, Luce. *L'oubli de l'air chez Martin Heidegger*. Paris: Les Éditions de Minuit, 1983: 15.

Is not air the whole of our habitation as mortals? Is there a dwelling more vast, more spacious, or even more generally peaceful than that of air? Can man live elsewhere than in air? Neither in earth, nor in fire, nor in water is any habitation possible for him.

ever telling of air itself.”¹⁸ Therefore, Irigaray attributed the name “philosophy of forgetting” to this tendency. Instead she herself proposes a different form of philosophy which she calls the “philosophy of breathing”.¹⁹ In this new way of thinking, Irigaray draws the attention away from “logos” and concentrates instead on the body.

Dancers would form a good example of Irigaray’s philosophy of breathing, thus making the study of the theory of Irigaray from the point of view of dance a valid effort. This is demonstrated in the PHD thesis *The Motion Capture Imaginary*, in which Laura Karreman dedicates a whole chapter to the use of breath in dance. This chapter, named “Breathing Matters”, is one of the rare sources treating the topic of breath and dance and treats precisely the relationship between Irigaray’s theory and dance:

A radically different perspective on dance performance becomes apparent. In this view of dance it is precisely the absence of speech that inspires mutual respect, an appreciation of the body and the senses, and a ‘giving-sharing’ of vital energies.²⁰

Karreman explains here that, because the use of breath without speech is considered by Irigaray as something positive and powerful, the way of sharing air between dancers and audience, and the communication through breath by (often) non-speaking dancers, could be seen as an advantage.²¹

1.2 Between body and mind

Because of Irigaray’s focus on an embodied element, her theory shows parallels with other theories concerning “embodied knowledge”. Long before Irigaray, it was Spinoza who in the middle of the seventeenth century argued in favor of more emphasis on bodily research. In his most famous work called *The Ethics*, published after his death in 1677, he criticized Descartes for his famous “Cartesian dualism” in which the philosopher argues the existence of a clear distinction between mind and body. Spinoza, on the other hand, argues that body and mind are not two separate entities but are two of the infinite attributes of the same divine entity:

¹⁸ Eakin, Emily. “I Feel, Therefore I Am.” *New York Times*, April, 19, 2003.

<http://oregonstate.edu/instruct/hsts412/doel/dvs.htm>

¹⁹ Grammatikopoulou, “Remembering the air: Luce Irigaray’s ontology of breath.”

²⁰ Karreman, “The Motion Capture Imaginary: Digital renderings of dance knowledge”, 226.

²¹ Ibidem.

“the idea of mind and body are one and the same individual conceived now under the attribute of thought, now under the attribute of extension”.²² Mind and body are thus, according to Spinoza, two elements with no causal relationship, they are the two different sides of the same coin.²³ Besides, Spinoza rejects Descartes notion that the mind is a reasonable machine. Spinoza clarifies that this is wrong as emotion is interwoven with reason in the brain. Further on, he claims more radically, that many of our thoughts and feelings are about our own body. Therefore, he even seems to conclude that the mind exists purely for the body’s sake.²⁴

This discussion, on the dualism between mind and body is reflected upon in the core of the work of Emio Greco and Pieter C. Scholten. During the 1990’s, they developed a new corporeal dramaturgy leading towards an “intuitive body”, which is explained by Greco and Scholten as follows:

Intuition sits in between the instinctive body and the rationalisation of it. It forms part of an interspace with which we have toyed since our first creation *Fra Cervello e Movimento* (between brain and movement). We want to effect a polarisation between what is instinctive and what is controlled by the brain. Between the two, we found intuition.²⁵

As intuition can be found in between rationality and instinct, the research for an intuitive body is closely related to the discord between “brain” and “movement”, which is an important topic in the work of the choreographers. “Between brain and movement” is a subject that they started to research already since the beginning of their collaboration, with the creation of *Fra cervello e movimento* (between brain and movement). The three associated choreographies *Rosso*, *Bianco* and *Extra Dry*, also called the Martini Trilogy, lie at the very heart of their work. Philosopher Antoon van den Braembussche notes about this trilogy: “With this transfiguration, the dancer enters a grey area between brain and body. He or she

²² Spinoza, Baruch. *Ethics: Ethica Ordine Geometrico Demonstrata*. 1677. Translated by R. H. M. Elwes. Waiheke Island: Floating Press, 2009: 237.

²³ Yang, Nicole. “Descartes vs. Spinoza on Relationship between Mind & Body.” *Academia* – 05-06-2017 https://www.academia.edu/29787659/Descartes_vs._Spinoza_on_Relationship_between_Mind_and_Body

²⁴ Eakin, “I Feel, Therefore I Am.”

²⁵ *ICK dans Amsterdam*, “Emio Greco | Pieter C. Scholten.”

penetrates a gap in which time and movement become unpredictable and elusive.”²⁶

This apparent division between body and mind is reminiscent of the famous Cartesian dualism. However, I would like to argue that the philosophy of Greco and Scholten has much more similarities with the aforementioned ideology of Spinoza. In an interview by dancer and scholar Francesca Magnini, Scholten declares:

In the beginning we separated the ‘physical state’ from the ‘mental state’: *Fra Cervello e Movimento* has the movement, the physical experience, and the brain. I think we gradually came to think that the mental state is part of the physical state, the brain is part of the body, part of your body.²⁷

The two choreographers, thus, join Spinoza in the idea that mind and body are not completely separated. The way Emio Greco works, how he connects his state of mind to the creation of movements, confirms the direct relation between brain and body, continues Scholten. This unity, but at the same time this tension, between body and mind is a certain consciousness that Greco and Scholten carry out in their creations and which is also present in their theory on the intuitive body.²⁸

In December 2015, Suzan Tunca, who works for Emio Greco and Pieter C. Scholten at ICK, started a research on the “intuitive body” of the choreographers. In the document “The intuitive Body, research in progress” Tunca made a list of many different characteristics of the intuitive body. One of these characteristics is the fact that the intuitive body must be cultivated by bringing consciousness into the body: “By consciously bringing breath, awareness, space and receptivity to the entire body, it lights up from the inside”, declares Tunca. While this formulation by Tunca might seem a bit misty, it actually describes a certain state of the body and mind reached through an extreme awareness. Part of this consciousness is also the awareness of our unconsciousness, and so, the intuitive body operates between conscious and subconscious. Hereby, as stressed before by Tunca, breath plays an important role as it does not only continuously create connections between the

²⁶ Van den Braembussche, Antoon. Klazien Brummel. *It's life Jim, but not as we know it. A philosophical approach on Emio Greco/PC's Trilogy*. Amsterdam: Stichting Zwaanproducties, 2001: 23.

²⁷ Magnini, Francesca. *Inspiration. Emio Greco/Pieter C. Scholten. The Multiplicity of Dance*. Translated by Sally Titcomb. Rome: Artegrafica, 2015: 115.

²⁸ Based on a presentation by Suzan Tunca “The Intuitive Body. Positioning insights from the intuitive body through the dance of Greco and Scholten in relation to 7 domains of knowledge.” On 11-04-2017.

inside and outside but also forms a link between consciousness and subconsciousness.

The relationship between breathing and consciousness/subconsciousness is remarked before in *Le Théâtre et son Double* by Antonin Artaud:

We can keep ourselves from breathing or from thinking, can speed up our respiration, give it any rhythm we choose, make it conscious or unconscious at will, introduce a balance between two kinds of breathing: the automatic, which is under the direct control of the sympathetic nervous system, and the other, which is subject to those reflexes of the brain which have once again become conscious.²⁹

Breathing can, thus, be seen as a subconscious bodily instinct. Since it is often an automatism, it becomes, in a certain way, not necessary to pay too much attention to your breath. However, we can also breathe consciously and by doing so, we can manipulate our emotions in ways that can be useful for an actor, states Artaud. In the Double Skin/Double Mind method of Greco and Scholten, breath is also portrayed as a conscious action: “Breathing, in this workshop, is as a mantra but with an extreme alertness” explains Scholten.³⁰ In this way, breath, by nature a subconscious instinct, becomes a conscious tool. The intuitive body and its breathing are thus both balancing between notions as consciousness and subconsciousness, between brain and movement.

1.3 Conclusion

With her “philosophy of breath” Luce Irigaray made a statement against what she calls the “philosophy of forgetting” of Martin Heidegger. She criticized Heidegger for giving too much importance to the reliability of earth and neglecting air as a significant source of logos and science, but also of life in general. In dance for example, speech is often absent, and so, non-verbal communication based on air becomes crucial. It is therefore that her philosophy is also interesting from the perspective of dance studies.

For Greco and Scholten breath plays an important role as well. This becomes especially apparent in their philosophy on the “intuitive body”. This philosophy is strongly connected to theories on the relationship between body and mind as the one of Baruch Spinoza and the EG|PC theory “between brain and movement”. Through the use of breath, a

²⁹ Artaud, Antonin. *The Theatre and its Double*. Translated by Mary Caroline Richards. New York: Grove Press, 1958: 21.

³⁰ Interview with Pieter C. Scholten with author on July 19, 2017 in Marseille

connection can be made between body and mind, inside and outside, consciousness and subconsciousness, and an intuitive body can be developed.

2. The role of breath in the performance *Appearance* (2017)

In the former chapter the attention was drawn to corporeal knowledge of breath. In this chapter, this gained knowledge will be applied on the performance *Appearance*, a new creation by EG|PC that will premier during the season 2017/2018. This chapter contains a performance analysis in which the role of breath will be studied by finding an answer to the following question: How does the breathing method by Greco and Scholten function in practice? In order to answer this question, I will concentrate on breath as a thematic element of the performance but also on breath as a practical tool for the dancers. Experiences of the dancers themselves, regarded the role of breath in dance, will be incorporated as they can give us insights in how and why a certain pattern of breath is used in this specific performance.

Appearance is a co-production from ICK and the Ballet National de Marseille in which the directors work not only with dancers from both companies but also with composer Franck Krawczyk and the children's choir La Maîtrise des Bouches du Rhône. The children sing the *Kindertotenlieder*, a cycle of poems written by Friedrich Rückert, about the loss of his children and put to music in 1901 by Gustav Mahler. The performance is very much about the grey area between life and death, the children balance between presence and absence, between appearance and disappearance. This makes the performance an interesting subject related to breath, as one could wonder what kind of role is dedicated to breath in a performance that is about the death of children, leaving them absent of breath. The contradiction of life and death namely implies the contradiction of breathing and not breathing. The children are "taking their last breath" before disappearing. Another interesting aspect of *Appearance*, with regard to breath, is the combination of singing and dancing. These two actions call for different breathing techniques. In the fourth part of the performance, one of the dancers is singing and dancing at the same time, and it is interesting to study what the consequences are for his breathing.

2.1 About *Appearance*

The EG|PC creation *Appearance* is the first part of a diptych; the second performance, *Disappearance*, will premiere in 2019. The first part, *Appearance* gives the the voice to the

children and highlights the innocence, spontaneity and curiosity they embody, qualities that do not seem to fit in anymore in our contemporary society. The intuitive body, so important in the work of Greco and Scholten, is threatened to be lost. In this version of *Kindertotenlieder*, the death of the children, goes along with the loss of innocence and intuition.

In *Appearance*, Greco and Scholten worked intensely together with composer and pianist Franck Krawczyk. Krawczyk created a new version of Mahler's *Kindertotenlieder* in which he adapted the songs for a children choir and integrated a protest song from Hanns Eisler, and compositions from Leoš Janáček and Franz Schubert. Besides, Krawczyk used a soundscape of animal noises, which makes the audience immerse in a forest like and pre-language environment.

An important aspect of the performance *Appearance* is the image of the wolf. The wolf is an ambiguous figure that, on the one hand threatens as it can be seen as a symbol of wildness and fear but on the other hand is being threatened as well, as it is a vulnerable species, relying on its instincts and intuitions, depending on smaller and smaller natural environments. Through images, created by Dutch filmmaker Ruben van Leer, the wolf comes to life accompanying the dancers and children through the seven different parts (prologue, five songs and epilogue) of the performance (see Figure 1).



Figure 1: *Appearance*

2.2 Breath as a thematic element in *Appearance*

In the performance *Appearance* a game is being played between life and dead. The five songs take us through different states of grief of the father, as he writes about the denial, despair and feelings of guilt after his children are passed away. However, in this EG|PC version of *Kindertotenlieder*, the songs are not being sung by adults but by children which gives the performance a double layer: in some way the children namely sing about their own death.

Breath and air play a significant role in the performance *Appearance*, which is already clear from the beginning. The auditorium is covered in darkness, then, heavy breathing blasts through the speakers. At the same time a spot appears, which illuminates the pianist hanging over his piano. The spot is flashing and follows the rhythm of the respiration. This scene can be interpreted as a representation of struggle and depression. The heavy breathing could refer to the father trying to keep it together and the lifeless pianist could be a representation of his dark feelings. However, in general, this scene seems to refer mostly to the contrast of life and death. Citing Luce Irigaray: “can man live elsewhere than in air?” one can give another reason why the directors might have chosen to begin the performance with the sound of breathing and the image of a lifeless pianist.³¹ *Appearance*, namely, shows the balance between life and death, between breathing and not breathing.

Besides the theme of life and death, the breathing in *Appearance* is also related to the subject of anxiety. Hereby, the famous quote: “Life is not measured by the number of breaths you take, but by the moments that take away your breath” seems to be taken as a source of inspiration.³² Every now and then, the dancers and children gasp for air, they hold their breaths a couple of seconds and then start breathing normally again. This gasp for air is, contrary to the one in the quote, not a positive experience but rather a reaction of fear or panic. In the dissertation “Breathing Matters”, by feminist scholar Magda Gorska, we can read that irregular breathing can be a result of a certain emotional state. In a chapter on anxieties and panic attack, she underlines that “breathing is constitutive for anxious living”.³³ Anxiousness and panic can take your breath away, but through focus on regular breathing and performing breathing exercises, you can regain the control of respiration. The aspect of breath is thus both present in the cause as in the solution, affirms Gorska.³⁴

In *Appearance* the thematic element of anxiety is reflected in both the character of the father and the children. In the fourth song for example, the father tries to tell himself that the children only went out for a walk and that they will come back. His fear that they will not

³¹ Irigaray, 15.

³² It is not sure to whom this quote originally belongs, several names are mentioned among which Hilary Cooper and Alfred Hitchcock.

³³ Gorska, 209.

³⁴ Ibidem.

return is reflected in the repetition of phrases as “sie sind nur ausgegangen”, which indicates that the father tries to reassure himself.³⁵ In the last song, it is mainly the children who experience anxiety as they “went outside in a storm” before disappearing, assuming they must have been frightened.³⁶

This general theme of anxiety is underlined, as mentioned before, by the gasping for air of the dancers and children. They fear death, life and loss which is expressed in their panic reaction of not being able to continue breathing. They gasp for air, elevate their shoulders, and after a couple of seconds, they slowly start breathing normally again while at the same time slowly dropping their shoulders. This example shows how anxiety is being demonstrated in the performance *Appearance* through particular enactments of breathing.

2.3 Breath as a technical tool in *Appearance*

In the last part of the performance, the epilogue, we witness an interesting scene related to the breathing technique of the dancers. At the end of the fifth song the children leave the stage. They climb into the flightcases and close them, then, the dancers lead them away into the coulisses. After the exit of the children, which has the strong feeling of a farewell ceremony, the dancers are left alone and dance in the vacuum, guided by the sounds of whispering children and animal sounds. The dancers synchronize their breath and they start breathing together. At this moment in the performance there is no music, it is the breath of the dancers that is creating the rhythm.

The dancers use their breath to move in unison and to give the same intension to movements. A common technique to tune movements is the counting of music. In the companies of EG|PC however, the dancers do not count. By consciously breathing together they attempt to move together as one group. According to BNM dancer Béatrice Mille, breath is the beginning of all when working with Emio Greco: “La respiration amène les mouvements. La respiration crée le rythme. La respiration c’est la musique.”³⁷ Breathing is

³⁵ Rückert, Friedrich. “Oft denk’ ich, sie sind nur ausgegangen” in *Kindertotenlieder*. <http://www.marieleneudecker.co.uk/Resources/Kindertotenlieder%20%27Songs%20on%20the%20Death%20of%20Children%27.pdf>

Translation: They have just gone out.

³⁶ Rückert, Friedrich. “In diesem Wetter, in diesem Braus” in *Kindertotenlieder*.

<http://www.marieleneudecker.co.uk/Resources/Kindertotenlieder%20%27Songs%20on%20the%20Death%20of%20Children%27.pdf>

³⁷ Interview with Beatrice Mille by author on September 4, 2017 in Marseille

thus, according to Béatrice, the core of the dance of Greco. This is also remarked by journalist Judith Boessen who writes in the article “Ademen doe je samen”:

The basis of the performance is not determined by tight schedules and positions, but by the organic rhythm of breath. During several moments in the performance, the thirty dancers synchronize their breath in order to create a synchronous cadence. This is the count, the medium which determines the position of the dancers in the performance. As an audience member, you feel the rhythmic breathing, unnoticed you become part of this medium.³⁸

In this quote, Boessen states that breath does not only functions as the rhythm that supports the whole performance but also influences the audience, inviting them to become part of the performance through the unifying factor of breath.

Another important function of breath is energy, entrusted Béatrice me in my conversation with her: “The choreographies by Greco are very physical and demanding”, she explains, “focus on breath can give the dancers new energy to continue the choreography”.³⁹ This is also remarked by BNM dancer Andres Garcia Martinez:

Sometimes, while performing, I need to concentrate on emptying the body through the air. I have to find the breath to get it together. Sometimes I’m in pain and I’m tired. But then I ask myself: what are we doing here? And I think: we are just breathing.⁴⁰

Andres specifies more detailed in this quote what Béatrice stated before: focus on breath helps to find peace and gives new energy to continue. We are obliged to breathe, stated Irigaray in *L’oubli de l’air chez Martin Heidegger*, and it is exactly this quality, the reassurance that breath is always there, that helps the dancers to keep going.

Translation: “Breathing feeds the movements. Breath creates the rhythm. Breath is music.”

³⁸ Boessen, “Ademen doe je samen.”

Original text: “De basis wordt niet bepaald door strakke schema’s en posities, maar door het organische ritme van de ademhaling. Gedurende de voorstelling zijn er momenten waarop de dertig dansers hun ademhaling synchroon stellen zodat er een gelijklopende cadans ontstaat. Dat is de telling, dat is de drager die bepaalt waar ze zich bevinden in de voorstelling. Als toeschouwer voel je die ritmische ademhaling, ongemerkt doe je mee en word je onderdeel van de drager.”

³⁹ Karreman, “The Motion Capture Imaginary”, 39.

⁴⁰ Interview with Andres Garcia Martinez by author on October 31, 2017 in Marseille

In Greco's dance breath is also used in order to create different movement qualities, which is also very much present in *Appearance*. At one moment, the dancers all stand still, they breathe together, then they slowly move their arm on the rhythm of their breath. They stretch the arm while inhaling, as if they fill the arm with air. While exhaling the arm slowly drops down. However, the choreography of *Appearance* sometimes demands to break this tranquil flow of breath in fast dance phrases. In a fast dance phrase a different way of breathing can help to emphasize certain movements. Andres explains this way of breathing as follows:

The breath is used to focus on certain movements. Emio Greco compares such a movement to the sticking of a needle. The action of the needle is thin. The breath is thin. You refocus the breath in order to refocus the body.⁴¹

The metaphor of the needle is used to describe a different way of moving, more precise and fast. The "thin" breath is there to underline those movements. Breath, slow, fast, thin or filled is thus used to create a certain energy, not only in the dancer himself but also his movements.

Breath can also create energy between the dancers on stage. Béatrice says about this phenomenon: "Par la respiration je sens tout le monde sur scène. Je sens même la présence de quelqu'un qui se trouve complètement à l'autre côté."⁴² Through breath the group of dancers are able to dance as if they form one body. This tension between the group and the individual is connected with a question raised by Greco and Scholten after their commission as directors of the Ballet National de Marseille: How to create a balance between the tradition of the BNM as ballet and the new contemporary identity? Based on this question, Greco and Scholten created the axe of research: "Le corps du Ballet National de Marseille", in which 'corps' references to the traditional 'corps de ballet' and at the same time to the body of the dancer, a crucial element in the work of the directors. The strong hierarchy, with soloists and a corps de ballet, the Ballet National de Marseille used to have, was abandoned by Greco and Scholten who equalized the company. Judith Boessen, whose article "Ademen doe je samen"

⁴¹ Ibidem.

⁴² Interview with Beatrice Mille by author on September 4, 2017 in Marseille

Translation: "Through breathing I can feel everyone on stage. I can even feel the presence of someone who is at completely the other side."

was discussed before in this chapter, makes an interesting remark concerning the abandonment of hierarchy in the company: “Even though some dancers operate as pure soloists, they stay part of the swelling and withdrawing respiration”.⁴³ The use of breath creates thus a sense of equality and exchange, and at the same time a tension between the individual bodies and the bigger group of dancers, dancing as one *corps*.

In *Appearance* there are only five dancers on stage which gives the performance a different dynamic than the BNM performance *Le Corps du Ballet National de Marseille* in which all twenty-three dancers of the company are on stage. The collective body that is created is smaller, less overwhelming and more intimate in *Appearance*. But, according to Andres, even in a small group, breath stays the most important tool to connect with the other dancers: “We listen to each others breathing. And so, we are able to meet in our extremes. Where is the minimum and maximum of breath you will meet the others.”⁴⁴ Andres describes here the feeling of a strong connection at the moment that the air completely left the lungs and at the moment that lungs are completely filled with air. The connection that is created is important in, for instance, the giving of cues. The end of *Appearance* contains such a crucial cue. The dancers exhale and bow forward, reaching their hands. At the moment that all the air has left the lungs, they inhale, shortly, reaching even further with their hands. Then, they exhale and fall down. This final dance phrase of *Appearance* shows how complex the use of breath is in the dance of Greco. Through breath the dancers are able to connect, give cues, generate a certain movement quality, and, finally, create synchronicity in their dancing.

A final, technical element which is worthwhile discussing in relation to *Appearance*, is the combination of two disciplines: singing and dancing, making this performance an interesting subject of research related to breath. Breathing techniques in dancing and singing are two completely different fields. The average singing technique is to focus on the expansion and reducing of the belly while breathing, and combining this with slow inhalations and exhalations. In the breathing method of Greco, the dancer does not focus on just one part of

⁴³ Boessen, “Ademen doe je samen.”

⁴⁴ Interview with Andres Garcia Martinez by author on October 31, 2017 in Marseille

the body but rather on the body as a whole.⁴⁵ It is likely that the flow of breath of the dancers clashes with the breathing technique in singing.

Appearance is not the first performance in which Greco and Scholten experiment with the combination of singing and dancing. In *Passione*, for example, we see BNM dancer Angel Martinez Hernandez singing a part of the Matthews Passion while dancing at the same time. This leads rapidly to exhaustion and at a certain moment Angel is completely out of breath. Angel tells about this: “Emio and Pieter wanted the song to be expressed with the difficulty of being breathless. There is a necessity to sing even though it was hard to do it.”⁴⁶ The difficulty to sing and the difficulty to hit the right notes without breath, underlines the tragic aspect of the Matthews Passion. Struggle, which is an important aspect of the agony of Jesus is accentuated by Greco and Scholten through a breathless dancer. In this way, the struggle to breathe becomes an end in itself.

Returning to *Appearance*, we see between the fourth and the fifth song, the struggle of dancer Nahimana Vandenbussche who sings a part of the “Solidaritätslied” by Hanns Eisler and dances at the same time. The other dancers witness him while putting up a barricade at the front of the stage. The dancer’s solo forms a transition: the children approach the front side of the stage and are almost ready to climb on the barrier in order to lift their demonstration to a next level. His performance is full of energy although we hear the exhaustion in his voice and we see him sweating and fighting. Nahimana clarifies: “Singing, dancing and breathing at the same time is sometimes hard but it is also convenient, because while I am singing, I feel directly the rhythm of the music. This makes my movements more powerful.”⁴⁷ Nahimana clearly sees a positive side of singing and dancing at the same time and declares that, although it is difficult, the singing does not completely interfere with the DS/DM *Breathing*.⁴⁸ However, just as in *Passione*, *Appearance* expresses a certain necessity through integrating the Solidaritätslied, originally a protest song. The struggle of both Nahimana and Angel does thus not devalue the performance, on the contrary, their struggle reflects the urge of expression.

⁴⁵ This will be further explained in chapter 3

⁴⁶ Angel Martinez Hernandez, e-mail to author, November 12, 2017

⁴⁷ Nahimana Vandenbussche, e-mail to author, November 12, 2017

⁴⁸ Ibidem.

2.6 Conclusion

This chapter approached the phenomenon of breath in the performance *Appearance* from two different angles: as a thematic element and as a practical tool. Breath plays an important role in the dramaturgy of the performance, a soundscape with heavy breathing and performers gasping for air are just a few examples of how the subjects of life, death and anxiety are being highlighted. However, breath is not only linked to the staging of the performance but is also very much present in the dancing. Breath helps the dancers to feel each others presence, to synchronize, to gain new energy and to give different impulses to the movements. Breath is thus, on different levels, of great importance in *Appearance*. The reliance of the dancers on their breathing plus the importance of breath as a thematic element in aforementioned performance, can tell us how much air is valued in the company of Greco and Scholten.

3. The element of breath in the Double Skin/ Double Mind method

In this chapter the attention will be drawn to the element of breath in the Double Skin/Double Mind method. We make thus the step from a performance on stage to a training in the studio. The ideas and philosophies behind the performance of breath on stage will be clarified by asking the question: how does the Double Skin/Double Mind breathing method of Greco and Scholten lead to a new awareness of the body and mind?

In order to answer this question I will first explain what exactly DS/DM is. Then, the chapter will concentrate on the role of breath and will try to explain by using several philosophical theories, how this focus on breath changes the awareness of the body and the quality of movement of the dancer. For the explanation of DS/DM, this paper will not only use scientific articles but interviews with dancers and directors as well as their experiences and ideas can give us a better understanding of the functioning of the workshop and the philosophies behind it. Furthermore, during the Festival de Marseille in June 2017 I participated myself in a DS/DM workshop taught by BNM dancer Alejandro Longines, I will use this experience to reinforce my arguments.

3.1 About DS/DM

The creation of DS/DM all begun in 1998 when Greco and Scholten were invited to give a five-day workshop during the international Tanzwochen Wien. The demand to create a workshop forced them to reflect on certain aspects as: how to make a connection between their work and a new workshop, and how to transfer their development of the intuitive body language, based on the body of Greco, to others.⁴⁹ The result, after some thorough research, is the DS/DM workshop.⁵⁰ The DS/DM workshop reflects the DS/DM method of Greco and Scholten in which the sensitivity of the body is researched. This sensitivity is necessary for Greco when creating new choreographic material. It is for this reason that the method can be considered to be the basis of every single performance created by Greco and Scholten. DS/DM is not only a method and workshop, but can also be used as a warming-up for

⁴⁹ DeLahunta, Scott. "The moment to question... Double Skin/Double Mind?" In: *Capturing Intention. Documentation, analysis and notation research based on the work of Emio Greco/PC*, edited by: Scott DeLahunta, p. 20-22. Amsterdam: EG|PC and AHK, 2007: 20.

⁵⁰ *ICK dans Amsterdam*, "Double skin/Double mind."

dancers, or as a dance training in which the participants (amateurs and/or professionals) can gain new insights in the work of Greco and Scholten.⁵¹

The DS/DM method is also of great importance at the Modern Theatre Dance department of the Amsterdam School of the Arts since Greco and Scholten became associated artists in 2005. From the first year until the third year, the students are getting trained in this DS/DM method. During two weeks they for instance receive training that explains the basic elements of the work of Greco and Scholten, which encourages them to create their own choreographic material and that teaches them small parts of the EG|PC repertoire.⁵²

Six years after the creation of DS/DM Greco and Scholten felt the urge to understand the the structure and the logic of the workshop better, because it seemed as if “they were going to repeat themselves”.⁵³ In 2004 the choreographers collaborated with documentary maker Maite Bermudez during the “Notation Research Project”, a research project by EG|PC that will be specified later on in chapter 4. The development of the DS/DM documentary by Bermudez, forced Greco and Scholten to reflect on the structure of the workshop. It turned out to be very difficult to name the different parts and to argue why they start with *Breathing*, for example. However, in the end, the creation of the documentary appeared to be fruitful as, quoting Scholten: “Now it feels like rejuvenation. We didn’t change the structure of the workshop, but it has gotten more layers through this research project.”⁵⁴

3.2 Breath in DS/DM

DS/DM consists of four different elements: *Breathing*, *Jumping*, *Expanding* and *Reducing*. During the first element, *Breathing*, the dancers focus on their inhalation and exhalation. While inhaling the dancers are striving for an extreme extending of the body, when the longs are completely filled with air, the dancer arrived at the peak of his abilities. When exhaling the dancer relaxes and moves downwards, hereby looking for the most comfortable way in

⁵¹ Buytenhuijs, Marieke, et. al. “Double Skin/Double Mind The Method.” *ICK dans Amsterdam* – 10-10-2017 <http://www.ickamsterdam.com/en/academy/education/ick/double-skin-double-mind-the-method-20>

⁵² ickamsterdam.com “collaboration ICK” 06-07-2017

⁵³ DeLahunta, 20.

⁵⁴ Idem, 21.

which that is possible. When all air has left his lungs the dancer falls down or starts inhaling again looking for new possibilities to extend the body.

Why does the DS/DM workshop start with the element *Breathing*? The answer to this question is reflected in Greco's understanding of breath that he explains as follows in the DS/DM documentary:

Breathing is connecting the inside and the outside, breaking the boundaries of the inside, breaking out. Then the way back, going back, going into yourself, absorbing the outside world into yourself.⁵⁵

Through the focus on breath the dancers learn to connect the brain with the body and the inside (their body) to the outside (the space).⁵⁶ It is important to connect the inside and outside, stresses Scholten, as the connection is related to action and reaction, which produces a certain alertness and consciousness.⁵⁷ This consciousness of the own body and how it relates to the space and the other bodies in that space, is crucial for the elements that follow in the workshop as they demand a certain consciousness of the body and the movements it can produce. In *Expanding*, breathing helps to create more length and in *Jumping* the dancers are challenged to make a connection between the rhythm of the breath and the rhythm of the jumping. *Breathing* can therefore be considered as an element you can always fall back on, stresses Scholten. Besides, it can help dancers to work more precisely and to add more speed in their movements. Finally, it should not be forgotten that the connection between inside and outside is also strongly related to the earlier explained research on the discord between body and mind in which breath connects the mind to body, the brain to the movement, and can evoke the creation of an intuitive body.

This discord between body and mind is also reflected in the name "Double Skin/Double Mind", which points towards a duality, a conflict and synchronicity at the same time. The research between an inner and an outer body is further explored by using the word "double", in this way the plurality of the concepts "skin" and "mind" are being highlighted.

⁵⁵ Quote by Emio Greco in *Double Skin/Double Mind*. Documentary. Directed by Maite Bermúdez. Amsterdam: EG|PC, 2006.

⁵⁶ *Double Skin/Double Mind*. Documentary. Directed by Maite Bermúdez.

⁵⁷ Interview with Pieter C. Scholten by author on July 19, 2017 in Marseille

This can indicate for instance, an idea about an inner skin and an outer skin or the presence of the mind, not only in the inner body but also in the movements created by the dancer. The title Double Skin/Double Mind is thus multi-interpretable and introduces a challenge for each participant to discover DS/DM in his/her own way.

About this element of discovering in DS/DM, BNM dancer Andres says:

Breathing makes you discover your limits. Where is my body today? Where do my movements stop? Can I go beyond my boundaries? It is the breath that determines how far you can go in your movements.⁵⁸

In this statement and in my other conversations with dancers it appeared that in DS/DM, every dancer has a different feeling of the body and its limits, and even each individual dancer can experience DS/DM differently from day to day.⁵⁹ Within DS/DM, Greco gives the dancers the freedom to listen to their body and to explore their own breath and their own movements. An interesting example is ex-ICK dancer Sawami Fukuoka who explains in the DS/DM documentary that she sometimes decides to, breathe out, instead of breathing in, because she feels that she can create more length in her body while exhaling. Greco's famous quote: "with breathing you are always different" is reflected in his approach of DS/DM that relies on the belief that breathing is something very personal.⁶⁰

3.3 DS/DM in relation to other breathing methods

In Greco's choreographies, in contrary to a DS/DM training, the dancers have less freedom to experiment with their breathing and are in general strongly encouraged to follow the DS/DM breathing method. Having the same flow of breath does entail many advantages, as explained before in the second chapter. However, it is not always easy to stick to the method. BNM dancer Alejandro Longines agrees that it can be quite challenging sometimes:

The choreographies by Emio are sometimes challenging and fast. It is difficult to still control your breath in such a demanding part. Sometimes we have the tendency to breath out while doing a movement that was originally meant to lengthen the body, and this changes the intention of the movement. Instead of extending

⁵⁸ Interview with Andres Garcia Martinez by author on October 31, 2017 in Marseille

⁵⁹ This is also confirmed by dancer Valentina Pace during the symposium at the Ballet National de Marseille, October 2017

⁶⁰ Interview with Andres Garcia Martinez by author on October 31, 2017 in Marseille

and controlling a movement you let go. In that case we hear Emio screaming from the side line “No breathe out! Breathe in!”⁶¹

The method of Greco, in which expanding is related to inhaling and reducing is related to exhaling, is contrary to for example the Graham technique. This method, developed by Martha Graham, contains two important elements: contraction and release. In an interview with Judy Dudley, an at the time important dancer of the Martha Graham company, Dudley declares about the use breath related to contraction and release:

You have to let your breath forcibly out through your teeth and feel how the spine pushes outwards and lengthens (contracts) and then breathe in and see what your back does as you stretch your spine upwards (release). The thing that makes your breath come out is the pressure from the abdominal muscles and your ribs through your teeth.⁶²

During the contraction, the dancer exhales, pushes the air out the body. During the release, the dancer inhales. In this way, the Graham technique shows similarities with practices as yoga. In the article “Body and Mind: The Yoga Roots of Martha Graham’s ‘Contraction’ and ‘Release’” Eileen Or researches the connection between yoga and the Graham technique. She concludes that in yoga inhaling has a negative or passive connotation and exhaling a positive or active connotation. This because, while inhaling, we are receiving (passive) the element of “prana” and while exhaling we are giving (active) energy from all part of our bodies to the outside world.⁶³ This makes both yoga and the Graham method, radically different than the method by Greco and Scholten who use inspiration to expand (active) and expiration to release (passive). As a consequence, the quality of movement of the Graham method is completely different than the one of the DS/DM method.

The division of breath in two different parts: inhaling and exhaling, and this notion related to movements, is something that we see more often in the work of choreographers. Besides Emio Greco, Pieter C. Scholten and Martha Graham also Doris Humphrey used this division

⁶¹ Quote from Alejandro Longines, with whom I spoke after doing the Double Skin/Double Mind workshop at the Ballet National de Marseille the 24th of June.

⁶² Reynolds, Dee. “A Technique for Power: Reconfiguring Economies of Energy in Martha Graham’s Early Work.” *Dance Research: The Journal of the Society for Dance Research*, 20, 1 (2002): 16.

⁶³ prana: word in Sanskrit meaning “vital breath”

Or, Eileen. “Body and Mind: The Yoga Roots of Martha Graham’s ‘Contraction’ and ‘Release’.” 1995 p. 206

in her method. At the beginning of the twentieth century Humphrey, interested in the relationship between breath and movement, developed, in collaboration with Charles Weidman, the concepts of fall and recovery which she linked to the pattern of breath. And also Anne Teresa de Keersmaeker, the renowned Belgian choreographer and head of the Rosas dance company, splits breathing up in two different parts and connects these to two different movement qualities: attacked and suspended. In this method by de Keersmaeker, attacked movements are related to “pulling” and “twisting”.⁶⁴ The attacked movements are fast and precise but suddenly stagnate, together with the breath. Suspended movements, on the contrary, are described as slow, smooth and without accents.

This division of breath in two stages, is a common thread in the methods of the American and European choreographers. On the contrary, the Indian Pranayama breathing technique, used in yoga, distinguishes four different stages in breathing: Puraka (inhaling), Abhyantara Kumbhaka (pause after inhaling), Rechaka (exhaling) and Bahya Kumbhaka (pause after exhaling). Practitioners of yoga extend the pauses between inhaling and exhaling in order to attain a certain state of relaxation.⁶⁵ Through the concentration on the pauses in breathing, instead of on the action of inspiration and expiration, a different view on breath is created. This probably explains why Prayanama has complete different results than the breathing methods in dance mentioned before. By focussing on the “passive” pauses a certain state of mind becomes the highest goal, movements are of less importance. A different view on respiration can thus lead to different results.

3.4 DS/DM and the Body without Organs

Zooming in on the DS/DM breathing method a remarkable aspect is encountered. Greco namely approaches breath as a phenomenon that does not limit itself to the lungs. This philosophy by Greco, which will be explained in detail further on in this chapter, strives for a respiration of the whole body. In this way, Greco attempts to create a different view on the body and also a different experience of the body. This manifests itself in movements that do

⁶⁴ Karreman, Laura. “Repeating Rosas danst Rosas. On the transmission of dance knowledge.” *Performance Research*, 20, 5 (2015): 105.

⁶⁵ Madanmohan. “Effect of yoga type breathing on heart rate and cardiac axis of normal subjects.” *Indian Journal of Physiology and Pharmacology*, 30, 4 (1986): 335.

not follow the expanding and reducing of the chest, but instead, follow the “breathing” of the whole body. Greco’s refuse to limit breath to only the lungs finds its roots in a philosophical discourse by Gilles Deleuze. In 1947 the philosopher wrote the article “How Do You Make Yourself a Body without Organs”, which appeared in the book *A Thousand Plateaus* (1980) written collaboratively with Félix Guattari. The article is inspired on a radio play by Antonin Artaud called *To Have Done with the Judgement of God* (1942): “For you can tie me up if you wish, but there is nothing more useless than an organ.”⁶⁶ Deleuze took this idea and developed it further while declaring the war on organs.

The Body without Organs (BwO), an empty body that is at the same time filled with “gaiety, ecstasy and dance”, is the ideal result of a quest for a new state of the body, escaping from imposed psychological and social constructs.⁶⁷ The BwO is a goal that will never be reached, it is a process, a set of practices. Deleuze and Guattari argue that becoming a BwO involves two steps, first the body needs to be emptied and then it needs to be filled with intensities. To illustrate the BwO, Deleuze and Guattari compare the BwO to an egg. The egg always designates an intensive reality which is in constant evolution. The organs are fused, migrating, developing, and find themselves close together in zones of proximity.⁶⁸ The egg is related to childhood, but is opposed to childhood memories as it is a “becoming”, argue Deleuze and Guattari.⁶⁹ It is not about the child before the adult, nor about the mother before the child, it is about the contemporaneousness of a continually self-constructing milieu.⁷⁰

This self-construction is also very important for Greco and Scholten, who consider the process to be just as important as the final creation. DS/DM for example, is all about the process. During a five-day symposium at the Ballet National de Marseille October 2017, ex-dancer Vincent Colomes of the company ICK compares this quality of DS/DM with ballet: “Ballet is about *what* you are doing, it is not about the process. As opposed to DS/DM, which is a process, it is not about what you are doing but *how* you are doing it.”

⁶⁶ Artaud, Antonin. *To have done with the judgment of God*. Translated by Helen Weaver. In: *Selected Writings*, edited by: Susan Sontag. Berkeley: University of California Press, 1988: 571.

⁶⁷ Deleuze, Gilles and Félix Guattari. *A Thousand Plateaus: Capitalism and Schizophrenia*. Minneapolis: University of Minnesota Press, 1987: 167.

⁶⁸ Idem, 182.

⁶⁹ Ibidem.

⁷⁰ Idem, 183.

Another element of the theory of Deleuze and Guattari that can be related to the work of Greco and Scholten is the experiment with the body. In order to find our BwO, Deleuze and Guattari state: “Why not walk on your head, sing with your sinuses, see through your skin, breathe with your body.”⁷¹ This different approach of the body can also be found in the DS/DM method by Greco and Scholten. During the DS/DM workshop we first make a connection between our respiration and our movements (expanding and reducing). Then, we start experimenting with our breath, we breathe with our hands and with our armpits. Taking the example of the hands, this means that while breathing in, we lengthen our hands, filling our hands with air, and when breathing out the hands relax and let the air go.

In the *Double Skin/Double Mind* documentary, Greco explains: “with breathing you are never the same. You keep changing. It is always something that you keep searching.”⁷² While doing this experiment, Greco puts the philosophy by Deleuze and Guattari into practice and searches for a new way of breathing and a new way of perceiving the body. Breathing with different body parts, with the lungs, the skin, or even with the whole body, in order to become a BwO. The organs do not count anymore.

3.5 Imagining elements of nature

Air is not the only element of nature that is of importance in the DS/DM method. Especially water seems to play a big role, at a certain moment in the workshop, Greco demands the dancers to dance as if their body is in water. This offers a new view on the way one moves as water restrains speed, it makes the movements slower and at the same time more powerful. Later on in the workshop, Greco changes the exercise and demands the dancers to dance as if the body itself is water. This again produces a whole different quality of movements, the body moves quickly, it is streaming as water. In the DS/DM documentary, one of the participants gets visibly confused of this play with different elements and she asks: “how can my body be water when it is in air?”. It appears that for certain participants the exercise to imagine your environment to be water is easier than imagining yourself as water being in air, which is remarkable as we are used to live in air, and as Irigaray said: “we cannot live somewhere else than in air”. The question of the participant of how the body can be water in

⁷¹ Ibidem.

⁷² Quote by Emio Greco in *Double Skin/Double Mind*. Documentary. Directed by Maite Bermúdez.

air, is partly answered in the study by Suzan Tunca on the “intuitive body” of Greco and Scholten. She makes the following notes in a dossier on her studies:

The intuitive body is in touch with the inside, the inner body. The inner body can be imagined as everything under the skin being an empty space that can be filled in with various elements such as air, water, fire etc.⁷³

This inner body, mentioned by Tunca, is not the same as the intuitive body. The inner body can be described simply as everything that is under the skin, while the intuitive body is a certain state of the body and mind that the ICK and BNM dancers attempt to reach.⁷⁴ The inner body, explains Tunca, is an empty body that can be filled with liquid elements, and every element offers a different experience of the body. The inner body, therefore, describes a paradox as it can be empty and full at the same time. This quality reminds of the BwO that is emptied and needs to be filled with intensities. The inner body, just as the BwO, is a process, a “becoming” as Deleuze and Guattari stated before.

What is striking here, is the fact that the inner body is especially focussed on liquid elements, elements that according to Irigaray were forgotten by metaphysics. But this does not mean that Greco and Scholten forgot the element of earth. According to Scholten himself the element of earth forms an important part of the choreographic language by Greco as well.⁷⁵ This becomes especially apparent in Greco’s *grounded* dance which seeks to touch upon the very essence of our nature through highlighting our intuition.

What becomes apparent here as well is that the liquid elements are used as imaginative language. By using words as water, air or fire, the dancers and choreographers are able to express the feeling of their body and their dance. An example is the aforementioned challenge to “breathe” with the skin, hands and armpits, but the phenomenon is also reflected in a spontaneous reaction by dancer Yoshiko Kinoshita. After doing DS/DM at a symposium at the Ballet National de Marseille in October 2017, she attempts to put the sensation of her body in words: “After DS/DM all my cells are alive. It feels as if water is streaming through my body. No air, water!”⁷⁶ Through using the metaphor of water she can

⁷³ Based on a presentation by Suzan Tunca, “The Intuitive Body”.

⁷⁴ Explanation by Suzan Tunca during a symposium at the Ballet National de Marseille, October 2017.

⁷⁵ Interview with Pieter C. Scholten by author on July 19, 2017 in Marseille

⁷⁶ Quote from dancer Yoshiko Kinoshita during the symposium at the Ballet National de Marseille in October 2017.

express her experience and share this with the other dancers. Besides the aspect of sharing an experience, imaginative language can also stimulate a change of movement quality while performing dance. This is for example the case in the DS/DM documentary in which Greco demands the dancers to dance as if their body is water.

The elements of nature are not only used as imaginative language but also to give actual physical indications. I noticed this during the same symposium where I assisted at a DS/DM workshop conducted by Tunca. In her version of DS/DM, there is more attention for the breath. She integrates yoga and Buddhist practices in DS/DM and lets the dancers start by lying on the floor, focussing on their breath. During this part of the workshop, Tunca, gives the dancers physical indications related to breath, “close the right nostril to clear the left channel”, but also uses metaphoric language, “fill the inner body with air”. This duality is remarked before by Karreman who in “The Motion Capture Imaginary” specifies: “in the exchange between dancers and choreographers, the breath is often used in a sense that is simultaneously physical and metaphorical.”⁷⁷ This statement is further elaborated by Karreman’s focus on the “imaginary” in which she underlines the importance of metaphors as concepts that shape our understanding but also determine our vision on reality. This is also argued by Lakoff and Johnson in *Metaphors we live by* (1980), who state: “The metaphors we use determine a great deal of how we live our lives.”⁷⁸ In the Ballet National de Marseille the metaphors of air, water and fire actually shape the movements of the dancers and the way they perceive the body. Their view of the body, with an inner and an outer side, becomes, in a certain way, reality.

3.6 Conclusion

The DS/DM method by Greco and Scholten, for many years at the very heart of their work, aims to create a certain sensitivity or alertness of the body. The element of *Breathing* has a key role as it establishes a link between inside and outside, between the body and the mind, between the body and the space (and the other bodies in that space). During the same element the dancers are challenged to breathe with other body parts than their lungs, they “breathe” with their skin, their hands and their armpits, which creates a different movement

⁷⁷ Karreman, “The Motion Capture Imaginary”, 229.

⁷⁸ Lakoff, George and Mark Johnson. *Metaphors We Live By*. Chicago: University of Chicago Press, 1980: 244.

quality and lets the dancer seek his intuitive body.

“Air” appeared to be an important element in the communication between dancers and choreographers. “Air” can be used for physical indications as “Breathe in the air” but can also be used in metaphors, as is for example the case with the “breathing” with different body parts. This imaginative language, in which words as “air”, but also “water” and “fire” are used, is crucial in the transmission of dance knowledge and can actually change of the physical experience of the dancer.

4. Breath and the Double skin/Double mind installation

The knowledge gained from the precedent chapter about the DS/DM workshop will in this chapter be used and compared to information about the DS/DM installation. This part of the thesis will clarify the role of embodied DS/DM breathing in the technological DS/DM installation. Breathing is a typically corporeal element that is inherent to living beings. So what exactly is its relationship with a construction that has never been alive? In order to answer this question, there must first be established how the body in general uses the installation, how the installation is constructed and with which purpose this is done. Then, there will be focussed on the role of breath in the DS/DM installation and the relationship between body and technology. Finally, the last paragraph includes a critical evaluation of the DS/DM installation, based on the knowledge gained in the previous paragraphs.

4.1 Capturing Intention and the DS/DM installation

To begin, in order to get to know more about the purpose of the installation, it is important to touch upon the “Notation Research Project”. The installation was one of the outcomes of this research group, set up in 2004 by EG|PC. The Notation Research Project was under the lead of Bertha Bermudez (ex-ICK dancer and researcher), and consisted of scholars from a wide range of disciplines as theatre studies, cultural studies, data science and cognitive neurology.⁷⁹ The basic question that was asked within this research group was: what notation system can capture inner intention as well as the outer shape of gestures and phrases?⁸⁰ The main result of this process was the publication of the book *Capturing Intention* (2007). In this bundle of articles, with a cross-disciplinary focus, the different participants of the Notation Research Project, reflect on the process and outcomes. Most of the



Figure 2: DS/DM Installation

⁷⁹ Bastien, Marion, et. al. *Capturing Intention. Documentation, analysis and notation research based on the work of Emio Greco | PC*. Amsterdam: Emio Greco | PC and AHK, 2007: 5.

⁸⁰ Ibidem.

articles in the book present possible solutions on the main question, such as “capturing intention” through: a written dance notation system, a documentary or an installation. The installation was actually realised in the same year as the publication of *Capturing Intention* in 2007.

The so called “DS/DM Interactive Installation”, is created by scientists Chris Ziegler and Frédéric Bévilacqua. The design by Ziegler, which we see in Figure 3, is composed of an aluminium construction, one big screen, four sound speakers and one tracking camera that registers the movements of the participant.⁸¹ The software, called “gesture follower”, is developed by Bévilacqua. Gesture follower is a movement tracking program that compares the data of the filmed workshop with the live movements of the participant in the installation.⁸² In this way, feedback can be given based on the movements made by the participant in the installation.

The installation is based for the most part on the DS/DM workshop, but besides the element “workshop”, three new parts are included: “learn”, “customize” and “play”. In “workshop” and “learn” we see an avatar of Greco who has the role of teacher. This part of the installation has, so to say, a conventional character: just as in dance classes it is shown how the dance is done. In “customize” and “play”, however, there is no presence of a virtual teacher, the dancer is alone, surrounded by screens which give the dancer indications and explanations but also reflect his movement intentions by showing abstract moving figures.⁸³

At the moment, the Double Skin/Double Mind installation has mainly as goal the embodied understanding of the movement language of Greco, however another important aspect of the installation is the fact that it is also considered to be an archive. At the symposium at the Ballet National de Marseille in October 2017, a skype call was arranged with Bertha Bermudez, and so I had the opportunity to ask her what her perspective is of the DS/DM installation. She responded that for her the installation, in the first place, is an archive. The installation, namely, makes you revisit DS/DM without the physical presence of the teacher. In the article “What if this were an archive?” researcher and participant of the Notation

⁸¹ *ICK dans Amsterdam*, “Double Skin/Double Mind.”

⁸² *Ibidem*.

⁸³ See the short DS/DM documentary “Interactive Installation” on the website of ICK <http://www.ickamsterdam.com/en/academy/research/ick/capturing-intention-17>

Research Project, Maaïke Bleeker, approaches the subject in a more critical way and asks herself the question whether the installation can also be considered as an archive.⁸⁴ The installation is namely only capable of transferring the DS/DM workshop and is not yet capable to transmit choreographies. A real archive or not, the installation will, most likely, still be able to function after many years and can continue transferring the method of Greco and Scholten, also in their absence.

4.2 Breath and the DS/DM installation

Since the 1980's the field of dance started to pay particular attention to technology. Apart from Greco and Scholten there are many different choreographers who gave or are giving special attention to new technologies and start new collaborations with engineers in order to combine dance with new digital media. It was especially the development of sophisticated software, that created a boost in the encounter between dance and technology. An example of such a technology that is able to analyse and capture the movements of the entire body in 3D, is "motion capture".

Motion capture is a digital technique that functions by marking the body with small specialised sensors that are attached to the body. The process is often executed in an iron construction unto which infra-red cameras are attached. The reflection of the infrared light by the markers enable the creation of a virtual 3D version of the dancer. In this way, the movements are kept alive without the necessary presence of the dancing body.⁸⁵ Motion capture is a technology that was not developed especially for dance, but was originally meant for biomechanical studies and animation of games and films. However, during the 1990's an increase of digital interactive systems occurred. These systems as Eycon, EyesWeb, BigEye and SoftVNS were especially designed for artistic use.⁸⁶

⁸⁴ Bleeker, Maaïke. "What if This Were an Archive?" *RTRSRCH* 2, 2 (2010): 5.

⁸⁵ Reynolds, Dee, et.al. "Dance Research Electronic-Introduction Dance and Neuroscience-New Partnerships." *Dance Research: The Journal of the Society for Dance Research*, 29, 2 (2011): 263.

⁸⁶ Bevilacqua, Frédéric, et. al. "Gesture Capture: Paradigms in Interactive Music/Dance Systems." In: *Emerging Bodies. The Performance of Worldmaking in Dance and Choreography*, edited by: Gabrielle Klein and Sandra Noeth, p. 183-193. Hamburg: University of Hamburg, 2011: 183.

Someone who experimented a lot with technology and especially motion capture is dancer and choreographer Merce Cunningham. In his performance *Biped* (1999) a group of both virtual and real dancers is created.

The difficulty of working with motion capture in a real-time situation is also one of the reasons that Frédéric Bevilacqua decided not to use this system for the design of the DS/DM installation. In the article “Momentary Notes on Capturing Gestures” Bevilacqua describes another problem of motion capture:

“The experience I gained with the 3D motion capture convinced me that a major limitation of the use of motion capture in arts remains the generally poor tools available to interpret motion data.”⁸⁷

Instead of working with motion capture, Bevilacqua decided therefore to develop his own program called *gesture follower*. This program is based on an artificial intelligence model called “machine learning”, which Bevilacqua explains as follows: “This recognition scheme is based on a set of labelled examples that allows the computer to learn”.⁸⁸ In general, *gesture follower* functions by comparing human movements to pre-recorded ones. First a movement vocabulary needs to be defined. Then, recorded movements can be stored in the memory of the computer. An audio control system will be linked to the movement vocabulary that is stored in the computer. The result will be the comparison of movements made by a participant with those which are memorised by the technological system. On top of that, specific music will appear when certain movements are performed.⁸⁹

Bevilacqua started experimenting with EG|PC in 2006, recording some phrases of movements from the DS/DM workshop with a mixed capture system and video analysis



Figure 3: DS/DM Installation

⁸⁷ Bevilacqua, Frédéric. “Momentary notes on capturing gestures.” In: *Capturing Intention. Documentation, analysis and notation research based on the work of Emilio Greco*/PC, edited by: Scott deLahunta, p. 26-34. Amsterdam: EG|PC and AHK, 2007: 27.

⁸⁸ Idem, 28.

⁸⁹ Bevilacqua, et. al. “Gesture Capture”, 190.

(EyeWeb).⁹⁰ The phrases of 30 seconds were danced by Bertha Bermudez and Emio Greco. Through working with a video system the whole body posture and its movements can be captured. As shown in Figure 4 the single camera can grasp the silhouette of the dancer which can be useful in comparing your own performances to the ones of the teacher.

But is this system also able to capture subtle body qualities as breath? And if so, how? In the article “Gesture Capture” Bevilacqua, Schnell and Alaoui explain that all sorts of physiological qualities can be measured with technologies. They give the example of muscular activity which can be measured with sensors, attached to the body, that work with electrical activity.⁹¹ Other physiological aspects such as breathing can also be captured by technology. In the image below we see dancer and researcher Bertha Bermudez with a sensor on her body that is able to register her breath.

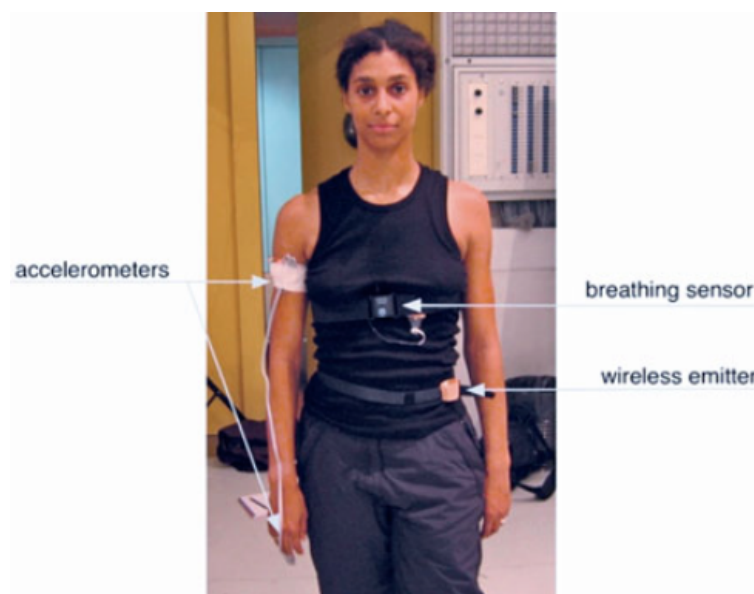


Figure 4: Bertha Bermudez with breathing sensor

An example of a performance that relies on the communication between breathing and technology is the choreography *This is my house* (2005) from choreographer Myriam Gourfink. Gourfink approaches technology as a partner of man. According to her we rely on technology and it is this idea that she transfers while letting five female dancers dance with breathing sensors. When starting the project of *This is my house* Gourfink invited researchers

⁹⁰ Bevilacqua, “Momentary notes on capturing gestures”, 29.

⁹¹ Bevilacqua, et. al. “Gesture Capture”, 183.

and engineers Rémy Muller and Frédéric Bevilacqua to design a tailor-made software.⁹² This collaboration stimulated the research of Bevilacqua's gesture follower as he gained more insight in the use of a phrase as a time process.⁹³ The recorded movements phrases (from Emio Greco and Bertha Bermudez) were divided into subsections. The gesture follower can, as explained before, by "machine

learning", recognize these subsections and can thereupon link these to a determined audio file. Thanks to this system, the right sound is played at the right moment. But this way of working also has its downsides, in the article "Momentary Notes on Capturing Gestures" Bevilacqua

explains: "Nevertheless, the assumption that one can segment

a phrase at precise and unique times can be problematic in dance."⁹⁴ Dance phrases are namely for a big part subjective, the dancers can have a whole different view on what is a phrase than the choreographer for example.⁹⁵

In spite of the difficulties Bevilacqua divided the workshop in parts and he decided to split up the *Breathing* in two different phrases, as shown in Figure 6. The participant follows the movements made by Emio Greco and is confronted with the sound of his inspiration and expiration, which indicates how the breathing should be done. During the first part of *Breathing*, the breathing in, the body is lengthened and the participant is invited to search as much length in his/her body as possible. In the second part, breathing out, the body relaxes and slowly drops down. Hereby taking the easiest way to go down as possible. At the same time, on another screen, an abstract breathing schedule is shown which assists the participant in finding the right flow of breath.



Figure 5: *Breathing performed by Emio Greco in the DS/DM installation*

⁹² Franck, Philippe, and Clarisse Bardiot. "This is my house/2005." *Myriam Gourfink* – 23-08-2017 <http://www.myriam-gourfink.com/thisIsMyHouse.html>

⁹³ Bevilacqua, "Momentary notes on capturing gestures", 29.

⁹⁴ Idem, 30.

⁹⁵ See the study of Scott Delahunta and Philip Barnard "What's in a phrase" (2005).

4.3 About technique and technology

In this paragraph it will become clear that, when talking about the functioning of the installation, there exists a tension between “embodied” and “disembodied”. This is related to the presence of a breathing and dancing body in a technological installation. Before continuing this line of thought, a clarification of the concept “embodiment” is necessary.

When talking about embodiment, I follow the assumption of Ben Spatz in his book *What a Body Can Do*:

My assumption here is that mind and body are holistically intertwined – or rather, following current trends in cognitive studies, that mind is an emergent property of the body, just as the body is the material basis of the mind. Therefore, when I refer to “embodiment” [...] I mean to include all of the following: thought, mind, brain, intellect, rationality, speech and language.⁹⁶

Spatz argues that embodiment includes, so to say, everything a body can do. While the word “body” specifies an exclusive corporeal focus, “embodiment” can include the body but also the mind, emotions and even spirituality.⁹⁷ Instead of focussing on Cartesian Dualism, I concentrate, in my use of “embodiment”, on the contradiction between embodiment (mind included) and, the element that the last two decades became of huge importance, technology.

Technology is often considered as “disembodied”: it is not alive, it does not show emotions, and machines can often function more or less independently. This presupposition gets nowadays more and more criticised, especially in the context of “posthumanism”, in which technology is often considered as an extension of the human body. In the book *The Posthuman*, Rosi Braidotti considers human as a: “nomadic subject which can extend itself through a multitude of channels.”⁹⁸ An example of this is computer games in which avatars are used. The avatar is created by yourself and does the things you want it to do.

These days, through the creation of avatars, but also because of the fact that some of us carry technology not only attached to the body (sensors, telephones, computers) but also inside the body (pacemakers), the boundary between technology and embodiment becomes

⁹⁶ Spatz, Ben. *What a Body Can Do. Technique as Knowledge. Practice as Research*. London: Routledge, 2015: 11.

⁹⁷ Ibidem.

⁹⁸ Braidotti, Rosi. *The Posthuman*. Cambridge: Polity Press, 2013: 2.

more and blurred and no clear difference can be made. However, in *What a Body Can Do* Spatz offers an essential element that distinguishes “what a body can do” (embodied technique) from “what a body can build” (technology).⁹⁹ This is the fact, stresses Spatz, that from an historical point of view, technology is an extremely recent phenomenon compared to the ecologies of our bodies.¹⁰⁰ As it is only since the beginning of the twenty-first century that there has been an explosive growth of technology, it is not surprising that we experience such a strong alienating feeling towards technology.

The DS/DM installation preserves this distinction between embodiment and technology. This is mostly due to the element of *Breathing*, in which no input is needed of the participant as the installation cannot register breath. The installation does give indications in order to stimulate the participant to follow the desired rhythm of respiration, the hints that are given are the same for every participant, a dialogue is not possible. Therefore, the participant will not truly get emerged in the digital world, instead, he or she finds him/herself in a construction, surrounded by four walls unto which technology is attached. It is therefore that this situation can rather be described as an encounter between human and technology than technology as an extension of the human body, as described before when mentioning Rosi Braidotti. On the other hand, *if* we consider the installation to be an extension of a body it would rather be an extension of the body of Emilio Greco, for it is Greco’s movement language that is carried out by the system, it is Greco’s avatar that we see on the screen and it is the sound of Greco’s breath that surrounds us.

In order to improve the contact and to dissolve the differences between embodied technique (breathing) and technology (an installation) in the DS/DM installation, it is desirable for the installation to become an extension of the body of the participant. Besides, more importantly, it is necessary, from the point of view of the participant, to neglect the different historical backgrounds of bodies and technology.¹⁰¹ It is only with these improvements that a complete loss of boundaries can be achieved and the participant will be able to make a natural connection between his breathing and the installation.

⁹⁹ Spatz, 13.

¹⁰⁰ Ibidem.

¹⁰¹ Idem, 13.

4.4 Critical evaluation of the DS/DM installation

In the previous two paragraphs the role of breath and the relationship between body and technology in the DS/DM installation has been discussed. In these paragraphs it appeared that the installation, besides the fact that it is an interesting and useful project, contains some problems. To start with, the installation is unable to give feedback on the respiration of the participant. When the participant is not performing *Breathing* as he or she should be doing, the installation will not give corrections because the sensors are not able to register his or her breathing. In order to stimulate the participant to follow the instructions, they will be confronted with sounds of breathing, with a virtual schedule of a pillar that shows the flow of breath virtually, as well as with the avatar of Emio Greco who shows how to breathe and who gives indications as: breathe in, breathe out and breathe slowly.¹⁰² The role of breath in the DS/DM installation is thus, in the end, not interactive. The installation will just give indications in several ways, inviting the dancer to follow the desired flow of breath, but will not give direct feedback on the breathing of the participant.¹⁰³

One can wonder if this is a problematic aspect of the installation. On the one hand, the dancer does get indications in many ways, it is very clear what the installation wants you to do and *Breathing* gets a great amount of attention. Then there is also the fact that breathing is a necessity, as the muscles need to be oxygenated. As the workshop is very intense, the dancer simply can't continue without proper breathing. In this way, the dancer will correct him or herself and will find his or her proper way of breathing. Yet, the fact that the installation does not give direct feedback might still be problematic as *Breathing* can be seen as the basic element on which the other elements continue to build upon. The fact that the installation is not capable to give direct feedback in the context of this element is therefore inconvenient. If the participant does not execute the flow of breath as he or she should, this might have consequences for his or her performance in other parts of the workshop.

As is discussed in the previous paragraph, the installation can be considered as an extension of the body Emio Greco and to a much lesser extent as an extension of the body of the participant. Besides, the single camera that registers the movements produces images in low quality. As a consequence, the participant might be restrained from truly getting

¹⁰² information based on a conversation with dancer Béatrice Mille in Marseille, September 4, 2017.

¹⁰³ Confirmed by Frédéric Bevilacqua in my conversation with him on September 14, 2017.

immersed in the workshop, which does not enhance the feedback system either. What should be taken in consideration is the fact that the installation dates from 2007, and as the developments in the field of digital technology develop at high speed, it is understandable that the software of the, although recent, installation can already be considered as outdated. At the time it was not possible to construct an easy feedback system on breath, but this might be completely different nowadays.¹⁰⁴

4.5 Conclusion

The DS/DM installation is a workshop, an experiment and an archive. The virtual workshop has a few advantages compared to the real-time workshop given by Greco, the participant can move freely without being judged by others for example. But there are also disadvantages, there namely still exists many boundaries between the technological installation and the embodied technique of the participant. Besides the aforementioned historical difference, the relatively low quality of the software of the installation creates yet another boundary. The installation cannot give direct feedback on the dancers breathing, and so, no clear connection can be created between the embodied technique of breath and technology. A more adequate software is therefore desirable as *Breathing* is a fundamental element of DS/DM, also in relation to the other elements *Jumping*, *Expanding* and *Reducing*.

The future of the installation might be in the hands of the Ballet National de Marseille, a French dance company under direction of Emio Greco and Pieter C. Scholten since 2014. In these three years the two directors already left a mark on the company by abolishing the ranks of the dancers, by creating axes concentrated on the body and by innovating the principles of ballet. Research, an element that is very much developed in their Dutch company ICK, might also become important in their French company. Although these are many speculations, a new research group could offer new possibilities with regard to the DS/DM installation. While now often stored because of his unwieldy character, the installation can, after some renovation and innovation become more mobile and more interactive. Which will also mean that the border between body and installation become more and more blurred as body and technology become more and more entangled.

¹⁰⁴ Frédéric Bevilacqua also expressed this assumption in our conversation on September 14, 2017.

Conclusion

Breath and dance are intrinsically linked. However, very little attention has been dedicated to the importance of breath in dance. This thesis shows that more insight in the use of breath in dance can lead to a better understanding of the work of choreographers and the embodied experience of the dancers. With their philosophy “between brain and movement” and their Double Skin/Double Mind method, Greco and Scholten present their unique view on the role of breath in dance. The fascination for their work and methods led to the following main question of this thesis: In what way can the understanding of breath by Emio Greco and Pieter C. Scholten lead to a new way of understanding their work?

At first, the EG|PC philosophy “Between brain and movement” was discussed. This theory lies, already since the meeting of Greco and Scholten in 1995, at the very heart of their work. Breath has an important role in this theory as it establishes a relationship between body and mind, between instinct and rationalism, between brain and movement, which can lead to the creation of an intuitive body.

With this knowledge the work of Greco and Scholten was entered from three different angles in order to get a broad view of their understanding of breath: an analysis of their latest performance *Appearance*, a study of the DS/DM method and a research and evaluation of the DS/DM installation. In *Appearance*, breath is used as a thematic element: it reflects anxiety and a (apparent) polarization between body and mind, and life and death. In the same performance, breath is also used as a technical tool: it helps the dancers to synchronize, to gain new energy and to give a certain character to a movement.

The breathing technique of the dancers in *Appearance*, is based, to a large extend, on Greco and Scholten’s DS/DM method. The DS/DM breathing helps the dancers to relate to their own body, to the space and other bodies in the space. Through this consciousness and the focus on breath a different quality of movements can be reached. However, breathing did not only appear to be important on a physical level but is also essential in the communication between dancers and choreographers. Words as “air” and “breath” are used to give physical indications and are also used as metaphors in order to express a certain sensation of the body and its movements.

Greco and Scholten strive for innovation by initiating, amongst others, the development of the DS/DM installation (2007). The virtual transfer of the EG|PC breathing method without the physical presence of a teacher is promising, however, one big problem is being encountered: the software is unable to give direct feedback on breath, due to which the participant is restrained from making a clear connection between the embodied technique of breath and technology. Therefore, the installation would benefit from some modernization which could become the possible objective of a future research group.

The numerous ways in which breath is of important in the work of Greco and Scholten leads to the conclusion that their philosophical approach of breath has a very practical impact. Breath helps the dancer to relate to his own body but also establishes the relationship between dancers and choreographers. Because this thesis focused on the performance *Appearance*, no statements can be made about the oeuvre of Greco and Scholten in general. However, the many interviews with the dancers, the study of *Appearance*, the DS/DM method and the DS/DM installation, lead to the indication that breath, as a thematic, technical and innovating force, can be considered as a common thread throughout the oeuvre of Greco and Scholten.

This gap, in the study of the choreographies of Greco and Scholten, might be filled with future research in order to gain more certainty and a clearer overview of the role of breath in the whole oeuvre of EG|PC. Additionally, I would like to stress that, whether this thesis concentrated on the work of Emio Greco and Pieter C. Scholten, the topic of breath in dance can also be a potential way of studying other approaches of choreographers and can generate new insights in the embodied experience of the dancers, in the communication between them, and also in the artistic projects of a dance company.

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