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**Encounters on the borders of the immaterial: Body, technology and visual culture**  
**Art and Breath (1970-2012)**

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Complementary material at: <http://art-breath.com>

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*Στους γονείς μου Κωνσταντή και Αφροδίτη  
την αδελφή μου Αρχοντία  
και τις ανηψιές μου Μαργαρίτα και Αφροδίτη*

*To my parents, Konstantis and Afroditi  
my sister Archontia  
and my nieces Margarita and Afroditi*



*We struggle to make this Breath visible,  
to give it a face, to wrap it into words, allegories  
and spells, so that it won't leave us.*

*But it can't fit in the twenty-six letters we line  
up; we know, all these words, all these allegories,  
the thoughts and the spells are once more a new  
mask that hides the Abyss.*

*But it's the only way, by limiting the limitless,  
that we can, inside the borders of the newly  
carved human circle, work.*

Nikos Kazantzakis, *Ασκητική (Salvatores Dei)*



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## Contents



## Contents

<b>Chapter One: Introduction</b> .....	17
1.0 Main Object of Study .....	19
1.1 Objectives and structural overview.....	24
<b>Chapter Two: Methodology</b> .....	41
2.0 State of the art, basic resources and selection of artworks.....	43
2.1 Academic background and motivation for the study.....	54
2.2 Online publishing as a research tool: The <i>Interartive</i> adventure.....	60
2.3 Conferences, lectures and publications.....	65
2.4 Scholarship, internship and research group .....	71
<b>Chapter Three: Shades of the Immaterial: Body, Technology and Visual Arts</b> .....	73
3.0 Minimal matter/Maximal possibilities: Digital technologies, everyday life and art.....	75
3.1 Theoretical background .....	78
3.1.1 Immateriality, from the conceptual to the digital.....	78
3.1.1.1 Shades of the immaterial: Different approaches and definitions to the state of the <i>non-object</i> .....	78
3.1.1.2 “Art and technology: A new unity”: An etymological approach.....	85
3.1.1.3 The work of art in the age of digital reproduction.....	88
3.1.1.4 Towards an “Ideal text”: Hypertext creating a new generation of authors and readers.....	91
3.1.2 Experience as a way of perceiving the world. From philosophy to artistic creation	96
3.1.2.1 Viewing the body and the mind as a whole: The phenomenological approach.	96
3.1.2.2 Beyond Phenomenology I: From Eastern Philosophies to biofeedback technologies.....	100
3.1.2.3 Beyond Phenomenology II: Expanding experience through technology .....	103
3.1.3 Experience within the immaterial virtual space.....	108
3.1.3.1 A shift of focus in the reading of art history.....	108
3.1.3.2 A new perspective in the reception of the artwork .....	109

3.1.3.3 Participation, a new role for the audience.....	112
3.1.3.4 Creation as transformation: From appropriation to remix.....	119
3.1.3.5 The politics of the immaterial space: Information sharing as a cultural and political act .....	121
3.1.3.6 From code to real space: About “Cultural Hacking” .....	124
3.2 Transformations of the immaterial: From conceptual art to augmented reality .....	126
3.2.1 Immateriality in art before the emergence of digital technologies .....	126
3.2.2 Char Davies: Bridging the body/mind split .....	133
3.2.3 George Khut: A colourful reflection of the inner body .....	140
3.2.4 Christa Sommerer and Laurent Mignonneau: Exploring new means of communication.....	146
3.2.5 Thecla Schiphorst: Wearable technologies and performance .....	152
3.2.6 Hacking the urban space: Augmented reality art.....	157
<b>Chapter Four: An Index of Breath: Philosophy, Cultural Practice and Artistic Creation ...</b>	<b>163</b>
4.0 The path of Breath: A link between philosophy, ritual and artistic creation .....	165
4.1 Theoretical background .....	170
4.1.1 Materiality and spirituality of breath: Aristotle and the ancient Greek tradition... 170	
4.1.2 From theory to practice: Breath control in the Indian tradition.....	176
4.1.3 Breath in religious and cultural practices .....	181
4.1.4 From East to West: Luce Irigaray’s ontology of breath.....	185
4.1.5 Breathlessness, suffering and death: A phenomenological approach.....	191
4.2 Breath as a prime matter of artistic creation .....	196
4.2.1 Manzoni, Torres and Penone: Some first notes on breath as an artistic material....	196
4.2.2 Lygia Clark: Odour and breath, art and therapy .....	202
4.2.3 Nikos Navridis: Infinite transformations of breath and void.....	209
4.2.4 Bill Viola: Underwater visions between the first breath and the last breath .....	221
4.2.5 Danae Stratou: The breath of earth and the transformation of the natural landscape .....	229
4.2.6 Kimsooja: Diffracted lights, ethereal breaths.....	235
4.2.7 Edith Kollath: Ephemeral objects of aerial imagination .....	240
4.2.8 Sabrina Raaf: The invisible life within air and breath .....	246

<b>Chapter Five: Breath in Action: Voice, Ritual and Performance</b> .....	253
5.0 Breath in Performance: From Primitive Ritual to Postmodern Action .....	255
5.1 Theoretical Background.....	260
5.1.1 The origins of theatre and performance art: Ritual, Reality and Representation....	260
5.1.2 Theatricality and Performativity: The Non-textual Elements of Performance .....	266
5.1.3 Breath on Stage: Actor Training and Performance .....	268
5.1.4 Towards a new theatrical language: Antonin Artaud .....	271
5.1.5 Breath, Voice and Language .....	275
5.2 Breath in Theatre and Performance.....	284
5.2.1 Beckett's Voice: <i>Breath</i> and other works.....	284
5.2.2 Beckett offstage: Visual Transformations.....	293
5.2.2.1 Barbara Knezevic: Original and reproduction .....	294
5.2.2.2 Damien Hirst: Memory and suffering .....	297
5.2.2.3 Adriano and Fernando Guimarães: New stagings.....	300
5.2.2.4 Nikos Navridis: The public as a protagonist of the performative act .....	305
5.2.3 Bruce Nauman: Repetitive actions, mumbled whispers.....	310
5.2.4 Vito Acconci: Repetitive breaths, dark whispers .....	316
5.2.5 VALIE EXPORT: Visualizing the formation of voice .....	321
5.2.6 Marina Abramović: The real and the extreme as forms of exploring the body .....	325
<b>Chapter Six: Conclusions</b> .....	335
6.0 General and specific conclusions.....	337
6.1 Future lines of research.....	347
<b>References</b> .....	351
<b>List of figures</b> .....	397
<b>Index</b> .....	403





Chapter One

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**Introduction**



*With words of air I will begin  
and for this reason they are soft in hearing*  
Sappho<sup>1</sup>

## 1.0 Main Object of Study

Less is more and more...

From representation to abstraction and from the materiality of the object to the fluidity of experience, the trajectory of the artwork from the beginning of the 20<sup>th</sup> century until today has subjected it into a constant questioning of its material substance and an incessant expansion of its communicative means. As contemporary artists realize their work through time-specific –hence fleeting- actions, temporary installations and intangible bytes and pixels, the question of the immaterial rises as a challenging enigma that poses a new question to every answer attempt: Can we talk about immateriality and visuality within the same discourse? Can the immaterial be linked to the intellect and the corporeal at the same time? How can we experience it with the body?

A thorough answer to these questions –along with others that come up during research- requires words and images that come from the fields of philosophy and contemporary art respectively. These tools will help to address the main subject of this thesis: how the ‘escape’ from the confines of matter has encouraged a different way of relating to the art object and how, within this newly established relationship

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<sup>1</sup> Oddyseus Elytis, *Sappho*, Athens: Ikaros, 1984, p.18: “Αερίων ἐπέων ἄρχομαι ἀλλ’ ὀνάτων”.

between visual culture and the spectator, new paths of understanding the self and the world have been introduced.

From a phenomenological perspective, we gain experience through the entire body, and not simply through the mind. Viewing the question of the immaterial through this point of view reveals how experience is filtrated through the senses in order to become knowledge.

Undoubtedly, the stimulants to our senses have multiplied, thanks to the expansion of technology onto culture and daily life. Technology has enriched the means of artistic expression and has altered the way we relate to our body and our surroundings on a daily basis. As it becomes more and more integrated within everyday life, the objects that used to constitute the mirror of our cultural preferences –books, audio records and art objects- turn into digital files, introducing new fields of interaction. Oddly enough, the role of the body in this immaterial universe becomes increasingly important, since its limitations often dictate the form of the new technological advancements; at the same time broadening the field of experience becomes a constant challenge. In this context, one gets immersed in the digital universe with the entire body, increasing thus the potential of understanding and knowledge.

The expansion of perception is not something new: long before the emergence of information technologies, diverse philosophical Schools and cultural practices focused on this subject through complex systems of thought and action that involved breath control. Examining these practices helps one understand the process of perception and how it shapes artistic inquiry and public reception, in relation to the mind and the body.

In a cyclical manner, the issue of breath takes us back to the sphere of the immaterial, through the intangible, yet observable phenomenon of breath. To use

breath as a means of artistic expression is to deal with the immaterial and to convert it into a real experience. The focus on respiration brings the subject of the immaterial closer to our sense of the corporeal; it also reveals how different cultural manifestations, from performance to information technologies and from *logos* to meditation can be brought together under the dynamics of breath.

My main goal in this thesis is to inquire into the role of the immaterial within artistic endeavours and to show how it encourages a more open approach to the work of art, which involves perceiving it through the entire body. For this matter, I focus on theories that create a basis of understanding and subsequently relate them to the work of artists who deal with breath in regard to the immaterial and the body.

The analysis is formed by three main threads, which are interwoven among each other and with other smaller threads throughout the development of this thesis.

The first thread covers the inquiry of the immaterial and the evolution of its understanding from the conceptual frame of the 1970s to the contemporary digital world, building primarily on Maurice Merleau-Ponty's phenomenology and Don Ihde's postphenomenological assertions, while keeping in mind Nicholas Bourriaud's focus on postproduction. This theoretical analysis is completed with artists who work with software-based interactive art with an almost non-existent material aspect, which requires participation through the entire body –mainly breath.

The second thread engages with the relation of breath to philosophical thought and artistic practice, starting with a theoretical analysis that passes through Greek and Indian philosophy and reaches contemporary thinking. This builds a substratum that helps approach artists who work with breath as a prime material or source of inspiration, especially focusing on installation art.

The third thread views respiration through the prism of performative action; for this matter, its theoretical basis involves the relation of breath to voice and speech and its role in performance and actor training, with a particular emphasis on Antonin Artaud's thinking. Subsequently, the intermediary space between theatre and performance art will come into focus, as well as artists who work with performance art.

The philosophical theories and artistic works presented here are being discussed against the outline of the historical tradition of the Avant Garde movements of the 20<sup>th</sup> century and the ideas of influential thinkers. The aim is not to create an anthology of philosophical ideas that "suit" the development of the analysis or to suggest that there is a linear evolution in theory and artistic action that takes us from the ancient world to contemporary art and thought, as the logical outcome of a long process. On the contrary, the objective is to demonstrate how certain ideas regarding the subject of the thesis undergo development and transformations throughout the spectrum of time and space examined, but still carry in their essence elements that are present in previous philosophical postulations and traditional practices. It is an essence which is shared with other disciplines and forms of cultural expression, like visual arts, literature and theatre. As the philosophical foundations of the subject are being distilled, a new branch of thinking is being revealed, which deals with breathing and the way the corporeal is sensed within daily experience.

An equally open approach is maintained in regard to the artists presented in this thesis. Coming from different parts of the world, most of them are internationally acclaimed artists who have had a significant impact in visual arts, without however excluding from the analysis younger artists, who are currently opening up their way in the contemporary art scene. Hence, we aim to create an invisible thread that starts from the late 1960s and not only reaches contemporary artistic production, but

also has the potential to project the artistic developments of the near future. The artists presented here cede an extensive margin of initiative to the public, that often becomes the co-creator of the artwork. Within this context, art spaces, which nowadays expand from museums to the internet, become an environment where one can find new experiences that alter one's sense of the corporeal, enhance one's sociability and add to one's education.

In order to create a solid discourse on the issue examined here –the interrelation between the immaterial and the corporeal, breath and art- it is necessary to carry out an interdisciplinary research, that expands from art theory to philosophy, digital humanities, theatrical studies, literature, anthropological observations and computer culture. It is an approach dictated by the nature of the artistic works that form the main corpus of analysis, which often combine artistic research with philosophical inquiries, scientific revelations and technological discoveries.

This diversity creates the necessity to find a unifying axis between the different discourses. Therefore, as we extrapolate into systems of thought that are adjacent to art theory or go beyond it, we will constantly follow the same axis formed by the questions of immateriality, corporeality and technology, further focusing on the subject of breath. Using the metaphor of a braid, “as an infolding and unfurling form that disengages and reconnects with core themes while continually moving in new spaces”,<sup>2</sup> we can understand how these subjects are related and interconnected. Within this frame, the different strands of thought and cultural practice will be “braided” together so as to produce a “rope” of knowledge, a new vision of the main issue examined here, that is able to stand on its own as an independent subject, but can also form part of other researches.

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<sup>2</sup> Graeme Sullivan. *Art practice as research: Inquiry in the visual arts*. Thousand Oaks, CA: SAGE, 2005, p.115.

## 1.1 Objectives and structural overview

From this short presentation, one can begin to visualize the main subject and objectives of this thesis. Through this doctoral research I sought to investigate the question of the immaterial in contemporary art and to reveal the creative processes that are connected to interaction, digital technologies and embodiment. As was stated above, the objective here is not to simply make an “anthology” of ideas and artworks that are relevant to immateriality and breath, but to present in an integrated and rigorous manner the alternative paths of creation and perception, which go beyond the limits of the material object.

The main terms that I aim to bring into light will be the immaterial in contemporary art and how it evolves from the conceptual to the digital; also, the human body as a locus of artistic creation and its role as a tool of perception; lastly, breath as an immaterial element that expresses the corporeal and the intellect –and hereby as a prime matter of artistic creation. Through these questions an alternative path in art history will be carved: one that emphasizes experience over materiality, participation over authority, flux over stability and openness over exclusion. It is a path that passes through multiple layers of cultural expression, different theoretical approaches, and a deeply intercultural and interdisciplinary approach.

More specifically, this thesis seeks to reveal the immaterial dimension of digital culture, the role of the body in regard to recent technological advancements and the relevance of these aspects to visual culture. Creating a bridge between the ethereal and the concrete, it highlights the role of breath in interactive software-based environments, in installation and videos, and lastly, in performance.

The subject of the thesis is further substantiated within the following chapters, where the methodology and the main arguments are presented through theoretical references and artistic examples. It would be useful to view here the outline of the



thesis, so as to see how the object of study is potentiated and how the principal ideas are connected among each other.

The next chapter is dedicated to an analysis of the method and the main resources of research, building the theoretical frame of the discourse and outlining the background of the subject of study, in terms of personal motivations and the general state of the art.

The first step will be to see how the current topic fits within the larger framework of the art history and theory of the past decades from the 1970s and on. For this matter, it is particularly significant to have a closer look into the resources that the theoretical part of the thesis is built upon, the ancient writers, the influential thinkers of the 20<sup>th</sup> and 21<sup>st</sup> century, and the writings of the artists mentioned here.

In the same chapter –the second one– we will also become familiarized with the main methods of research, the extent of influence of my educational background and the initiatives undertaken throughout the last years, which include publications, lectures, interviews with artists and interchange of knowledge and opinions with other theorists. The basic tools of research, contemplation and writing will be included in this brief presentation.

The next three chapters, the third, the fourth and the fifth one, constitute the nuclear of this thesis. In order to make the reading easier, I've chosen to follow a similar structure within the three chapters, with the first part dedicated to the apposition of the theoretical background relevant in each case, and the second part focusing on artworks relevant to the theories presented in the chapter, placed within the context of the oeuvre of the artists that created them. The aim is not to a simply “illustrate” the theories presented; the artists selected here pose their own questions on the theoretical issues raised throughout the thesis. In other words, their

work could be perceived as a philosophical research on the issues that are raised within the realm of immateriality and the digital world, corporeity and breath.

The third chapter provides an overview of the subject of the immaterial in theory and artistic practice. A necessary step in this regard is the attempt to define the immaterial, through a comparative analysis of the propositions put forth by François Lyotard, Lucy Lippard and Bernard Stiegler, in regard to immateriality, dematerialization and hypermateriality respectively. Via a comparative study of the terms proposed, one can see that there is a connective tissue between the three: they do not describe a complete absence of matter, but a state of minimal matter charged with information and experience. For this reason, the definition of the immaterial, which will be the preferred term, is essential for the understanding of the works examined in this chapter, whose artistic significance goes beyond the object *per se*.

Another issue to be taken into account is the relation between art and technology, starting with an etymological analysis and following closely Martin Heidegger's approach. Taking a step further into the world of technology, the issue of the digital will be brought into focus; the emergence of digital technologies has changed significantly the potential of interaction and perception of art. As an example of these changes, the world of hypertext will be examined, in order to get a foretaste of how information technologies have expanded the role of the public.

In order to come to a better understanding of the multitude of changes brought forth by information technologies and the flight to the sphere of the immaterial, it is necessary to enter the field of philosophy, and cover the distance from Cartesianist divisionism to the unifying vision of the body and the mind, proposed by Edmund Husserl and Maurice Merleau-Ponty. From a phenomenological point of view, perception is an active, bodily involvement with the world –a theory that will turn out to be particularly helpful when approaching interactive artworks, which are meant to be experienced with the entire body.

In a theoretical level, phenomenology leads to two basic connections, which are interesting for the topic of this thesis.

The first one is the relevance to eastern philosophy, where the body and the mind are seen as a unity, as a balance that can be influenced by breath. The second one is Postphenomenology, which deals with how technological tools are incorporated in bodily action as an extension of the body and describes how perception is altered within digital environments. Don Ihde has developed this theory, so as to show how interaction with digital devices changes our sense of the corporeal.

In an art historical context, there was a shift of interest towards more pluralistic approaches; any changes in aesthetics have the power to alter perception, as we shall see. At the same time, participation came to the fore as a means of co-creation of the artwork; here we will follow the trajectory of this evolution in a brief description that spans from the first vanguards of the 20<sup>th</sup> century to the experimentations of the 1960s and the interactive art of the digital era. The participatory role of the audience has expanded towards new directions today; sharing and altering digital files has brought to the fore the notions of “remix” and the “hacking” of cultural forms. These concepts will be viewed in continuance, so as to complement the analysis regarding immaterial digital environments.

The second part of the third chapter will be dedicated to artists whose work tackles the theoretical issues analysed in the first part.

Initially, the first attempts away from representation and materiality will be brought into focus, starting with Kazimir Malevich and Marcel Duchamp and moving on to John Cage’s research on silence, Sol LeWitt’s focus on concept and, most importantly, Yves Klein, who, drawing inspiration from Eastern philosophy, converted the void into a place of experimentation and a “material” of expression.

Moving forward to the era of the digital, one can see how artists focus on creating new experiences for the participant within the realm of the immaterial virtual universes. The artists who work with virtual reality, software art and interactive art create all-encompassing environments where the experience of the artwork is not based simply on the eyes and the mind, but on an “immersion” with the entire body. The artistic examples selected here all employ breathing as a means of participation within the artwork; this interest in breathing will be further justified in the following chapter.

Char Davies breaks the early conventions of Cyberspace as an immaculate Cartesian space; she replaces them with a virtual space that is to be lived with the body and to be explored with subtle movements and alterations in breathing rhythm.

In a similar direction, George Khut employs biofeedback technologies, which are often used in medical practice, to help the participants reach an awareness of their body and its functions, coming to a different understanding of the self.

Further on, Christa Sommerer and Laurent Mignonneau focus on interactive works that include the participant’s image, pulse and breathing; thus, they allow the users to get a different sense of themselves and the others, opening up a new path of communication that does not necessarily have to go through words.

Communication plays an important role in the work of Thecla Schiphorst as well; her technologically enhanced garments, which liven up through the movements, the pulse and breathing of the people who wear them, create an artistic language that combines elements from the latest developments in digital technologies with performance art. In this sense, she gives us a foretaste of the role of breathing in performance, which will be examined in the fifth chapter.

One last step in the charting of the immaterial digital space is to explore the world of augmented reality; this way, one can see how the inquiry for the immaterial expands

in daily life, questioning the established hierarchies within the urban matrix and designating a space which is full of information, ready to be captured through digital devices and hacked into new forms.

As the artists presented here use breath as an element of creation, which transforms the artwork and engages the users into the artistic action, they manifest how we experience the world through the body. Hence, they showcase the phenomenological theories presented in the first part of the chapter and introduce us to the next one, which is dedicated to breathing as a mind altering force.

After exploring different aspects of the immaterial and showing that it signifies a shift of interest from observation to participation, and from understanding with the mind to perceiving through the entire body, the corporeal aspect in the process of perception will be further analysed in the fourth chapter, with a strong focus on breath. Hovering on the border of the immaterial, respiration is an element that highlights the connection between the body and mind and further explains how perception can be altered through changes within the body.

In order to understand this, it is necessary to devote the first part of the chapter to a theoretical approach, which will take into account ancient Greek philosophy, Indian theories and practices, and their impact onto contemporary Western philosophy.

The journey to the world of ancient Greek philosophy will involve an etymological approach of breathing, complemented by the relevant theories by Anaximenes, Democritus, Aristoteles and other ancient Greek thinkers, who saw respiration as a connection between the spirit and the body, the person and the world. Expanding our horizons towards the East, we will discover an even more complete model of thought, where philosophical theory is implemented with practice. In the Indian tradition breathing is connected to the human soul and consciousness; through a complex system of respirational exercises that involve breath control, the

practitioners seek to reach a higher state of consciousness, where one is aware of every subtle change within the body and in connection to the world, making the most of one's corporeal and spiritual energy. These practices constitute a living part of the Indian tradition, which has become known all over the world, through the popularization of yoga and other type of breath-related exercises that are connected to medical practice or martial arts.

A closer look into popular culture reveals that breath control has constituted an important aspect of diverse religious and cultural practices, from meditation to prayer and traditional rituals. Although a closer focus on such actions goes beyond the scope of the subject of this thesis, it is useful to note here that the widespread presence of such practices within different times and places makes them a significant part of everyday life. This shapes the way people understand the connection between the body and the mind, making it not simply a philosophical question, but a lived experience based on observation.

Subsequently, the theoretical analysis of this chapter takes a leap onto 20<sup>th</sup> century thinking, introducing the theory of Luce Irigaray, which revolves around air and breath. Influenced by Eastern teachings and practices, Irigaray revised western philosophy through the spectrum of breath, defining breathing as the first autonomous gesture of being, which marks the detachment from the mother and brings us to contact with the environment and the others. For Irigaray breath awareness can bridge the gap between body and consciousness; she believed that air is a place of harmonic coexistence where concepts such as the corporeal and the spiritual, male and female, divine and profane, find their ideal balance.

The final theoretical discourse of this chapter deals with breathlessness, in relation to suffering and the fragility of existence; a phenomenological approach will be favoured here as well, in line with the main perspective of the previous chapter. Moreover, the question of breathlessness and the way it can alter perception adds to

the understanding of breath control as a mind altering practice. These observations are to be considered as the analysis moves on to the artistic practices that involve breathlessness and asphyxia, as a means of changing the state of mind of the artist and the public.

On the second part of the fourth chapter we seek to bring forth artworks that deal with breath either as a subject or as a prime matter of creation. In a way, they “materialize” something “immaterial”, making it visible or felt. So, returning to François Lyotard’s definition, they are working with breath as an *(im)material*, a state of minimal matter that carries a maximal load of information and the capacity to produce mind altering experiences. Focusing on the sound, the volume, the rhythm and the force of breath, the installations and videos presented in this chapter manage to tackle subjects as life and death, freedom and communication.

The artistic analysis begins with a brief look onto some artists from the 1960s and 1970s who used breath as a “material”: Piero Manzoni, for example, sold his own breath trapped in inflated balloons; Franscesc Torres highlighted breathing as an action; Giuseppe Penone sought to define the shape of breath in installations and sculptures. Within this retrospective of the first artists who dealt with breath, the work of Lygia Clark will come into focus. Her work will be seen in relevance to the issue of smell, which comes to perception through breathing; smell has been marginalized by the same mentality that considered the body as something separate and inferior to the mind. Breathing and smelling are basic elements in Clark’s work, which stimulate the mind and emotions, with a therapeutic effect on the participant.

The work of Nikos Navridis will come next as the main case of study of the fourth chapter, that exemplifies the theories presented and opens up the discourse towards new paths of thought. Navridis has devoted his artistic work on breath, forming a vocabulary of void and immateriality that talks about the human condition. Following the evolution of his artistic language closely, it becomes evident that for

him breath stands out as a symbol of time, existence and struggle. He consciously seeks to engage the public with his works, by creating all-encompassing installations where the participants join through their respiration. His sources of inspiration come from a multitude of sources: the ancient Greek tradition, cultural practices – fire breathing, yoga, weight lifting- and scenic arts –singing and performance. Therefore, his work connects the theoretical background of the fourth chapter, with the discourse that evolves in the next one, about performance arts. For this matter, the oeuvre of Navridis will be revisited in the fifth chapter, in regard to his influence from Samuel Beckett, along with other artists that share the same source of inspiration. Seeing his work through different points of view helps us gain an in-depth vision.

The role of breath as a means of creation will become a starting point to approach other well-known artists through a novel vision. Bill Viola is a good example of an artist who deals with breath in his videos and video-installations. Images of birth and death, people floating underwater and resurfacing to take a deep breath after a long period of breathlessness are recurrent in Viola's imagery. In a theoretical level, his work is connected to Eastern systems of thought –a strong influence for the artist- and the issue of breathlessness. At the same time, the constant focus on water creates an interesting counterpoint between Bill Viola's work and the next two artists examined here, who deal with earth and light.

Danae Stratou works within the natural landscape, incorporating its elements –sand, trees, water- into her installations as an extension of her artistic intervention. Following the tradition of land art, but with a contemporary vision, through her work she establishes a link between the earth, the universe and the human body. Her minimalist constructions introduce ideas such as memory, effort, intimacy and communication, thus constituting an artistic language that relates to the ancient



Greek philosophy and to contemporary thinking –in line with the analysis of the first part of the chapter- within an interdisciplinary and intercultural frame.

The frame of analysis of this thesis leads us to different parts of the world; the approach to the work of the Korean artist Kimsooja is a characteristic example. Kimsooja connects the tradition of her country with natural elements, interior with exterior and her breaths with the breaths of the public. Inspired by Eastern theories about nothingness, she creates a work full of lyricism, where experimentation with breathing sounds, diffracted lights and colours become part of an experience that she shares with the viewers.

Edith Kollath is an artist who has devoted a large part of her work to the poetics of breath and the immaterial. She is inspired by impermanence and momentariness and manages to incorporate these elements into her visual vocabulary. Kollath follows the free flow of breath within the body and reflects this path within her work, transmitting calmness onto the public. This feeling is induced by images such as a torso oscillating from the movement of breath, gusts of smoke that change shape, breathing books. The relation of *logos* to breath, which is only insinuated here, will become the subject of a more thorough analysis in the next chapter.

The artistic analysis of this chapter is concluded with Sabrina Raaf, who provides a previously unseen vision of breath. Raaf examines the invisible information carried through breathing and air, the biochemical information within the air that changes via the presence of the public. Creating a work based on the idea that each gust of air that we inhale or exhale is a carrier of invisible information that is dispersed through the environment, her work is linked to the main ideas of the previous chapter about the transformation of information within the realm of the immaterial, except that in this case we are not dealing with digital code, but biochemical information.

As the question of the immaterial transferred us from the digital towards the corporeal, through the focus on breath and the way that it relates to thought and action, we've discovered multiple threads of connection among diverse cultures and artists. Following the same path, the fifth chapter will also be dedicated to breath, but from a slightly different perspective, in relation to theatre and performance art. Breath has always had a significant role in scenic arts; by unravelling this connection and taking a step further, onto performance art, one can see how the main point of focus in contemporary art has shifted from object to action –thus taking a distance from materiality.

The theoretical background of the fifth chapter will outline the connection between breath, body and voice in performance and visual arts, revealing how the non-textual elements shape the performer's action and the viewer's experience.

Initially, the roots of theatre in rituals will be brought into focus; the emergence of the theatre from rituals stimulated the imagination of theorists and artists of the late 19<sup>th</sup> and early 20<sup>th</sup> century, who sought a more direct style of performance, where action would be largely based on metatextual elements, such as movements, random voicings and breathing. Taking these inquiries a step further, the artists of the 1960s and 1970s sought inspiration in non-European cultures, where the element of ritual is a strong element, capable of producing, and not simply reproducing, reality. Within this context, the artistic (or ritualistic) object only has a meaning during the action and is being destroyed afterwards. These acts revealed a distinct path of expression to performance artists, one that passes through personal and collective experience and is not crystallized in a final object; thus emerged new ideas about the relation of the artist to his or her body and the public, which did not necessarily involve the creation of a material object.

In order to understand this evolution thoroughly, it is necessary to define theatricality and performativity, two terms that are linked to the non-textual

elements of performance. The analysis of the concepts will be largely based on a phenomenological approach, also bearing in mind Hans Robert Jauss' Theory of Reception, as an extension of the theoretical analysis of the third chapter. This adds to the understanding of the role of the observer in the perception of the performative act. In all, it is a research about the *theatre-minus-text*, ergo the non-textual elements of the theatrical play that at times gain more significance than what is being said onstage.

Considering the fact that the *theatre-minus-text* is the most vivid part of the performance, that is not written anywhere, but it is being born during the theatrical act, it is significant to go further into the field of actor training, so as to examine how the non-textual elements of the theatrical act are being introduced into performance. A comparative study of the role of breath in Western and Eastern actor training reveals that whereas in the first case the actors try to hide it within their words and make it imperceptible, in the second case it forms an integral part of the performance; breath control emerges again as the point of focus, having the power to enhance performance and to influence the feelings of the audience. Throughout this approach to Eastern actor training, it is useful to keep in mind the analysis of the fourth chapter regarding the Indian tradition, where the separate elements of philosophy and cultural practices form an indivisible whole.

The Indian tradition and the myths about the birth of theatre from ritual constitute an integral part in the thought of Antonin Artaud, who focused on the actor's body and breath, aiming to renew the theatrical language of the West. Artaud's "Theatre of Cruelty", a performative act where the feelings are transmitted through non-textual means, is the vision of a theatre that does not *represent* life, but *is* life itself. This idea found its realization in contemporary performance art, which will be the focus of the second part of this chapter.

By talking repeatedly about the non-textual elements of performance, one should not underestimate the power of breath within *logos*. The relation between breath, voice and language will be the focus of study in this phase, a study founded in poetry and literature –resorting to the words of Homer, Sappho, Paul Valéry, Gaston Bachelard, Italo Calvino and Roland Barthes- with an eye to the physiological aspect of the formation of speech as well.

The corporeal basis of voice and its dependence on breath will be studied first, following the path of voice from the inner cavity of the lungs to the larynx and the mouth, where it takes shape. Focusing on this path, the ancient Greeks believed that thinking was made through the lungs, thus connecting *logos* with the soul through breath; for this matter, this notion complements the ideas about the role of breath in ancient Greek tradition, presented in the fourth chapter. Despite the lack of scientific accuracy, it is interesting to go through Homer’s descriptions and Sappho’s “words of air”, because they have poetically inseminated Western thought. The relation between breath and voice is particularly significant in regard to poetry, which is not meant to be read, but to be recited, and is hence based on vocality and breath. Reversely, as breath has the power to shape a poem, poetry has also the power to change respiration. Based on theoretical texts and medical research, we see how recitation rhythm can become another form of breath control, bringing the body to a state of calmness and influencing the perception of the literary work.

The analysis regarding aspects of ritual, voice and breath creates the substratum to pass onto the second part of the fifth chapter; the artistic focus here is based in performance art, from the 1970s until today. However, at this point, before moving further onto the artistic analysis, we need to establish a link between theatre and performance. This link is the work of Samuel Beckett, which constitutes a radical change in the theatrical act; his minimal language, his revolutionary narrative and his highly visual perspective brings him closer to performance art. By looking into

the work of Beckett from the prism of voice and breath, we discover unknown aspects in a body of work that has been the subject of numerous multidisciplinary analyses. Furthermore, the visual stimuli of his imagination will be mentioned, so as to understand why his work has had such a profound impact onto visual arts.

As a case of study here we will take the play *Breath* and analyse the origins of the work, its connection to Beckett's language and the way it has been "staged" by visual artists, namely Barbara Knezevic, Damien Hirst, the brothers Adriano and Fernando Guimarães and Nikos Navridis. Through a juxtaposition of works that employ different expressive means and highlight a different aspect of the original play, one can observe how the original source of inspiration undergoes endless metamorphoses.

*Breath* is more akin to a visual arts installation than a theatrical play. However, Barbara Knezevic seeks to focus on the almost non-existent text, subjecting it into visual transformations. Damien Hirst, on the other hand, creates a video that follows the proposed staging to a large extent, introducing within the details his personal vocabulary and a problematic about the question of history and time. Adriano and Fernando Guimarães follow Beckett's example by creating works that oscillate between theatre and performance art, stressing the visual aspect of his theatrical plays further; repeated images of actors submerging underwater, verging on asphyxia, return us to the issue of breathlessness and the imagery of Bill Viola, examined in the previous chapter. As an extension of the issues analysed in the fourth chapter, we go back to the work of Nikos Navridis; through works that are inspired by Beckett, we see how he expands the limits of the theatrical stage onto installations that encompass the visitors and make them part of the performative act by means of breath.

After taking those first steps in the intermediary space between theatre and visual arts, we will focus on performance artists of the 1970s that are active until today.

Bruce Nauman, Vito Acconci, VALIE EXPORT and Marina Abramović share a similar interest in the human body, often bringing it to an extreme state of pain; the inquiries mentioned earlier, regarding voice, speech and the influence of Beckett are also significant for most of them.

Bruce Nauman's repetitive actions are constituted of mumbled words and intense breaths, that convert familiar actions into unwordly, almost menacing situations. Within these acts the senses become more acute and introduce a new way of feeling the body and the mind.

Vito Acconci also experiments with breathing and voice, creating a disturbing ambience, where the concepts of submission, dominance and madness are brought forth by nonstop, almost crude voices that have not been properly formulated into speech. These uncanny sounds produce an unusual ceremony, where breathing and hissing become part of the ritual.

Another artist that deconstructs speech into voices and breaths is VALIE EXPORT. The relation of breath to voice and word is a constant source of inspiration in her performance and installation works, from the 1970s until today. Hence, her work becomes a unique illustration for the theories explained in the first part of the chapter regarding the roots of *logos* in voice and breath. As EXPORT reveals the path of breath in the larynx, in magnified, vibrating images of the interior of the body, she transforms a familiar process into an uncanny vision.

The final artist examined in this analysis is Marina Abramović, one of the most prolific and influential artists of the past four decades. The work of Abramović is intrinsically connected to the theories analysed before, with her influence by the Eastern world and primitive rituals expanding the theoretical approach of the fourth and the fifth chapter respectively, whereas her quest on the void and the immaterial is aligned with the approach of the third chapter.

Moreover, the stillness and extreme fatigue that form part of her performances often bring her body to a meditative state, similar to the one achieved through breath control. In her performances with Ulay, breathing becomes the element that binds them together but also threatens their existence; her own experiments with voice and breathing oscillate from constant cries to states of induced breathlessness, where suffering becomes a means of reaching a different state of consciousness. The legacy of Abramović in the art of the late 20<sup>th</sup> and early 21<sup>st</sup> century is based not only on her artistic actions, but also on her teachings, where breathing plays a significant part.

In the last chapter we will go through the key findings of the thesis, examining the main points of the theoretical and artistic analysis and emphasizing how they are connected to each other. These points highlight how contemporary cultural expression involves the public in the creative process and reveals new ways of understanding the body through the software-based virtual environments. This expression often includes embodiment through movement and breathing. Thus, breathing unites different discourses about digital culture and the visual arts, crossing borders and cultural separations; a process of exchange and constant remix. In addition, we will stress the importance of artistic practice as a form of scientific and philosophical research. Finally, we will draw the lines of continuity of some of the issues that have arisen during the doctoral research and visualize how they might be analysed further in a future investigation.





Chapter Two

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## Methodology



*The rules of the game: learn everything, read everything, inquire into everything [...] When two texts, or two assertions, or perhaps two ideas, are in contradiction, be ready to reconcile them rather than cancel one by the other; regard them as two different facets, or two successive stages, of the same reality, a reality convincingly human just because it is complex. [...] Keep one's own shadow out of the picture; leave the mirror clean of the mist of one's own breath; take only what is most essential and durable in us, in the emotions aroused by the senses or in the operations of the mind...*

Marguerite Yourcenar<sup>3</sup>

## **2.0 State of the art, basic resources and selection of artworks**

When following the discourse unravelled in this dissertation, about the question of the immaterial in regard to the body and new technologies, with a particular focus on the role of breath in visual arts and performance, it is important to keep in mind a thread that is followed in every step of the research. It is a path that starts from the state of the art and the existing sources about the subject, and is developed in relevance to the academic background of the researcher, the methodological tools employed and the constant interchange of opinions with other specialists.

In this sense, embarking on a doctoral research often feels like discovering a new territory; the researcher is called to explore and map it. There are innumerable

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<sup>3</sup> Marguerite Yourcenar, *Memoirs of Hadrian, and reflections on the composition of Memoirs of Hadrian*, New York: Farrar, Straus and Giroux, 1963, pp.330-331.

different paths to be followed, so initially one can begin with the most treaded ones –the paths previously explored by other specialists- but eventually it becomes necessary to stray towards uncharted directions, guided by instinct, background knowledge and method, so as to unravel original ideas.

In this chapter we will follow the main methodological tools of this thesis, aiming to clarify the sources and options taken within the course of the research.

First of all, we will present the state of the art, by looking at the basic resources and introducing the main ideas that they have instilled in the research. Apart from the bibliographical research, which lays at the foundation of every theoretical discourse about contemporary culture, this thesis has largely employed “interactive” tools of research, from the longstanding academic traditions of conference attendance, where ideas are shaped within the academic community, to emerging methods, such as the creation of online platforms. After making a reference to my academic background –as a basis where the methods and ideas applied in this thesis flourished- I will present the methods related to the expansion of information technologies and the shift of academic research towards online platforms and publications, as well as the more traditional academic methods, like participating in conferences, lectures, research projects and exhibitions, which have largely influenced the ideas presented in this work.

As stated in the introduction, the main aim of this thesis is to explore the different aspects of the immaterial within visual culture, in regard to the perception of the corporeal and the impact of information technology. This main line will be expanded towards the philosophy of breath and its role in virtual environments, as an element that belongs to the border of immateriality and corporeity. The bibliographical sources used are linked to the main keywords that are implied in this discourse, contemporary art, immateriality, information technologies, breath and performance.

The question of the immaterial is discussed with a strong focus on the propositions by Lucy Lippard, Jean-François Lyotard and Bernard Stiegler, in regard to dematerialization, immateriality and hypermateriality in art.

Lucy Lippard, in the research *Six Years: The Dematerialization of the Art Object from 1966 to 1972*,<sup>4</sup> documents the transition from the art object to conceptual art within this period, observing that the focus slowly shifts from materiality to energy and action. In the format of a log, with plenty of photographs, interviews and material that documents this evolution, the book becomes a source of inspiration not only due to the ideas it presents, but also because of the form of the content, that evokes a critical spirit and leaves an open margin for interpretation.

Similarly, our approach to contemporary art movements is based not only on theoretical texts, but also on the testimonies of the people that have shaped them and the exhibitions that have established them. One important exhibition in the subject of the immaterial is *Les Immatériaux*, organized by Jean-François Lyotard in the Centre Georges Pompidou in Paris in 1985. In the texts and interviews about the exhibition Lyotard placed the emphasis on the interactive aspect rather than the material dimension of the works of art; he also highlighted the role of energy, just like Lippard.

The question of energy shapes the research of Bernard Stiegler, who examines the effect of digital technologies on physical objects. In his *Économie de l'hypermatériel et psychopouvoir*<sup>5</sup> he observes how the evolution of science in different historical periods has affected perception and the subconscious, describing as

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<sup>4</sup> Lucy Lippard, *Six Years: The Dematerialization of the Art Object from 1966 to 1972*, New York: Praeger, 1973.

<sup>5</sup> Bernard Stiegler, *Économie de l'hypermatériel et psychopouvoir, Entretiens avec Philippe Petit et Vincent Bontems*, Paris: Mille et une nuits, 2008.

“hypermateriality” the condition where matter is charged with information –as is the case with digital technologies.

These analyses have been helpful in defining the margins of the “immaterial” in contemporary art history and philosophy: rather than severing the links with matter altogether, the term implies a state of energy and interaction.

So, if the very definition of the immaterial leads our research towards these two directions, the experience engendered within this interactive frame needs to be examined further. In this regard, phenomenology turns out to be an invaluable tool.

In *Phenomenology of Perception*<sup>6</sup> Maurice Merleau-Ponty deals with the first-person experience of embodiment. What is important in relevance to the main questions addressed in this thesis is the focus on perception; for Merleau-Ponty the body is central in experience and thinking. The human body is the *topos* of our being-in-the world; as a consequence, the way we perceive the world is inseparable from the structure of the body. Similar ideas are also to be found in Martin Heidegger and Edmund Husserl, as we will see.

As an extension of the phenomenological theories, Don Ihde introduces a new frame that is adapted to the contemporary reality of constant technological advancements. In *Postphenomenology and Technoscience*,<sup>7</sup> Ihde focuses on technological and scientific culture, so as to see how they are related to our perception of the self and the world. Likewise, in *Bodies in Technology*,<sup>8</sup> he analyses the subject of embodiment in cyberspace and examines the phenomenon of bodily perception in video games, virtual reality and digital environments.

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<sup>6</sup> Maurice Merleau-Ponty, *Phenomenology of Perception*, London: Routledge, 2005.

<sup>7</sup> Don Ihde, *Postphenomenology and Technoscience*, New York: Suny Press 2009.

<sup>8</sup> Don Ihde, *Bodies in Technology*, Minneapolis, Minnesota: University of Minnesota Press, 2002.

This approach will help us come closer to the issue of digital technologies in contemporary art, starting from their immaterial quality and moving on to the way experience is formed within contemporary artistic environments.

In order to examine these artworks in depth, an important part of the resources for this thesis comes from art theorists who address the issues of technology and experience, perception and the body, in regard to specific artistic examples.

The numerous publications by Edward Shanken about technology and science in contemporary art have been mostly helpful in this regard; Shanken has studied the relation between conceptual art and technology-based art extensively, highlighting the similarities between the two. His ideas substantiate the connection between those fields through the question of the immaterial, which will be the core of the proposition of the next chapter of the thesis. Moreover, Shanken has studied the role of technology in art extensively, from the 1960s and the first exhibitions about software art to our times, making an invaluable contribution to the study of the legacy of Jack Burnham and Roy Ascott.

When it comes to exploring the transition from the analogue to the digital and the subsequent changes in the prevailing notions regarding representation and artistic creation, Margot Lovejoy's *Digital Currents, Art in the Electronic Age*<sup>9</sup> is a mostly useful tool. Lovejoy comments on the communicative role of art and the growing role of the public in artistic creation. Moreover, she is inspirational to the extent that she follows an interdisciplinary approach, writing an art history that is open to different points of view and perspectives.

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<sup>9</sup> Margot Lovejoy, *Digital Currents, Art in the Electronic Age*, London: Routledge, 2005.

Similarly, Oliver Grau's *Virtual Art from Illusion to Immersion*<sup>10</sup> helps understand the transition from traditional forms of art to virtual reality. Grau observes the phenomenon of illusion, from Roman art to Renaissance and Baroque illusion spaces, before focusing on cinematographic technologies and virtual reality. His work constitutes a fundamental study on illusion, offering a complete historical background alongside a theoretical framework that follows a phenomenological perspective. Therefore, even if his ideas are not always followed in this thesis, his example of performing a historically vast and multidisciplinary study was an inspiration for my research, which makes reference to different cultures and time periods, and for my scientific thought, which is largely influenced by my experience in history and archaeology, as we shall see.

This is also the case with Nicolas Bourriaud's *Postproduction*,<sup>11</sup> which may only be briefly commented on the next chapter, but has had a deep impact on the ideas and method of my research. Bourriaud focuses on artists who use pre-existing artworks as prime material of creation, by interpreting, reproducing and altering cultural forms into something new. The writer talks extensively about the role of remixing and programming in cultural creation, which is particularly useful in relation to the theories examined in the next chapter regarding digital technology, immateriality and art. Bourriaud reveals a new aesthetic of collaborative creation, technology and intercultural encounter.

Still on the realm of contemporary art and technology, but with a stronger focus on the human body, *Corpus Solus*<sup>12</sup> by Juan Antonio Ramírez has been important in the research regarding the role of the body in artistic production, which is a recurrent

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<sup>10</sup> Oliver Grau. *Virtual Art, From Illusion to Immersion*, Cambridge, Massachusetts: The MIT Press 2003.

<sup>11</sup> Nicolas Bourriaud, *Postproduction, Culture as Screenplay: How Art Reprograms the World*, New York: Lukas & Sternberg, 2002.

<sup>12</sup> Juan Antonio Ramírez, *Corpus solus, Para un mapa de cuerpo en el arte contemporaneo*, Madrid: Siruela, 2003.



theme throughout this thesis. Ramírez follows the perception and image of the body from modernism to contemporary art, in order to reveal the emergence of new approaches and the reinvention of the subject in the latest artistic production.

The question of the body in art becomes the focus of the exemplary study *Το σώμα. Ικεσία και απειλή* (The body. Supplication and Threat) by Pepi Rigopoulou.<sup>13</sup> The writer reveals the connection between the body and its representation, based on philosophy, culture theory and psychoanalysis, with a strong focus on the ancient and modern Greek world and Eastern culture. In this course, she examines how the body is related to the city, religion and the soul and explores its multiple transformations within the artistic vanguards movements of the 20<sup>th</sup> century, ritual and performance.

The research on the field of the immaterial, apart from the issues of technology and experience, is largely based on the contemplation upon air and breath, as a junction between the ethereal and the corporeal.

A strong basis for this research has been the study of ancient Greek philosophers who have dealt with the subject, especially Aristotle, who combines the observation of nature with an insight on the human soul. Wherever it was possible, I resorted to the original text in ancient Greek, so as to maintain a close approach to the original meaning.

Georges Didi-Huberman's *Gestes d'air et de Pierre*<sup>14</sup> has been very helpful in addressing the issue in a philosophical point of view, as it brings forth useful questions about the relationship between materiality and immateriality, visibility and invisibility, stone and air. For Didi-Huberman absence begins where matter ends; this is true for the surface of artistic objects as well as the human body that

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<sup>13</sup> Pepi Rigopoulou: Πέπη Ρηγοπούλου, *Το σώμα. Ικεσία και Απειλή*, Αθήνα: Πλέθρον, 2003.

<sup>14</sup> Georges Didi-Huberman, *Gestes d'Air et de Pierre, Corps, Parole, Souffle, Image*, Paris: Les Éditions de Minuit, 2005.

welcomes the air inside and around it. His thinking forms a theory of breath in relevance to soul, voice and artistic creation.

In a similar tone, Gaston Bachelard's *Air and Dreams*<sup>15</sup> offers an escape from the rationalism of science and philosophy towards a poetic universe. Bachelard combines imagination, dreams and a study of the elements with literary theory, balancing aesthetic and psychoanalytic theory. For the current research, his contemplation on the relation of breath to poetry and odour has proven to be a most helpful insight.

In regard to the question of voice, Adriana Cavarero's *For More than One Voice*,<sup>16</sup> a reading of history of philosophy through an inquiry on voice and its relation to *logos*, is giving some useful hints about how breath turns into voice, then speech, and subsequently into meaning.

Cavarero's views are presented in relevance to Roland Barthes' vision about voice. Barthes' essays are also mentioned in regard to text and theatricality.

In this context, a very important reading is Antonin Artaud's *The theatre and its double*,<sup>17</sup> that explores the role of breathing in theatre, in search of a performance that would not be a simple representation, but life itself.

A focal point in my research regarding breath and culture has been Luce Irigaray's ontology of breath, expressed in different studies, such as *Between East and West*<sup>18</sup> and *The Forgetting of Air*.<sup>19</sup> These essays propose a distinct philosophical vision,

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<sup>15</sup> Gaston Bachelard. *Air and Dreams, An Essay on the Imagination of Movement*, Dallas: The Dallas Institute, 1988 (1943).

<sup>16</sup> Adriana Cavarero, *For More Than One Voice, Toward a Philosophy of Vocal Expression*, Stanford: Stanford University Press, 2005.

<sup>17</sup> Antonin Artaud, *The Theater and Its Double*, New York: Grove Press, 1994 (1932).

<sup>18</sup> Luce Irigaray, *Between East and West*, New Delhi: New Age Books, 2002.

<sup>19</sup> Luce Irigaray, *The Forgetting of Air in Martin Heidegger*, London: Athlon Press, 1999.

which takes into account Eastern disciplines and breathing practices, in an attempt to renew the philosophical tradition of the West through an intercultural vision. For Irigaray, air and breath are the starting points to think about issues such as life, nature, autonomy of being and sexual and social difference.

Without doubt, the most useful tool in the research on breath and performance has been Sreenath Nair's *The Restoration of Breath*.<sup>20</sup> Nair's investigation draws a line from Greek to Indian philosophy and from daily breathing practices to Western philosophers, so as to discover how breath control can "alter consciousness". These findings are applied in an analysis of the role of breath in performance. Although Nair mainly focuses on Indian theatrical tradition, his research has been a most helpful guidance in the fourth and fifth chapters of this thesis, where I analyse the role of breath in visual arts and performance.

Most of the artists mentioned in my dissertation are still active, producing artistic and theoretical work. For this matter, texts by artists like Bill Viola, Char Davies, VALIE EXPORT and Bruce Nauman have been a vital source of information about their work. An initial inspiration on questions regarding the immaterial has been provided by the writings of Yves Klein,<sup>21</sup> which reveal his theoretical and artistic research in the field of immateriality, based on Japanese philosophy, the writings of Gaston Bachelard, cosmogony, alchemy, phenomenology and psychology.

Moreover, some of the artists presented here are also researchers –working within scientific laboratories- and publish scientific papers, in which they present their work in relevance to the technological advances and theoretical ideas it represents; the publications by Thecla Schiphorst, Laurent Mignonneau and Christa Sommerer gave me insight into their work and the issues stemming from the application of

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<sup>20</sup> Sreenath Nair, *Restoration of Breath, Consciousness and Performance*, Amsterdam: Rodopi, 2007.

<sup>21</sup> Yves Klein, *Overcoming the problematics of art: The writings of Yves Klein*, Putnam, Connecticut: Spring Publications, 2007.

digital art in artistic practice. In the same direction, the dissertation *Development and Evaluation of Participant-Centred Biofeedback Artworks* by George Khut<sup>22</sup> helped me approach the subject of biofeedback technologies, as it describes the technology behind his breath-based art and, most importantly, employs scientific tools in order to evaluate the reception of the artwork by the public.

As the topic of this research is based in contemporary art, with an important part dedicated to digital art and technology, I often had to resort to essays from journals about contemporary art, philosophy, technology and art theory. This gave me valuable insight into a rapidly changing artistic scene. Equally important were the catalogues from relevant exhibitions and conference proceedings, where the newest artistic creations and the latest findings in research are being crystallized respectively. Among these, the Symposium “Take a deep breath” –which shall be further analysed in the next section- has been a crucial influence in the interdisciplinary approach that is employed in this thesis.

The artworks that are presented here are selected after a thorough research into the artistic movements of the past four decades, by consulting art exhibition catalogues, art history books and journals, and online search. The common denominator among these artists of different origins, styles and cultures is the use of breath within their expressive means. It should be noted here that there was a great number of relevant artworks that came up during research. I had to select only a small part of those, so as to leave margin for a deeper analysis. Therefore, I chose the artists that dedicate a significant part of their work to the subject of breath; moreover, I had to make a selection according to the main threads followed in this thesis, technology, cultural practices and performance.

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<sup>22</sup> George P. Khut, *Development and Evaluation of Participant-Centred Biofeedback Artworks*, Phd dissertation, Sydney: School of Communication Arts, University of Western Sydney, 2006.

Each of the three main chapters begins with a theoretical part that is “reflected” in the artworks analysed in its second part. It is true that in most of the cases there is certain relevance between the artworks and the theories that are presented. However, the selection was not made with this criterion, to make the theories “fit” the artworks and vice versa. This relevance emerged organically through the research and contemplation on the subject; often I would decide to follow one direction, only to discover later during the research that the idea I was investigating was also present in other artworks and philosophical theories that I was already familiar with.

This comes as no surprise, if one considers that, in the end, we are dealing with a philosophy about the body –from phenomenology to breathing practices- and an art that is meant to be experienced through the body.

After all, theory and artistic practice have become an integrated whole in contemporary art; the artists study theory and often get inspired by philosophical ideas. At some points of my analysis, as I focus on particular artists, I will be analysing their theoretical onsets, to show that they are in line with the theoretical discourse of this thesis.

Overall, the resources mentioned here have provided me with a substantial body of knowledge about digital technologies, phenomenology, immateriality and breath. However, it felt vital to expand the investigation beyond bibliographical research, enhancing it with more interactive tools, which shall be mentioned below.

## 2.1 Academic background and motivation for the study

When looking for the beginning of an academic research, it becomes difficult to draw the line and define it in an absolute way; the background of the researcher and the knowledge acquired in the years prior its onset have left their traces in the process of the investigation and the final outcome.

For me, this background includes a degree in Archaeology and a master in Art History at the Aristotle University of Thessaloniki, that have been a significant part of my academic formation, before the beginning of my doctoral studies at the University of Barcelona.

These studies had equipped me with a very extensive visual vocabulary, from prehistoric art to contemporary art, a solid knowledge in history and a clear vision about the way technological advances and social changes influence the prominent ideas in each historical period.

My familiarization with prehistoric, classical, roman, medieval and modern art has helped me get a clear image of the evolution of the perception of the body throughout the ages and its transformations in regard to the main philosophical ideas and religious preconceptions of the culture it belonged to. In other words, the representation of the body in different time periods reflects a certain experience of corporeity and relevant ideas about Being; if the bending of a knee in an ancient *kouros* resulted in a different vision of the human body and expressed the logical viewing of man in Classic Antiquity, a similar inquiry could be proposed in respect to digital representation and the ideas it represents in our times.

On the other hand, archaeology is a science that deals with the visible and the invisible; usually what is visible is only a fraction of what it used to be, calling for the researchers to revive in their minds not only the object in its entity, but also the ideas that this object hints to and the people who have left it behind. It is a unique

experience to find the fragment of an object buried in the ground, knowing that the last person who held it has been dead for more than two thousand years; the fragment becomes a link to this person and their culture. In the end, we are dealing with a phenomenological approach, like the one described in the next chapter of the thesis, since we are seeking to reconstruct the experience of a cultural artefact, by decoding its role.

Archaeology familiarizes the researcher with material culture, which studies artefacts so as to reveal the social and cultural attitudes that lay underneath. The study of materiality in regard to culture shows that the way people perceive and relate to the objects depends on cultural and social factors. As James Deetz defines it,

Material culture is usually considered to be roughly synonymous with artifacts, the vast universe of objects used by mankind to cope with the physical world, to facilitate social intercourse, and to benefit our state of mind. A somewhat broader definition of material culture is useful in emphasising how profoundly our world is the product of our thoughts, as that sector of our physical environment that we modify through culturally determined behavior.<sup>23</sup>

However, material culture goes beyond materiality:

The physical environment includes more than what most definitions of material culture recognise. [...] Our body itself is part of our physical environment, so that [...] all aspects of kinesics—human motion—fit within our definition. Nor is the definition limited only to matter in the solid state [...]<sup>24</sup>

Therefore, the study of material culture involved a quest into the immaterial, similar to the one attempted in the next chapter.

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<sup>23</sup> James Deetz, *In Small Things Forgotten: An archaeology of American life*, New York: Anchor Books, Doubleday, 1977, pp.24-25.

<sup>24</sup> Ibid.

The experience in archaeology set some very intriguing questions at the onset of this research: What is the materiality of today's culture? What is the experience of an artwork that is based in technology and how is it different from the experience of physical object? How does contemporary art reflect the technological advances and the prevailing theories of our time?

These questions shall be answered in the following chapters, through an analysis of theory and artistic practice.

My affiliation with the Greek world can be perceived through the multiple references to ancient Greek philosophy and literature. These serve as “roots” for a great part of the ideas presented in this thesis, if one considers that for a long time western thought has blossomed under the influence of Greek philosophy. However, rather than a sterile obsession with Greek culture, what is prevailing here is a sense of interculturality, where the achievements of the past are in dialogue with other cultures. In this regard, multilingualism has turned out to be a useful tool when approaching authors of different origins –something reflected in the bibliographical references cited previously.

An equally important part of my studies has been my focus on modernist and contemporary art, which began with my undergraduate studies and flourished during my master studies in Art History at the Aristotle University. At this time, I focused in uncovering the largely unknown work of one of the Greek women artists of modernism, Sophia Laskaridou.<sup>25</sup> The process involved visiting private collections and museums, interviewing people and gaining a first-hand experience of “raw research material”: unpublished artworks and archives. It was an invaluable lesson, which has boosted my doctoral research, since it taught me how to take the

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<sup>25</sup> Christina Grammatikopoulou: Χριστίνα Γραμματικοπούλου, *Η ζωγράφος Σοφία Λασκαρίδου* (Christina Grammatikopoulou, *The Painter Sophia Laskaridou*), Master Dissertation, Thessaloniki: Aristotle University, 2007.



initiative to approach artists, curators and collectivists, and to organize the material that comes up during the research.

On the other hand, my focus on the beginnings of the 20<sup>th</sup> century has given me a solid knowledge of the first Avant Gardes, when the visual arts opened up to the use of new methods and materials –in addition to painting, sculpture, and architecture, that had a longstanding tradition. That was the time when the first attempts towards immateriality in art were made and when cinematographic evolution introduced new creative tools and new perceptive visions. Moreover, during my master research I became affiliated with new theoretical approaches to art history, mostly focusing on Theory of Reception and Feminism, due to the topic chosen. These theories have affected the point of view chosen in this thesis, inspiring the emphasis on the role of the public and the investigation on the multiplicity of factors that shape the face of art history.

After finishing my master studies, I embarked on the second phase of my academic career at the University of Barcelona. As I was attending the different subjects for the Diploma in Advanced Studies (DEA), I became particularly drawn towards contemporary art. Anna Casanovas' class "Video creation: The body as a place of artistic creation" stimulated my interest in the role of the body in contemporary art. As I was looking for a relevant subject for my semester project, I came across the work of Nikos Navridis, who works primarily with breath in his video art and installations. It was like finding the end of the thread of a tangled skein of artworks, theories, practices, philosophies that deal with breath as an element that unites the body with the mind.

Thus, in October 2008 I presented my DEA dissertation about the role of breath in contemporary artistic practice. The dissertation began with a research on philosophical theories of the Ancient Greek and Indian tradition, which are connected to cultural practices that are based on breath control. This theoretical

background was linked to the subject of breath in contemporary art. The artworks examined in this thesis were organized according to the qualities that make breath perceptible, namely volume, sound and temperature, alongside with phenomena of breathlessness. Although very different in content and structure, the fourth chapter of the current thesis still holds modicums of this first journey in the world of breath, with a more elaborated approach on philosophical theories, and a more limited selection of artists and artworks, which allows a deeper analysis of the works and ideas presented.

After deciding to continue investigating on the same subject for my doctoral research, I began to become interested in the presence of breath in performance art. Starting with Antonin Artaud's vision on the renovation of theatre through the dynamics of breath, I went on to explore the work of performance artists of the 1970s mainly, to see how their work related to these ideas. This research, along with a series of interviews with the artist Nikos Navridis, stimulated a growing interest on the work of Samuel Beckett and the role of breath in his plays.

As I kept exploring the subject of breath, I encountered the frame of the research, the question of the Immaterial.

It is certain that the first inspiration for the immaterial was provided by the writings of Yves Klein<sup>26</sup> and François Lévy-Kuentz's documentary about his work *La Revolution Bleue* (2006),<sup>27</sup> which turned my focus towards conceptual art.

However, everyday life was manifesting that immateriality was taking a different turn. After moving to Barcelona in 2007 it became clear that the internet was not a simple communication and research tool, but an expanding platform for social contact. It was the time when social networks started to become popular,

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<sup>26</sup> Klein 2007.

<sup>27</sup> François Lévy-Kuentz (dir), *La Revolution Bleue*, France : Réunion des musées nationaux, 2006, 52min.

“dematerializing” our everyday experience, and the first tablets and smartphones were released in the market, with touch screens that followed the movements of the body. Therefore, it became clear that the “dematerialization” of everyday life was accompanied by a surprising interest in the body and an adaptation to bodily experience. It was a phenomenological approach for a technologically enhanced world where the self and the body were at the epicentre, distant from the Cartesian visions of the early Internet, where the body was only a “shell” for the mind.

As I began to investigate the role of breath and the body in this context, it became clear that I had to submerge into an unfamiliar territory, populated by computer programmers, website developers and internet companies. It was a territory that needed to be explored first-hand; therefore, I set out to gain knowledge and work experience in web design and webpage administration, search engine optimization and programming –in a basic, yet functional level.

It soon became evident that digital technology was not only changing the way we work and interact socially, but also the perception of images and texts, the creation of visual arts and literary works, as will be analysed in the next chapter. But even further than that, technology started to emerge as a tool of political action. As the “immaterial revolutions” became increasingly political, I turned to the concept of hacking as a political and cultural practice.

The digital universe proved to be an immense field for ideas and research. However, the focus in contemporary art and corporeal experience delimited a very clear field around the role of the object and the body, the creation and experience of art, as a collaborative effort between the artist and the audience.

In terms of the doctoral research *per se*, the knowledge and experience gained in regard to the world of the internet and programming were channelled towards the

creation of an online platform of contemporary art, *Interartive*, which has been under development for the past five years.

## 2.2 Online publishing as a research tool: The *Interartive* adventure

One of the changes introduced by information technologies is the way that knowledge is created and disseminated online. Publishing academic papers on the internet suggests a more direct interaction with members of the scientific community and an increased collectivism in the way that knowledge is created. Of course, authorship has never been isolated; researchers work on their ideas by testing them with the findings of other authors and adding new threads of knowledge. In other words, writing becomes a dialogue with the innumerable predecessors and contemporaries who have dealt with the subjects relevant to the research.

Kathleen Fitzpatrick, in *Planned Obsolescence: Publishing, Technology and the Future of the Academy*, claims that the new forms of communication, like blogs, hypertext, remixes, online magazines, have transformed the “linear” experience of reading and writing into a multi-directional and collaborative process:

We need to think less about completed products and more about texts-in-process; less about individual authorship and more about collaboration; less about originality and more about remix; less about ownership and more about sharing.<sup>28</sup>

It is not a negation of the validity of traditional research, dissertations, publications and conferences, but an enhancement that involves flexibility and immediate dissemination of knowledge.

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<sup>28</sup> Kathleen Fitzpatrick, *Planned Obsolescence: Publishing, Technology and the Future of the Academy*, New York: New York University Press, 2011, p.83.

Therefore, publishing some ideas of an academic research before it is crystallized into a thesis, allows the text to develop and to change, by being tested against the texts of other scholars and by enabling interaction with specialists and a broader audience. Online publication creates an active readership that provides the author with feedback and permits an evolving collaboration between different authors.

Fitzpatrick highlights that online platforms of academic research enable the formation of collectives, which do not eliminate individual research, but rather create “a fertile community composed of multiple intelligences, each of which is always working in relationship with others”.<sup>29</sup>

During my academic research I have had the opportunity to put these ideas into practice, by taking the initiative to found *Interartive*,<sup>30</sup> a platform for contemporary art and thought, in the format of an online art magazine.

*Interartive* was first issued in June 2008, as an attempt to go beyond the walls of the university and to establish a bridge between academic research and contemporary artistic production. The editorial team consists of five doctoral researchers of the University of Barcelona (Marisa Gómez Martínez, Herman Bashiron Mendolicchio, Modesta Di Paola, Lucila Vilela and myself), but during its trajectory it has gathered together more than 130 artists and art theorists –both established and young ones.

Having different cultural origins and theoretical backgrounds, the collaboration of this heterogeneous group has resulted in the creation of an intercultural, interdisciplinary and multilingual platform, with an access to a broad cultural container of international and local movements.

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<sup>29</sup> Fitzpatrick 2011, p.74.

<sup>30</sup> *Interartive* [online] <<http://interartive.org>> (Accessed November 4, 2011). Also see the website of this thesis, *Art-Breath* [online] <<http://art-breath.com/online-publishing-as-research-interartive>> (Accessed November 14, 2013)

The texts that are published in *Interartive* cover a very wide fan of subjects and styles, from new media and performance to street art and cinema, including exhibition reviews, philosophy and literature. The interviews with artists, curators, art specialists and directors of art institutions have a prominent place in each issue.

The articles are published in Spanish or English, sometimes with a translation into the author's mother tongue (Catalan, French, Greek, Portuguese, Italian and German). This way, not only is the content of the magazine accessible to the great number of readers who understand Spanish or English, but it also adds to the development of specialist bibliography in diverse languages.

In parallel, *Interartive* carries out curatorial projects in virtual and real space.

The heart of every issue is the Virtual Gallery, where we present an online exhibition of an artist with a critical text by an art theorist translated in five languages (English, Spanish, Portuguese, Italian and Greek). The gallery reflects the philosophy of the online platform: accessible to a great number of people due to its online publication and accompanied by a text, which intends to stimulate the thought of the reader, rather than to offer a unique interpretation. Thus the gallery crosses cultural and physical boundaries, reaching a great number of people without the mediation of an official art institution. The accessibility of the gallery and the fluidity of the digital format allow the formation of new processes in artistic creation and the development of art theory.

The virtual gallery is an open dialogue between the artists, the art theorists and the public. For the *Interartive* team, it offers an opportunity to establish a dynamic collaboration with contemporary artists; making a selection based on quality, rather than recognisability, in the virtual gallery one can find the work of emerging artists side by side with the work of artists that are well-established in the international art world.

This way, we create a platform where ideas are being formulated and exchanged: parallel projects such as the Art-In-Progress page, where artists send pictures of their latest works, promote a new look into contemporary art, as a process that unrolls in front of the eyes of an international public. A fresh idea when it was first launched, the idea of instantaneous dissemination has gained popularity in the past years through social networks, where artists publish their latest works even before they are finished.

What is more, the *Interartive* team has also organized projects in art spaces and galleries, creating thus a link between the virtual and the real, between the art world and the public.

These events are documented with online photographs, catalogues, interviews and individual webpages, creating –alongside with the archive of the past issues of the magazine- a considerable source of information about contemporary art.

Therefore, taking into account the remarks of Fitzpatrick about the validity of online publishing as a research tool, as well as the account of the history and content of *Interartive*, it becomes understandable how this experience has added to my academic research.

First of all, it has been an interesting experiment in the formation and dissemination of knowledge in the digital world, providing me with a first person experience on how the dematerialization of culture has created new forms of perceiving academic texts and artistic works. This experience is crystallized in the third chapter, where “immaterial” culture is analysed, in regard to hypertext and interaction; it also gave me a first person experience in how the artwork becomes the result of a collaborative action.

Moreover, online publishing offers a new form of organization of knowledge, not in a linear and hierarchical way, but rather following multiple threads of

categorization –with the tags and categories that bring together separate fields of knowledge. This enables an open approach in research, in regard to the structure, topics and disciplines followed in this thesis.

In addition, my involvement in the web magazine has encouraged me to interview artists and explore more thoroughly some of the subjects presented in this thesis, opening my mind to new directions in regard to corporeity, performativity and digital art. On the other hand, it has helped me keep an on-going dialogue with art theorists, expanding my horizons into emerging fields of research.

My experience as editor-in-chief of the digital platform *Interartive* has provided me with the tools to organize the audio-visual material of this thesis into a webpage, Art-Breath.com.<sup>31</sup> The webpage *Art-Breath* provides an easy access to the videos and images related to the main subject and, although it is conceived as a supplement of the theoretical analysis of this thesis, at the same time it can open up a path of communication and interchange of ideas with a broader public.

Lastly, keeping an online platform and publishing my texts on a regular basis, alongside the texts of other researchers, stimulated my creativity, by encouraging me to write often and to constantly improve my expressive means.

In short, *Interartive* became the space where a very productive dialogue about the subjects treated in this thesis began and flourished. Thus, the fragments of my thoughts evolved into texts, academic publications and presentations in conferences, as we will see below.

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<sup>31</sup> The page is titled “Encounters on the borders of the inmaterial: Body, technology and visual culture” and is organized according to the structure of the thesis, in order to help the reader view the artworks that are commented here, alongside with information related to the subject. [online] <<http://art-breath.com>> (Accessed: January 10, 2013)



### 2.3 Conferences, lectures and publications

An important step in every research is to share the ideas that emerge with the academic community, in conferences and university lectures. This helps improvement, through dialogue, questioning, re-evaluation and redefinition of basic positions.<sup>32</sup>

At the onset of my research about breath I assisted the symposium “Take a Deep Breath” in Tate Modern Gallery, in London (November 2007). This interdisciplinary symposium proposed a fresh look at the cultural, social and scientific aspects of breathing. The symposium brought together a large number of theorists from different disciplines and artists working on the subject of breath. Through talks, visual art projects, performances, film screenings and musical events, it encouraged an extensive dialogue on the subject of breath. The symposium explored visible and invisible respiration, contaminated breath and pathologies of breathing, philosophies regarding respiration and the presence of breathing in psychology, psychiatry and religion. It also presented different artists that worked with breath as a medium.

Thus, my experience in Tate Modern left a profound impact in the interdisciplinary approach of this thesis and stimulated some of the ideas presented in the fourth chapter. More than giving me a clear line on the issue of breath within contemporary thought, it offered a valid example of how elements from anthropology, sociology, psychology, medicine and philosophy can be combined with art theory so as to provide a deeper understanding of contemporary artistic practice. Moreover, it gave me the opportunity to meet theorists from other disciplines who dealt with the subject of breath –some of which are cited in this thesis-, as well as some of the artists who participated in the symposium.

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<sup>32</sup> Website of the thesis *Art-Breath* [online] <<http://art-breath.com/research>> (Accessed: February 6, 2013)

Another important aspect of this thesis is the role of technology in regard to contemporary art. A series of lectures, conferences and publications belong in this line of thinking.

The continuing questioning on the issue of the dematerialization of everyday objects and culture was crystallized in a paper titled “Stepping towards the immaterial: Digital technology revolutionizing art”, that includes some of the ideas presented in the next chapter regarding the dematerialization of culture, focusing on examples of virtual art and net.art. The paper was presented in the conference “Transforming Culture in the Digital Age” in Tartu, Estonia, in April 2010. The conference shed light on how traditional “memory institutions”, like museums, archives, libraries and established artists deal with the transformations that are caused by new technologies. This interdisciplinary conference brought together professionals of heritage institutions –museums, libraries and archives-, artists, educators and academic researchers, creating a fertile discourse about how internet users are becoming producers of content, disregarding traditional hierarchies and transforming culture. The organization of the conference –and an unpredictable twist of fate that obliged most of the participants to prolong their stay in this small town, continuing thus the dialogue after the end of the conference<sup>33</sup>- enabled the exchange of ideas among specialists that dealt with culture from different points of view.

After the conference, my paper was published in the collective volume *Transforming Culture in the Digital Age*.<sup>34</sup>

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<sup>33</sup> The conference coincided with the eruption of the Icelandic volcano Eyjafjallajökull, that paralyzed European airways for about a week (April 2010).

<sup>34</sup> Aljas Agnes, et.al. (Ed.), *Transforming Culture in the Digital Age*, Tartu: Estonian National Museum, Estonian Literary Museum, University of Tartu, 2010.

A different aspect of the same research was presented in the conference “Universes and Metaverses: Artistic Applications of the New Media” at the University of Barcelona (April 2010). Following main concept of the conference, which was the use of new technologies in artistic practice and architecture, I presented the paper “Cyberbreath: Encounters of Body and Technology”. The subject was based on artworks that combine new technologies, with a focus on corporeal experience and breath. Some of the artworks that were presented in this paper are further commented on the next chapter of this thesis. The paper was subsequently published in the volume *Universes and Metaverses, Artistic Applications of the New Media*, edited by the research group Art, Architecture and Digital Society.<sup>35</sup>

Moving from the realm of theory to the world of artistic practice, in October 2010 I travelled to Vicenza, Italy, to assist the inauguration of the exhibition “Respiro”, curated by Adelina Von Furstenberg with the support of the organization Art for the World. Through a carefully selected array of works, the exhibition explored the subjects of breath control, calm breathing, apnea, oxygen, inspiration and heart pulse, among others. The opening was organized as a three-day encounter of artists, curators, publishers and art theorists, providing thus the opportunity for an interchange of ideas regarding breath and an in-depth understanding of the artworks presented.

In 2011 I was given the opportunity to organize a conference about breath in artistic practices, with the support of the Vice-Rectorate of Arts, Culture and Heritage of the University of Barcelona. The two day symposium “Breathe! Respiration, Breath and Whispers in Contemporary Art Practices”, that took place in the University of Barcelona (April 2011) dealt with breathing from an interdisciplinary point of view; through philosophy, medicine, yoga, artistic practice and poetry it sought to bring

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<sup>35</sup> Arte, Arquitectura Y Sociedad Digital (eds.), *Universos y Metaversos: Aplicaciones Artísticas de los Nuevos Medios*, Barcelona: Grupo de Investigación Arte, Arquitectura y Sociedad Digital, 2011.

into focus new ways of living the body. The participants explored different issues regarding respiration, mapping new ways of experiencing the body and transforming breathing.<sup>36</sup>

Coming from different disciplines, the participants followed different paths of thinking and analyses; yet, in many points, those paths intersected –for example, the connection of breath to life, thought, emotions and the world. Among the experiences offered to the audience, was the opportunity to practice breath control, to enhance their knowledge about breath, and, most importantly, to participate in the artwork “Whispers in a hole” by Catalan artist Rufino Mesa, which was especially created for the occasion. Therefore, the public could gain a first person experience about how breathing can alter thought and consciousness, and also how it can be used in artistic practice as a “material” that brings the artwork to life; during this process, the public became a co-creator of the final work.

In this sense, the conference put in practice the breath related theories and artistic practices of the fourth chapter of this thesis. It was a unique opportunity for me, not only to expand my knowledge and gain a first-hand experience of the main ideas of my research, but also to share these ideas with a broader audience. As part of this process, I participated in the conference with a presentation about the element of breath in the work of Samuel Beckett and the visual arts references within his work.

As my research on Beckett expanded, in July 2012 I was invited to the conference “Beckett and the State of Ireland” at the University College of Dublin, an annual conference dedicated to the legacy of Samuel Beckett in theatre and literature. Being the only art theorist among a selected group of Beckett specialists gave me the unique opportunity to introduce a different vision on the playwright’s impact on

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<sup>36</sup> Christina Grammatikopoulou, “Breathe! Respiration, breath and whispers in contemporary artistic practices”, *Interartive*, #31, April 2011. [online] <<http://interartive.org/2011/04/respira>> (Accessed: October 20, 2012).

culture: my paper 'From Theatre to Visual Arts: Transformations of Beckett's Breath' focused on the role of breath in Samuel Beckett's work and its inner relevance with visual arts, which stimulated what was characterized as a "thought-provoking discussion that would prove to be one of the highlights of the conference".<sup>37</sup> In the fifth chapter of this thesis these ideas are substantiated further.

Throughout this time, the inquiry into the digital intersected repeatedly with current cultural and political developments, revealing new ways of interaction and protest within the urban space. In regard to these issues, I participated in the "First International Conference of Anthropology and Urban Conflict", organized at the University of Barcelona (November 2012). The conference focused on the subject of social conflict in contemporary cities, analysing from different perspectives phenomena of disobedience within the urban matrix. Within this context I presented my paper 'From The Deep Web To The City Streets: Hacking As A Political And Cultural Practice'; it was a presentation dedicated to the changes brought forth by information technologies in art and politics, from phenomena of online political groups that press for social change, to artistic practices that use similar tools with a similar aim to awaken consciousness.

These ideas, along with a detailed analysis about Street Art and Augmented Reality were consolidated in the publication "Hacking: A new political and cultural practice", which forms part of the volume *Not Here Not There*, a special issue of the *Leonardo Electronic Almanac* about augmented reality.<sup>38</sup>

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<sup>37</sup> Adam Winstanley, "Beckett and the 'State[s] of Ireland'", *The Beckett Circle*, October 2012. In his review Winstanley notes that "Christina Grammatikopoulou examined Beckett's influence upon depictions of the body in contemporary art, in a thought-provoking discussion that would prove to be one of the highlights of the conference" [online] <<http://www.beckettcircle.org/2012/10/ucd-conference-beckett-state-of-ireland-review.html>> (Accessed: November 21, 2012)

<sup>38</sup> Christina Grammatikopoulou, "Hacking: A New Political and Cultural Practice", *Not Here Not There*, *Leonardo Electronic Almanac*, Vol.18, Issue 6, 2013.

A part of the next chapter is, in fact, dedicated to the subject, within the scope of “immaterial” technologies and “immaterial” revolutions.

In regard to my involvement in *Interartive*, I have often been invited by cultural institutions to talk about the subject of online platforms and online art networks. Among these invitations, it is worth mentioning the presentation of *Interartive* in the Cultural Centre “La Fàbrica” (Barcelona, October 2010), the participation in the Conference “Artistic Innovations and New Media” (Barcelona, April 2012) and the invitation by the School of Architecture of the Aristotle University of Thessaloniki (June 2012). These presentations have given me the opportunity to share my experience and to talk with a wider audience about the subject of digital publishing and the formation of knowledge online.

In parallel, I have been actively involved in the project Academia,<sup>39</sup> a series of meetings between young art theorists and accomplished artists Antoni Muntadas, Eulàlia Valldosera, Toni Serra, David Bestué and Marc Vives (June-October 2010). Conceived as a revival of the Aristotelic Academia in a contemporary context, the project highlighted the hidden processes underneath artistic creation and revealed interesting discourses about contemporary art. The project was supported by the research group “Art, Architecture and Digital Society” and the Vice-Rectorate of Arts, Culture and Heritage of the University of Barcelona.

Thanks to the enthusiastic help of the Vice-Rectorate and the Library of the Department of Art History of the University of Barcelona, in April 2012 I invited the London-based artist Christina Mitrentse to organize the project “Add To My Library”<sup>40</sup> at the University of Barcelona. It is a project that has been presented in

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<sup>39</sup> See catalogue of the event, VVAA, *Encuentro Akademia*, Universitat de Barcelona: Barcelona, 2010, [online] <[http://interartive.org/wp-content/uploads/libro\\_akademia.pdf](http://interartive.org/wp-content/uploads/libro_akademia.pdf)> (Accessed: November 10, 2012)

<sup>40</sup> See “Add to my Library Vol.III”, [online] <<http://interartive.org/2012/03/add-to-my-library>> (Accessed: November 10, 2012)

different European Cities, with the participation of well-known art theorists, which highlights the problems faced by educational institutions and questions the role of the book in an increasingly digitized culture. Expanding from the real space of the library to a digital platform and stimulating the public to become actively involved in the process, the artwork of Mitrentse highlighted the antinomies surrounding digital culture, that are described in the next chapter.

#### **2.4 Scholarship, internship and research group**

In 2006 I was awarded with a Scholarship of the Institute of State Scholarships of Greece for doctoral studies in European Art. Being the only scholar in my discipline to receive this reward after thorough exams was a remarkable honour; I hope that my trajectory in the University of Barcelona and the presentation of the current thesis stand up to the opportunity that this long term funding has offered me.

Lastly, it is important to mention that for the past three years I have had the luck to collaborate with the research group “Art, Architecture and Digital Society” of the University of Barcelona, which is headed by the academic researchers and professors Lourdes Cirlot, Anna Casanovas and Alberto Estévez Escalera. Since 1999, the research group focuses on diverse artistic and architectonic disciplines, in relation to information and communication technologies. As a member of the group, I was given the opportunity to contribute to the publications, the translations of texts and the administration of the website, but, more importantly, I was able to participate in the organization of conferences and the meetings of the group, where diverse facets of contemporary art and academic research were discussed among the members of the group. Being open to new ideas, the group has always been a welcoming environment for the development of the projects described in the previous section (“Academia”, “Breathe” and “Add to my library”).





Chapter Three

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**Shades of the Immaterial: Body, Technology and Visual Arts**



*Can the study of fleeting images be a subject?  
Images of aerial imagination either evaporate or crystallize.  
We must seize them between the two poles of this  
constantly active ambivalence.*

Gaston Bachelard<sup>41</sup>

### **3.0 Minimal matter/Maximal possibilities: Digital technologies, everyday life and art**

A universe of words, objects, identities within just a few square millimeters: information technology has introduced the minimal battlefield of a digital revolution that takes over matter. Books, photos, music records vanish into bytes and pixels, lose their material substance and travel light to the immense immaterial space of the Internet. Along with matter, our everyday experience transformed: the dust on the grooves of a vinyl disk, the creases on a book page that's been read over and over again, the smell of the new or the old become fading memories as we fidget over the keyboard with our eyes fixed on the computer screen.<sup>42</sup>

Digitized text, photo, video, music archives are multiplied intact, change place, get converted or transformed through software; they are shared or deleted without leaving a trace behind. The artwork becomes our trivial possession, but somehow always manages to elude our senses: once the power is cut off, it retrocedes to its previous state of inexistence -until a new wave of electricity and a complex set of

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<sup>41</sup> Bachelard 1993, p.24.

<sup>42</sup> Christina Grammatikopoulou, "Stepping towards the immaterial: Digital technology revolutionizing art", in Agnes Aljas, et.al. (Ed.), *Transforming Culture in the Digital Age*, Tartu: Estonian National Museum, Estonian Literary Museum, University of Tartu, 2010, pp.367-372. Also see: Christina Grammatikopoulou, "Ciber-respiración: Encuentros de cuerpo y tecnología" in Arte, Arquitectura Y Sociedad Digital (eds.), *Universos y Metaversos: Aplicaciones Artísticas de los Nuevos Medios*, Barcelona: Grupo de Investigación Arte, Arquitectura y Sociedad Digital, 2010, pp.85-93.

software brings it back to substance. As we map the route from this state of minimal matter to image, we shall see how the traditional relationship among the artist, the object and the public has been shifted to a new balance, introducing thus a whole new way of experiencing art.

Art becomes more accessible than ever, especially if we consider the fact that many artworks are created in the computer and are designated to stay there, without ever escaping this immaterial digital world. Works that never reach materiality; they are transferred through the Internet, meet the public and change shape as they interact with it. In other words, every work of art -whether it has material substance or not- has somehow become a common and everyday thing.

The materials used in museums in order to protect the artwork from any contact with the public –like vitrines, ropes or ‘do not touch’ signs- seem out of place in contemporary art spaces, where art experience stretches beyond the limits of vision. The ‘final touch’ to interactive art is given by the public, that explores the spaces or interfaces designed by the artists through touching and hearing, moving around and breathing. Within this artistic reality, established dipoles such as ‘artist/public’ and ‘public/artwork’ are transformed, altering the way people experience art and their own bodies.

In order to see how this new artistic reality affects bodily experience, we will focus on the question of the immaterial and the link between art and technology, and then have a first look on how digital technology changes our stance towards culture, using hypertext as an example. Keeping in mind that immateriality and corporeality are important factors in the reception of the artwork, the main axis of analysis will be phenomenology and other frames of thought that relate to it. After viewing how phenomenological thought has prevailed over Cartesian dualism, we will attempt to enhance the theoretical model proposed by having a look into Eastern philosophies,

that focus on the unity of the person and the world, and Postphenomenology, that explains how technology creates new forms of experience.

In continuation, we will see how experience and participation have become main tools in the creation of the artwork. Then, we shall examine how the artist's authority has been questioned, as the public takes a more decisive role in the formation of the artwork and the diffusion of cultural products. In order to explain these creative processes further, the concepts of cultural hacking and remixing of cultural forms will be brought into focus, with an eye on the role of the Immaterial in the formation of a new cultural and political reality.

Taking a step into the world of museums and art spaces, we will see some cases of interactive art where the participation of the viewer, through controlled movements of the body or breathing is the element that gives life to the artwork.

As we go through these examples, it is important to keep in mind that they are based on biofeedback technologies. A useful tool for medical research, biofeedback technologies capture the data from a person's bodily functions, measuring the slight variations in breathing, heart rate or body temperature, and subsequently transform these changes to audio-visual stimuli. As the subjects are being presented with those images, that follow their body rhythm, they reach a more profound knowledge of their body, where they can even influence the behaviour measured.

Therefore, the artworks that are based on biofeedback technologies open new roads of communication between users –even changing their perception of the real space, in certain cases. At the same time, the artworks presented here illustrate how the public has assumed a new role in museums and art spaces, more playful and active.

### 3.1 Theoretical background

*The logical outcome of technology's influence on art before the end of this century should be a series of art forms that manifest true intelligence, but perhaps more meaningfully, with a capacity for reciprocal relationships with human beings.*

Jack Burnham<sup>43</sup>

#### 3.1.1 Immateriality, from the conceptual to the digital

##### 3.1.1.1 Shades of the immaterial: Different approaches and definitions to the state of the *non-object*

The subject of immateriality has prevailed during the last decades in diverse theoretical discourses, including art, economy, society and psychology, especially in relation to information technologies. The question of the immaterial is of crucial importance in the present dissertation, in regard to body-based and technology-based art; therefore, it is important to define the term and to see the different approaches to the question of matter in relation to artistic creation.

In the texts of art theorists of the past fifty years we find different terms to describe the conditions introduced by the digitisation of artistic and cultural practice, such as “immateriality”, “dematerialization” and “hypermateriality”. Although in the present

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<sup>43</sup> Jack Burnham, *Beyond Modern Sculpture: The effects of Science and Technology on the Sculpture of this Century*, New York: George Braziller, 1968, p.15.

dissertation the term “immateriality” will be favoured, it is interesting to unroll the discourse about the diminishment of matter, bearing in mind that in none of the cases the terms need to be taken literally.

When speaking about “immaterial art”, we are using too generic a definition that could be applied to many different artworks; in fact, it is as a general term as speaking about “material art”; there are too many art genres that could fall under the same category. This is why it would be more accurate to talk about “immateriality in art”, so as to express how a certain evolution in thought and cultural practice has affected art and its reception. In other words, the discourse about “immateriality” is more aimed at describing the new approach towards the art object (or the *non-object*, as it is in most cases examined here) and the new relations it helps to build; as a result of this approach, the focus of attention is shifted from purely visual perception to other senses –like hearing and touching- and different processes –like communication.

So, the term “immaterial” should not be taken in a strict sense; the artworks examined in this chapter do have a material aspect –whether this matter is the computer hardware or the infinitesimally small particles used in electronic systems. In short, the question of the immaterial is more related to an evolution, where the artwork is more than an object; it is a creative *process*.

This observation became a focal point of analysis in theoretical texts of the late 1960s. Jack Burnham noted that “the cultural obsession with the art object is slowly disappearing [...] This shifts from the direct shaping of matter to a concern for organizing quantities of energy and information”.<sup>44</sup> It is an observation based on the artistic production of this period, which turned towards ephemerality and experience and started to experiment with software and systems of information; in

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<sup>44</sup> Burnham 1968, p.369.

this respect Burnham's description of a "systems aesthetic", where art does not reside in material entities, but in the interaction between people and their environment, is in accordance with the main argument about the immaterial presented here.<sup>45</sup>

The idea of "energy" as an inherent element in art is also to be found in John Chandler and Lucy Lippard's seminal essay "The dematerialization of the art object",<sup>46</sup> where they noted in regard to the art of their time:

The visual arts at the moment seem to hover at a crossroad that may well turn out to be two roads to one place, though they appear to have come from two sources: art as idea and art as action. In the first case, matter is denied, as sensation has been converted into concept; in the second case, matter has been transformed into energy and time-motion.<sup>47</sup>

In other words, the shift of interest from matter to energy and action does not imply that materiality disappears altogether; it simply means that the object becomes obsolete. Moreover, when referring to the art of the time, the word "immaterial" is not only linked to the ideas behind the artwork, but also to the creative process that results in it.

The term "dematerialisation" highlights the idea of energy even further, by designating an act, a process of distancing from matter. This distancing can be simply conceptual, meaning that the artwork still has a material substance, which subsides underneath the burden of the idea it represents. On the contrary,

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<sup>45</sup> Jack Burnham, *Beyond Modern Sculpture: The effects of Science and Technology on the Sculpture of this Century*, New York: George Braziller, 1968, p.15. Jack Burnham presented his ideas within the context of 'systems theory' which will not be further analysed in this thesis, so as to focus on a different theoretical frame. An analysis based on systems theory would have been too rigid to approach sufficiently the diverse subjects treated here, for this reason an approach that is largely based on phenomenology has been favoured.

<sup>46</sup> Lucy Lippard; John Chandler, "The Dematerialization of Art", *Art International*, February 1968, pp.31-6.

<sup>47</sup> Lippard 1973, p.43.



immateriality is not used to describe the process, but the condition where matter is almost absent.<sup>48</sup>

Although Chandler and Lippard do not illustrate their theory with artistic examples, in the subsequent edition *Six Years: The Dematerialization of the Art Object*<sup>49</sup> Lippard presents an overview of fluxus, happenings, video and conceptual art. In these art movements the object is disconnected from its material substance, which becomes less important than the concept or the process. This way, it becomes possible to link the artwork to alternative conceptualisations, as Jacob Lillemose observes:

Rather than attempting to sublimate or transcend materiality through non-material principles, such as ideology, beauty and sign value, conceptual art emphasises its social, economic and cultural aspects and exposes them to alternative conceptualisations; conceptualisations most often guided by principles and values of heterogeneity, irrationality, openness and destabilisation, and opposed to harmony, control, power and capitalistic exploitation.<sup>50</sup>

For this matter, it is important to keep in mind during the overview of the conceptual art of the 1960s<sup>51</sup> that the abolition of the limits of the material has opened up new possibilities for the art object, liberating it from the established paths of circulation and projection that are related to the art market and traditional art spaces. Instead, it has created the opportunity for a new way of perception, more polyphonic, where the artist has the freedom to play with ephemerality, fluidity and

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<sup>48</sup> Jacob Lillemose, "Conceptual Transformations of Art: From Dematerialization of the Object to Immateriality in Networks", in Joasia Krysa (ed.), *Curating Immateriality: the Work of the Curator in the Age of Network Systems*, New York: Autonomedia, 2006, p.128.

<sup>49</sup> Lippard 1973.

<sup>50</sup> Lillemose 2006, p.121

<sup>51</sup> See pp.126-130 of this chapter.

participation. As a consequence, the entire area of aesthetic awareness is redefined, as John Burnham foresaw in the early 1970s.<sup>52</sup>

So, immateriality is not an alternative word for emptiness; on the contrary, it could even be considered as a new state of matter. For Jean-François Lyotard the immaterial *is* matter; matter which is subject to interaction and diverse conceptual processes. This is suggested in the exhibition “Les Immatériaux” –the “immaterials”– which he designed in 1985 at the Centre Georges Pompidou in Paris. The exhibition focused on the advent of an art of the immaterial and the changes in the perception of such art by the public<sup>53</sup>, a perception that would engage all of the senses. More than a conventional exhibition of art, “Les Immatériaux” was an event based on philosophical questions, within a theatrical setting. Liberated from the mentality of presenting artworks, the exhibition explored new ways of interacting with the public. Rather than providing the viewers with a clear trajectory constituted by a succession of visual artworks, they staged “a labyrinth of questions that elicits a feeling of being lost and an incapacity to exhaust the possibilities for connections and meaning”,<sup>54</sup> where the viewers needed to rely in all of their senses.<sup>55</sup>

A great part of the exhibition was dedicated to new technologies, highlighting the plasticity of art based on computer and the new technologies of information and communication. According to Lyotard, immateriality is connected to energy –

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<sup>52</sup> Jack Burnham, “Notes on Art and Information Processing”, in *Software - Information Technology: Its New Meaning for Art*, New York: Jewish Museum, 1970, pp.10-14.

<sup>53</sup> Colette Tron, “Des ‘Immatériaux’ à l’ ‘hypermatériel’”, *Réel-Virtuel*, n°1, “Textures du numérique”, February 2010. [online]

<<http://reelvirtuel.univ-paris1.fr/index.php?/revue-en-ligne/c-tron>> (Accessed: February 10, 2012)

<sup>54</sup> Todd Jerome Satter, “The Black Box in the White Cube: Lyotard’s Les Immatériaux as Machinic Theater”, September 6. 2011, [online] <<http://www.anyspacewhatever.com/the-black-box-in-the-white-cube-lyotards-les-immateriaux-as-machinic-theater>> (Accessed: February 10, 2012)

<sup>55</sup> Tilman Baumgärtel. “Immaterial Material: Physicality, Corporality and Dematerialization in Telecommunication Artworks”, en Annmarie Chandler; Norie Neumark (eds.), *At a Distance: Precursors to Art and Activism on the Internet*, Cambridge, MA: The MIT Press, 2005, pp.60-70.

reminding us of Chandler and Lippard's observation that "matter has been transformed into energy".<sup>56</sup> For Lyotard, however, this is not a new evolution in art and thought; energy within matter was a pre-existing condition in objects:

All of the progress that has been accomplished in the sciences, and perhaps in the arts as well, is strictly connected to an ever closer knowledge of what we generally call objects (Which can also be a question of objects of thought). And so analysis decomposes these objects and makes us perceive that, finally, there can only be considered to be objects at the level of a human point of view; at their constitution or structural level, they are only a question of complex agglomerates of tiny packets of energy, or of particles that can't possibly be grasped as such. Finally, there's no such thing as matter, and the only thing that exists is energy; we no longer have any such thing as materials, in the old sense of the word that implied an object that offered resistance to any kind of project that attempted to alienate it from its primary finalities.<sup>57</sup>

So, Lyotard, through the exhibition *Les Immatériaux* and the theoretical texts that accompany it, underlines the fact that this newly discovered "immateriality", linked primarily to new technologies, is in fact a new approach to already existing structures. The presence of the object is not relevant in this regard, since, whether it exists or not, it is not viewed as an unchanging and stable structure, but rather as a changing dynamic.

From this point of view, there is a relevance of the "immaterials" to Bernard Stiegler's definition of the "hypermateral", since both terms designate a field where matter –whether perceptible or imperceptible to the human senses- is seen as an ensemble of information, interaction and perception.

However, Stiegler seems to perceive the term "immateriality" too literally, when stating that "[*The immaterial*] does not exist. It is an easy word [...] that describes in

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<sup>56</sup> See p.80 of this thesis.

<sup>57</sup> Bernard Blistène, "A Conversation with Jean- François Lyotard", in Giancarlo Politi; Helena Kontova (eds.), *Flash Art: Two Decades of History*, Cambridge, Massachusetts, 1990, pp.129-131.

fact *evanescent* states of matter which remain, nonetheless, states *of matter*.”<sup>58</sup> For him, hypermatter is a more accurate term when it comes to defining

...a complex of energy and information where it is no longer possible to distinguish its matter from its form [...] a process where information –which is presented as form- is in reality a sequence of states of matter produced by materials and apparatuses, by technological devices in which the separation of form and matter is totally devoid of meaning.<sup>59</sup>

For Stiegler the term “dematerialization” is equally inaccurate, because he believes that what we actually have is a “hypermaterialization” of everyday reality, where things can be transformed into information through material appliances, and subsequently be subjected to endless transformations to their very detail. In other words, hypermateriality is a reality where everything can be turned into digital information; for example, our voice, the air that enters body, passes through the larynx and reaches the air through waves, is captured in a voice recorder and transformed into a binary code, a succession of 0 and 1, as digital information.<sup>60</sup> It is a process that could be named “dematerialization” and a result that could be described as “immaterial” by other theorists. For Stiegler, however, as long as matter exists, we are within the realm of the hypermaterial.

As a conclusion, a lot of terms have been proposed in order to describe this state of minimal matter with a maximized load of information; the condition where matter is seen as something fluid and prone to dynamic change. The differences between terms such as “dematerialization”, “immateriality” and “hypermateriality” are almost insignificant; however, in the present dissertation the word “immateriality” will be preferred, since it describes a condition –and not a process, as dematerialization- and moreover it includes not only the questioning about digital art –like hypermateriality- but also the issue of the ideas behind artistic phenomena,

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<sup>58</sup> Stiegler 2008, pp.110-112.

<sup>59</sup> Ibid.

<sup>60</sup> For the question of digitization see section 3.1.1.3 of this thesis.

regardless of the presence of the object. In this sense, “immateriality” can describe more accurately the complex changes in the experience of the artwork, relevant to corporeity and technology, which will be examined in the forthcoming pages.

The term “immaterial” will be used to refer to the physically imperceptible; it can either describe elements that need to go through different filters in order to be perceived or express the shift of focus from the object to the process of creation and the ideas behind it.

### 3.1.1.2 “Art and technology: A new unity”: An etymological approach

Technology is linked to the concept of creation from its very definition; going back to its Greek etymology, we see that it comes from the same root as diverse words that are relevant to creation –of life, concepts or things:

*Tiktein*: to give birth, to bring into the world.

So, *techne* (art, craft) and *technology* have been considered as interconnected meanings for the Greek culture. It is true that, several times in the course of western history, the binary logic that drew separation lines between different fields of the intellect treated them as separate phenomena, as Edward Shanken notes: “art and her sisters (which include intuition, nature, and metaphysics) form a set that is mapped in opposition to technology and his brothers (analytic reason, machines, and physics)”.<sup>61</sup>

However, this separation began to be questioned with the early twentieth century Avant Garde. The visionaries of Futurism, for example, praised the machine and devoted their art to it. A few years later, the artists of Bauhaus –a School where

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<sup>61</sup> Edward A. Shanken, “ Telematic Embrace: A Love Story? Roy Ascott's Theories of Telematic Art”, [online] <[http://telematic.walkerart.org/timeline/timeline\\_shanken.html](http://telematic.walkerart.org/timeline/timeline_shanken.html)> (Accessed: June 20, 2012).

rationalism met utopia- founded their artistic-scientific research under the slogan “Art and technology - a new unity”, elevating applied arts to the same level as fine arts.

The Bauhaus logic makes reference to the initial meaning of the word *techne*, which in Greek “is the name not only for the activities and skills of the craftsman but also for the arts of the mind and the fine arts”, as Heidegger stresses. According to the philosopher’s interpretation of the term, “*techne* belongs to bringing-forth, to *poiesis*, it is something poetic”. What is also significant is that “from earliest times until Plato the word *techne* is linked with the word *episteme*. Both words are terms for knowing in the widest sense”.<sup>62</sup>

Therefore, for the Greek culture fine arts and crafts are not seen as something separate, but as equally important, closely linked to technology, which is literally translated as *the discourse about techne*; more analytically, since *logos* equally refers to reason and discourse, one could say that technology is a junction of *techne* and *episteme* (science or knowledge).

So, art and technology are connected by definition; they both refer to knowledge and creativity, with the latter often helping bring to life artistic visions. As we will see in this chapter, after the introduction of software as a means of realization of artistic expression –in interactive art, virtual and augmented environments, internet art- computer programming and intervention become parts of the creative process, expanding the experience of the artwork.

On the other hand, art can also help technology expand and evolve. As Martin Heidegger noted,

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<sup>62</sup> Martin Heidegger, “The Question Concerning Technology”, in *Technology and Values, Essential Readings*, ed. Craig Hanks, Oxford: Blackwell, 2010, p.104.

essential reflection upon technology and decisive confrontation with it must happen in a realm that is, on the one hand, akin to the essence of technology and, on the other, fundamentally different from it. Such a realm is art.<sup>63</sup>

Therefore, it is possible to see art as a platform for the development of technology. Further than that, art often becomes a tool of research for technological questions. Using scientific theories and tools, without being bound by the conventions of scientific research, artists can provide creative solutions to diverse theoretical and practical issues. This way, art becomes an area of experimentation with the potential to open new roads in science and technology.

So, when viewing the artworks that will be analysed in this chapter, it is important to keep in mind that they show how different fields of the intellect –information science, biology, philosophy, architecture- come together to form these novel environments, which take their final shape with the synergy of the artist and the audience. The artwork becomes thus a point where interdisciplinary research and personal/collective expression merge.

Perhaps the etymological analysis seems a somehow meticulous detour in our examination of embodiment in art. However, it is a first introduction into one of the main ideas presented in this chapter, that the merging of contemporary art with technology implies a more holistic approach to these issues. In all, one could say that the concepts presented here, art, crafts, creation, technology, science, which had often been seen as separate fields of knowledge during history, have managed to return to their initial meaning, thanks to the spreading of information technologies. Nowadays, art and technology are combined to create a new way of experiencing the world. More than that, technology and art allow for the emergence of new environments, which are built by the artists and the audience collaboratively, by means of participation.

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<sup>63</sup> Heidegger 2010, p.113.

### 3.1.1.3 The work of art in the age of digital reproduction

Information technology has triggered a great change in the way we see and perceive art. It creates a new, fluid space, perceived by all senses –not just vision and hearing. Moreover, it has turned art from highly valued merchandise to common experience, easily accessible through a computer.

As we've previously noted, when talking about "immateriality", in the context of computer technologies, we do not use the word literally, but we are actually talking about a state of minimal matter, of impalpable physicality, that can be translated into information. Every computer operation is reduced into a state of abstraction comprised by languages and complex algorithms.

A computer translates any kind of information into numerical data, saves it and subsequently reconstructs it in an understandable form that reproduces the familiar form of a photo, a video or a printed text. Lyotard describes this reality as

a filter [...] falling between things and us, a screen of numbers [...] A colour, a sound, a material, a pain, a star, are returned to us as numerical figures of very fine identification.<sup>64</sup>

This becomes clear if we look into the substance of a photograph.<sup>65</sup> As the etymology of the word reveals, an analogical photograph –*fotografía*– is the registration of light.<sup>66</sup> In analog photography representation has a referent, even if it is absent. In the digital system, it is abstract information,<sup>67</sup> a file constituted by numerical elements, the pixels. Every pixel corresponds to a specific code, according to its place in the picture and its color; this binary code is constituted of 0 and 1,

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<sup>64</sup> Jean-François Lyotard, "argument 2: l'immaterialite". Presentación de la exposición *Les immateriaux*, [online] <<http://www.tobeart.com/Collectifs/Immateriaux-CGP85arg2.htm>> (Accessed: June 12, 2012)

<sup>65</sup> See Josep M. Català Domènech, *La forma de lo real. Introducció a los estudios visuales*, Barcelona: Editorial UOC, 2008, pp.115-117.

<sup>66</sup> Photography is a compound word, from *fos* (light) and *graphí* (writing, transcription).

<sup>67</sup> Tron 2010, p.4.



numbers which suggest the presence or absence of electric charge in the device where the picture is stored.

To sum up, a digital image is a complex code that calls for the mediation of multiple layers of software, in order to acquire a real-like form on our computer screen. Every computer archive or software has its respective code. When we turn off the computer or shut down a program, the image no longer exists and no sign of the image remains -except for electrons on the disk where it is stored.

In other words, what we have in a digital photograph is not a copy or a registration of reality, but a reconstruction of what's visible:

A digital image does not represent an optical trace such as a photograph but provides a logical model of visual experience. Its structure is one of language: logical procedures of algorithms through which data is orchestrated into visual form.<sup>68</sup>

It is an almost immaterial state, since it cannot be perceived by the senses; a state of abstraction, ruled by mathematics. As Margot Lovejoy observes, "Within the logical world of computers where number, not shape or volume defines geometric space, nature and the body as we know them do not exist."<sup>69</sup>

This means that artists working within the computer space are working in a world with new rules, free from the confines of matter; some of them are also programmers, who create the software needed for their artworks, therefore, they can extend their work as far as their imagination allows them to. It is hard to find limits to the realization of an idea -apart from one's knowledge and technology- because code is limitless.

Limitless and flexible: like any other computer archive or Internet web page, a digital artwork can be endlessly transformed -by the artist himself or the public.

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<sup>68</sup> George Legrady, "Image, Language, and Belief in Synthesis," *CAA Art Journal* 49(3), 1991, p. 267.

<sup>69</sup> Lovejoy 2005, p. 153.

Subsequently, an artwork is not anymore a “sacred” and unique object, presented in a museum or an art gallery next to a “do not touch” sign. It can be multiplied and saved in computer files, becoming thus a common and everyday thing –just like any other digital file.

Building a new world on code, an abstract construction, means that one can discover new ways of acting within it.

Environments of virtual/augmented reality constitute a fluid world where the connective tissue is association –and often imagination.

On the other hand, while the virtual world has expanded onto fields that would have been impossible to conquer within a corporeal existence, the physical body is never left out of the picture. There is a growing tendency to adapt technology to the human body and mind, by imitating its functions and movements.

Electronic devices of different kinds seek to incorporate the memory of the body and its movements. From the joystick of the early video games to the latest movement detecting game consoles, and from the mouse and buttons to touch pads and touch screens, the technological evolution favours the adaptation to the movements of the human body, creating a more ‘natural’ and intuitive interface. One does not need to stay fixed onto one’s seat and press buttons with the fingers; contemporary computing devices follow the user’s life and adapt to it.

These concepts, which have gained a very high commercial value since the launching of smartphones and the latest generation of video games, have been subjects of experimentation for years in tech laboratories and art spaces. That is to say, the notion of the human body as a device controller is already present in the artworks that we will see in continuation, whose creation spans from 1995 to the present.

The main thing to keep in mind during the analysis of the artworks in this chapter is that the flight into the immaterial field of virtual reality is not some cultural change which takes place somewhere far from us, in museums or scientific conferences, but one that occurs in our everyday lives and extends to our way of approaching art. Our familiarization with the notion of immateriality starts from our keyboard and computer screen.

In order to see how we are being introduced into a new way of approaching culture, it would be useful to look into the subject of hypertext, and see the changes it has fostered.

#### **3.1.1.4 Towards an “Ideal text”: Hypertext creating a new generation of authors and readers**

Although the current dissertation is oriented towards the world of images, in contemporary art the visual element never falls far from word –whether we’re talking about the programming language behind a software-based artwork or a text related to it. Furthermore, information technologies have influenced the relationship between the reader and the author in a similar way as the one between the audience and the artist. For this matter, it is useful to have a look into the subject of hypertext, and how it has transformed written expression.

Mechanical reproduction –from the invention of the printing press in the 15<sup>th</sup> century and on- has made knowledge more accessible to the readers, giving the opportunity to a large number of them to become writers. Especially with the advent of daily press in the 19<sup>th</sup> century and the introduction of the “letters to the editor”, the readers had the opportunity to make their voice heard.<sup>70</sup>

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<sup>70</sup> Walter Benjamin, *The work of art in the age of mechanical reproduction*, London: Penguin Books, 2008 (1936), part X.

With the development of electronic publishing, it became even easier to access knowledge and to make one's voice heard. But, most importantly, electronic publishing has revolutionized the very *structure* of the text and the *way* we read.

Hypertext has no definitive beginning and end -which means that we can "enter" and "leave" the text through various "entries/exits" -and that it has "hyperlinks" that transfer us to different texts. This materializes visions for the "ideal text" that existed long before information technologies emerged.

The first allusions to a text with features similar to hypertext appear in 1945, in the article "As we may think" by Vannevar Bush.<sup>71</sup> In this text Bush foresees significant inventions, like the personal computer, the Internet, the World Wide Web and hypertext. According to him, the human brain works by association; when the mind captures a meaning or an idea, it recalls the most relevant known idea and thus moves on to the following thought, which is intrinsically connected to the previous one. So, in order to express human thought properly, we need a text with links that can lead from one meaning to the other; the linking is content based -as opposed to indexing according to alphabetical order. This process can be directly reflected on hypertext.<sup>72</sup>

Bush also considers reading as an active procedure: as we read we are invited to add our thoughts and reactions to the text. Lastly, Bush goes on to visualize a virtual -immaterial- text that would allow the readers to add their comments onto the original text -something very common today on blogs, on-line publications and social networks.

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<sup>71</sup> Vannevar Bush, "As we may think", *The Atlantic*, July 1945. [online]  
<<http://www.theatlantic.com/doc/194507/bush>> (Accessed: May 20, 2012)

<sup>72</sup> George P. Landow, *Hypertext 3.0: Critical theory and new media in an era of globalization*, Baltimore: The Johns Hopkins University Press, 2006, p.10.

The term “hypertext” was introduced in 1963 by Ted Nelson, a philosopher and computer scientist. As early as 1960, long before the emergence of the technological means that would turn it into reality, Nelson started experimenting with a form of software for text processing, based on *transclusion* –the term used to describe the action of introducing a text into another document through a hyperlink; this software would allow the readers to choose their own way through the text, without being limited by a predetermined beginning or end.

A few years later the computer scientist Andries Van Dam -who was working with Nelson- introduced the first hypertext system, the ancestor of HTML and the systems applied today.

Beyond computer science, renowned theorists had also envisioned a text with similar features as hypertext.

Reading –just like any other form of contact with culture, as we shall see later on- is not a passive procedure. As Michel de Certeau notes,

the activity of reading has [...] all the characteristics of a silent production: the drift across the page, the meta-morphosis of the text effected by the wandering eyes of the reader, the improvisation and expectation of meanings inferred from a few words, leaps over written spaces in an ephemeral dance. [...] A different world (the reader’s) slips into the author’s place. This mutation makes the text habitable, like a rented apartment. It transforms another person’s property into a space borrowed for a moment by a transient.<sup>73</sup>

For de Certeau, the text is never a stable and unchanging reality, but is similar to an apartment, that different tenants can modify according to their personal needs and perception. If we’re going to expand the metaphor of the apartment further, we could say that when it comes to printed text the reader stays inside the apartment for a period of time, whereas in a text published in hypertext, the tenant stays in a

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<sup>73</sup> Michel De Certeau, *The Practice of Everyday Life*, Berkeley: University of California Press, 1984, pp. xxi-xxii.

complex architectural space with openings to different apartments, which he can enter, exit and modify at will.

Closer to the characteristics of hypertext, Roland Barthes describes the ideal text as a text where

the networks are many and interact, without any one of them being able to surpass the rest; this text is a galaxy of signifiers, not a structure of signifieds; it has no beginning; it is reversible; we gain access to it by several entrances, none of which can be authoritatively declared to be the main one.<sup>74</sup>

Similarly, Michel Foucault and Jacques Derrida often mention in their texts terms that are nowadays related to hypertext, such as link, networks and web.<sup>75</sup>

A few decades later these visions are a common ground. Someone reading hypertext can follow the links and leave the original text, read a footnote and then go back to it or not. What was typed onto the margin of the page as a “footnote”, a secondary text, has now been given the same value as the “main” text, because it is presented as a full text.<sup>76</sup>

Internet users can publish their texts easily and share their thoughts with other readers. Thus, every reader becomes a potential writer and most often the distinction between writer and reader is abolished. Therefore Roland Barthes’ vision becomes materialized:

The goal of literary work [...] is to make the reader no longer a consumer, but a producer of the text. Our literature is characterized by the pitiless divorce which the literary institution maintains between the producer of the text and its user, between its owner and its consumer, between its author and its reader. This reader is thereby plunged into a kind of idleness [...]: instead of functioning himself, instead of gaining access to the magic of the signifier, to the

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<sup>74</sup> Roland Barthes, *S/Z*, New York: Farrar, Straus and Giroux, 1974, p.5.

<sup>75</sup> Landow 2006, 52.

<sup>76</sup> Landow 2010, p.8.

pleasure of writing, he is left with no more than the poor freedom either to accept or reject the text: reading is nothing more than a referendum.<sup>77</sup>

This “pitiless divorce” between producer and user has become obsolete, thanks to information technologies. Hypertext calls for an active reader, who has to face a series of choices: from simply changing the size of the fonts of the text, to wandering into the links provided by the writer, looking for relevant topics in the Internet and adding comments to the original text.

This is the base for blogs, where every Internet user can publish personal articles, thoughts, links to other texts or videos, film reviews, news, any kind of information. Through the comments and the links emerges a virtual community with common interests, where the limits between the reader and the writer have been abolished.

On the other hand, the coexistence of different kinds of data -text, sound, image, video- in the same webpage opens up an interdisciplinary dialogue between diverse fields of the intellect, which will influence the way knowledge is created, diffused and acquired in the future.

Getting back to our starting point and principal focus, the course from material to immateriality, we see that one of the consequences of the digital text is that for the first time writing is not dependent on a physical surface.<sup>78</sup> Hypertext is a “virtual text” that calls for the mediation of multiple layers of software, so that it takes the form of a conventional text onto our computer screen.

As a result, a digital text is never something tangible and fixed; anybody could copy and modify it. Thus, it is subject to a similar problematic as any cultural product based on participation and the idea of “remix” of previous forms, that we shall examine later with a focus on visual culture. But first, it is necessary to see how the

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<sup>77</sup> Barthes 1974, p.4.

<sup>78</sup> Landow 2010, p.34.

dematerialization of cultural forms has led to a different way of perceiving culture, by focusing on phenomenology.

### **3.1.2 Experience as a way of perceiving the world. From philosophy to artistic creation**

#### **3.1.2.1 Viewing the body and the mind as a whole: The phenomenological approach**

The body as a centre of experience is a focal point of participatory art and the latest generation of information technology –motion sensing video games, smart phones, touchpads and tablets; it is a radical shift from the frame of thought that considered the body as a ‘tool’ for the mind, which was receiving the stimuli from the eyes and giving orders to the fingers.

From this aspect, there is a common ground with the philosophical turn towards experience and the body, which long preceded these artistic and technological advances.

A recurring belief in the Western thought was that the self resides in the mind and not the body, relating the cognitive process primarily to the brain. The shift of focus from separatism to holism for the Western tradition simply reaffirmed a position that was already prominent in the East, as we shall see. What is new, however, is the role of technology in regard to the body, the research on how our sense of the self is enhanced through technological developments.

The origins of the dichotomy between the mind and the body could be traced to ancient Greek philosophers, who highlighted the importance of the soul in the search for knowledge and discarded the body as a burden in this process; for Socrates



one should be free from the body in order to achieve pure knowledge, whereas for Plato the body was a 'tomb for the soul'.<sup>79</sup> The spreading of Christianity, which saw in the body a potential for sin and in the soul a potential for divinity, magnified the gap between the two.

This duality was further solidified with the dominance of Cartesianism from the 17<sup>th</sup> century and on. For René Descartes the body is an inferior 'object', subjugated to the power of the mind, while matter is being discarded as something inferior. Lyotard notes that:

there is no matter in Cartesian thought. The foreclosure of the 'material other' inspires the decision to deny the "knowledges" of the body proper. The union of soul and body remains an intractable enigma. The soul unites only with itself, via its own transformers, innate ideas, the categories [...] All energy belongs to the thinking that says what it says, wants what it wants. Matter is the failure of thought, its inert mass, stupidity.<sup>80</sup>

So, the body cannot be a source of knowledge. For Descartes the mind is not subject to the laws of nature, as is the body; it is a nonmaterial entity, superior to the fragile shell of the body. The body does not cease to be a subject of study and analysis, but it becomes objectified and separated from the self.

Even with the consolidation of Aesthetics by Alexander Baumgarten, the body was still treated as an object.

Alexander Baumgarten conceived Aesthetics as a source of knowledge by means of the senses. However, he persisted in the distinction between the body and the

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<sup>79</sup> Âli Yurtsever; Umut Burcu Tasa. "Redefining the Body in Cyberculture: Art's Contribution to a New Understanding of Embodiment", in Daniel Riha; Anna Maj (eds.), *The Real and the Virtual: Critical Issues in Cybercultures*, Oxford: Inter-Disciplinary Press, 2009, p.4.

<sup>80</sup> Jean François Lyotard, "Matter And Time", in *The Inhuman: Reflections on Time*, Stanford, California: Stanford University Press, 1991, p.38.

mind<sup>81</sup> by considering hearing and seeing as ‘primary’ senses, and smelling, touching and tasting as senses that belonged to the ‘inferior’ body, which was subject to the laws of nature. It is worth noting here that while vision is considered to be the most important of the senses in the Western world, other cultures prioritize different senses, like smell and touch.

The true bridging between the body and mind comes with Phenomenology, which places experience in the centre of perception.

Edmund Husserl questioned the objectification of the body in Cartesianism, stating that “I do not have the possibility of distancing myself from my body, nor it from me”;<sup>82</sup> in other words, one cannot observe the body as a separate phenomenon, because the body is part of the Self –and it would have taken a second body to observe one’s own.

Even though in the beginning Husserl adopted a more ‘static’ approach when analysing consciousness, he later moved on to genetic and generative models of thought, that explain how experience evolves through time and how it is shaped in relation to the outside world.<sup>83</sup> The two latter frames of thought are particularly important when approaching interactive art.

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<sup>81</sup> Adrienne Dengerink Chaplin, “Art and Embodiment: Biological and Phenomenological Contributions to Understanding Beauty and the Aesthetic” in *Contemporary Aesthetics*, V.3, 2005. [online] <<http://www.contempaesthetics.org/newvolume/pages/article.php?articleID=291>> (Accessed: November 20, 2011)

<sup>82</sup> See Edmund Husserl, *Ideen zu einer reinen Phänomenologie und phänomenologischen Philosophie, Zweites Buch*, Dordrecht, The Netherlands: Kluwer Academic Publishers, 1991 (1952), p.159: “[...] habe ich nicht die Möglichkeit, mich von meinem Leibe oder ihn von mir zu entfernen“.

<sup>83</sup> For further analysis of Static, Genetic and Generative Phenomenology, see: Evan Thompson, *Mind in Life. Biology, Phenomenology and the Sciences of the Mind*, Cambridge, Massachusetts /London, England: The Belknap Press of Harvard University Press, 2007, pp.28-30, p.43 and also: Anthony Steinbock, “Husserl’s Static and Genetic Phenomenology: Translator’s Introduction in Two Essays”, *Continental Philosophy Review*, v.31, 1998, pp.127-134.

Husserl rejected Cartesianism but still retained a distinction between consciousness and reality, between subject and object, by perceiving the physical bodies and the worldly states of affairs as transcendent objects.<sup>84</sup>

On the contrary, for Maurice Merleau-Ponty, “the body is not a transparent object” but rather “an expressive unity which we can learn to know only by actively taking it up”. In other words, “we are our body” and we experience the world through it: “the body is a natural self and, as it were, the subject of perception”.<sup>85</sup>

Within this frame of thought, there is no distinction between subject and object, body and mind. The body is not perceived as an ‘objective body’, but as a ‘lived body’, that involves corporeity, the sense of the Self and the way of acting within the world. The only way to understand a phenomenon is to be engaged in it. Therefore perception is an active, bodily involvement with the world, rather than a distant observation from the outside.

The movements and gestures of the body, from a Merleau-Pontian point of view, are one with any thought that lies beneath them. When we reach our hand to pick up an object, thinking and reaching out are a complete and indistinguishable action, an integrated bodily performance. This is also valid for artistic works, which cannot be separated from what they express, since they are the outcome of a bodily gesture and hence the embodiment of the artist’s intention. In a few words, intention and outcome are perceived as a whole.

This approach should be taken into account while considering the issues that arise from the present dissertation, regarding the body and technology –with an emphasis on the immaterial. We think with the body, or, as Augusto Boal observes,

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<sup>84</sup> Taylor Carman, “The Body in Husserl and Merleau-Ponty”, *Philosophical Topics*, v.27, No.2, Fall, 2009, p.209.

<sup>85</sup> Merleau-Ponty 2005, p.239.

A bodily movement 'is' a thought and a thought expresses itself in a corporeal form [...] Bodily activities are activities of the whole body. We breathe with our whole body, with our arms, our legs, our feet, etc., even though our respiratory apparatus takes a leading role in the process.<sup>86</sup>

For Visual Arts and Performance this means that our body and mind are treated as an indivisible whole. According to Josep M. Català Domènech,

Vision, in a general sense, not only related to the eyes. Actually, we can say that we also see through the body, since the field of vision and the experiences derived from it are connected to the position of the body in respect to the reality around it, just as any visual experience is related to visual stimuli received from the environment through the entire body.<sup>87</sup>

Subsequently, the artists can employ body movements, as a means of altering the perception of the artwork. These issues will be dealt with more analytically in the next chapters.<sup>88</sup>

### **3.1.2.2 Beyond Phenomenology I: From Eastern Philosophies to biofeedback technologies**

On the other hand, when evaluating phenomenology as a theoretical frame for perceiving interactive art, we need to keep in mind that in Western philosophy there is usually a clear distinction between philosophical theory and cultural practice. Artistic practice could be viewed as an extension of the phenomenological theory analysed above; in addition, we seek a more encompassing model of thinking, where practice and theory are viewed as inseparable, we need to consider Eastern thought as well.

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<sup>86</sup> Augusto Boal, *Juegos para actores y no actores*, Alba: Barcelona, 2002, p.138.

<sup>87</sup> Català Domènech 2008, p.25.

<sup>88</sup> See chapters four and five of this thesis.

In Eastern philosophy the relationship of body and mind is treated as a dynamic correlation, which can be consciously altered through practice and contemplation. Contrary to the Western world, where Cartesianism dominated for a long time, the Eastern philosophies have been based on the presumption that the duality of body and mind is mutually inclusive, meaning that knowledge and the sense of the self emerges through both. For the mentality of the East, separation between the body and the mind makes no sense, since “the opposites are interdependent on and intertwined with each other, and it is not simply possible to conceive any one of them in solitary existence”.<sup>89</sup>

Thus, if we sought to view participatory art through a frame that includes theory and practice, we could enhance the phenomenological approach with a consideration of the eastern philosophical traditions that view theory and practice as indistinguishable features. The aim of these traditions is to train the body and mind in a way that the practitioners begin to feel this duality as a unity.

On a practical level, feeling the unity of body and mind requires advanced meditational skills, that allow the practitioner to disconnect from any external stimuli and thoughts until there is nothing left to perceive but the rhythm of one’s one breath. The same effect can be achieved reversely, by concentrating on one’s own breath until the mind is clear from exterior distractions and one begins to get a sense of oneself.

One could view this as a similar approach as the one proposed by generic and generative phenomenology, but within a more practical frame. Expanding one’s consciousness through such practices means that the sense of the ‘lived body’ is enhanced.

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<sup>89</sup> Yurtsever and Burcu Tasa 2009, p.5.

Consequently, phenomenological theory combined with traditional cultural practices could be used as a way to understand how participation and interactive art can alter perception. Inviting the viewers to participate in the artistic experience by means of their body and breathing can have similar effects as other cultural practices that enhance perception through breath control and body movements; “Breath is a potent tool of overcoming dualism”,<sup>90</sup> which could explain why the artists mentioned here use it as a prime matter of creation, as they seek to illustrate the indivisibility of body and mind.

The use of motion tracking devices, touch screens and interactive artworks has a certain impact on the person using it, not only as a means of carrying out a task, but also as a stimulant that puts our body into motion. If we see the mind and body as a whole, altering one of the two parameters can have an effect on the other.

Although in this chapter we mainly tackle the issue of the immaterial from the perspective of digital technology, entering the field of interactive art automatically introduces us to other aspects of immateriality, which shall be the main focus of the next chapters: visual transformations of breath and art as a time-based experience.

Therefore, the artists analysed in the current chapter are chosen as examples because not only do they use programming to bring life to their work, but also because they invite the public to a distinct experience, which involves conscious breathing within an interactive environment.

The artworks examined in the following pages use the body as an instrument of grasping upon the world,<sup>91</sup> putting the phenomenological and breath-related theories mentioned above into practice. In addition, the use of biofeedback

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<sup>90</sup> Drew Leder, *The Absent Body*, Chicago: University of Chicago Press, 1990, p.178.

<sup>91</sup> Khut 2006, p.26.

technologies –that provide the users with data from their own bodies- create a junction between ancient breath-related practices and the latest technology.

Whereas in the next chapter the focus will be philosophy and meditation techniques, here it is useful to note that biofeedback, a technological evolution used in medicine and art, is based on the same need to know more about the body; biofeedback means that an internal function is monitored electronically and “fed back” to the subject in the form of audiovisual material. It is noted that when facing this audiovisual stimuli, the subject can learn to control processes that are to a large extent involuntary.

In other words, it is possible to understand and control the body through technological means, in the same way that we can do so through meditation and diverse cultural practices.<sup>92</sup>

### **3.1.2.3 Beyond Phenomenology II: Expanding experience through technology**

The Cartesian notion of the body as a ‘shell’, that simply sustains the mind resurges in early cyber-fantasies, like William Gibson’s *Neuromancer*, where the main character, Case, lives “for the bodiless exultation of cyberspace”, where his “disembodied consciousness” is projected.<sup>93</sup> He is going through a disembodiment in the real world and a re-embodiment in the virtual space, as Anna Casanovas notes:

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<sup>92</sup> Leder 1990, pp.52-53.

<sup>93</sup> William Gibson, *Neuromancer*, London: Harper Collins, 1995 (1984), p.12.

To the ever increasing disembodiment which permits the liberation of the mortal and obsolete body corresponds a superhuman re-embodiment in Cyberspace. The imperfection of the palpable body remains compensated by a “perfect” artifice created by the computer.<sup>94</sup>

The Cyberspace within the novel is described as a purely conceptual space, destined for the mind:

Cyberspace. A consensual hallucination experienced daily by billions of legitimate operators, in every nation, by children being taught mathematical concepts... A graphic representation of data abstracted from the banks of every computer in the human system. Unthinkable complexity. Lines of light ranged in the nonspace of the mind, clusters and constellations of data.<sup>95</sup>

Although at first it appeared that information technologies would finally materialise the Cartesian vision of the mind-body split, letting the mind flow in an immaterial space while leaving the body behind to contribute to this ‘journey’ only through a minimal participation of the eyes and the hands, this utopic vision was soon dropped for more body-centric devices. The current tendency in information technologies is to follow the users as they move and to create devices and intuitive interfaces that engage the entire body and imitate its mobility.

This brings us to one of the most important phenomenological assertions for the current analysis: our sense of the body is not limited only to the surface of the skin, or even to the way it moves within the environment; it is extended to the tools we use<sup>96</sup>. In line with Heidegger’s theory that the tool becomes one with the user’s body, with a tendency to ‘disappear’ for as long as it functions correctly,<sup>97</sup> the

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<sup>94</sup> Anna Casanovas Bohigas, “Cibercultura: El cuerpo esfumado”, in M. Azpeitia; M.J. Barral; L.E. Díaz; E. González Cortés; T. Moreno; T. Yago (eds.), *Piel Que Habla, Viaje a través de los cuerpos femeninos*, Barcelona: Icaria, 2001, p.33.

<sup>95</sup> Gibson 1995, p.67

<sup>96</sup> Dengerink Chaplin 2005.

<sup>97</sup> Martin Heidegger, *Being and Time (A translation to Sein und Zeit)*, New York: State University of New York Press, 1996 (1953) pp. 69-70.



phenomenological approach agrees that tools are integrated within the frame of action; a painter 'thinks with the brush' and similarly the computer users think with the computer interface and find their thoughts reflected onto the screen.

Therefore, as the technological tools adapt to the body, they tend to 'disappear' and to become an extension of the body, which moves unconsciously. Within this frame, it is interesting to study these processes of embodiment, in order to see how people become engaged with the real-world surroundings and the virtual environments that emerge. A useful tool to this direction is Don Ihde's approach on the subject, who makes a significant contribution to the phenomenological positions presented above with his postphenomenological, technology-related inquiries.<sup>98</sup>

Ihde aspires to create a theoretical construction that covers all aspects of embodiment, taking into account the earthly body of phenomenology and the socially and politically constructed body of postmodern discourse; to these viewpoints he adds the idea of the body which is interactive with technology.<sup>99</sup>

The basic idea behind the latter is that technology becomes a mediator in the relations between people and the world: 'the experience of one's body image is not fixed but malleably extendable and/or reducible in terms of the material or technological mediations that may be embodied'.<sup>100</sup>

In other words, our sense of the body is filtered through our experience with technology, changing in the process. For example, if we use an avatar in one virtual game, we soon identify with our character and refine its actions and movements in a way that corresponds to our personality. Similarly, when users engage with bio-feedback technologies, that provide them with an audiovisual reflection of their inner body functions, like breathing or heartbeat, they may begin to get an

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<sup>98</sup> Ihde 2009, pp.38-44.

<sup>99</sup> Ihde 2004, xi-xx.

<sup>100</sup> Ihde, Don (1979), *Technics and praxis*, Dordrecht: D. Reidel Publishing Group, 1979, p.74.

enhanced sense of these functions –in other words, they begin to feel their body in a different way, because of the mediation of technology. As our senses are getting new stimulations, they are led to completely novel directions.

Ihde concludes that

we are our bodies –but in that very basic notion one also discovers that our bodies have an amazing plasticity and polymorphism that is often brought out precisely in our relations with technologies. We are bodies in technologies.<sup>101</sup>

Roy Ascott agrees that we are “computer-mediated and computer enhanced”.<sup>102</sup> By inventing the term *cyberception*, he sought to define the “emergent human faculty of technologically augmented perception/conception”.<sup>103</sup> It is an aptitude that is relevant to how we relate to technologies, and therefore, changes according to technological evolution. As a result, people gain a new sense of the self:

To inhabit both the real and virtual worlds at one and the same time, and to be both here and potentially everywhere else at the same time, is giving us a new sense of self, new ways of thinking and perceiving that extend what we have believed to be our natural, genetic capabilities.<sup>104</sup>

The artists who work with information technologies seem to be aware of the fact that the new media can bring about changes in perception; in fact, they seem eager to experiment in order to magnify the impact of their artwork onto the audience, by choosing paths that are not so common. The artworks that will be presented further on, though different in appearance, all create new experiences for the public.

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<sup>101</sup> Ihde 2002, 138.

<sup>102</sup> Roy Ascott; Edward Shanken (ed.), *Telematic Embrace, Visionary Theories of Art, Technology and Consciousness*, Berkeley and Los Angeles, California: University of California Press, 2007, p.319. Also see: Edward A. Shanken. “Virtual Perspective And The Artistic Vision: A Genealogy Of Technology, Perception, And Power”, *ISEA96 Proceedings, Seventh International Symposium on Electronic Art*. Ed., Michael B. Roetto. Rotterdam: ISEA96 Foundation, 1997.

<sup>103</sup> Ascott and Shanken, p.315.

<sup>104</sup> Ascott and Shanken, p.319.

Applying the phenomenological doctrine of perceiving the world through active engagement to the changes brought forth by information technology helps us understand how the new technologies have shaped our way of perceiving the world or cultural phenomena. At the same time, it becomes clear that participation contributes to a better understanding of art than passive observation. Even more so, if this involvement engages the entire body –moving, breathing, hearing, seeing- in relation to a technological device, the sense of the corporeal is extended beyond everyday knowledge, into an endless world of possibilities to expand the mind and the senses.

Interactive art, which encourages participation, can have an immediate effect on the public. Therefore, maintaining a distance between the art object and the public –a viewpoint shared by Adorno and Grau,<sup>105</sup> as we shall see- is not a *sine qua non* when it comes to perceiving an artwork; bridging the gap between the two can contribute to a stronger art experience.

For that reason, phenomenology is preferred in this chapter as the main approach in regard to digital devices and interactive media that encompass the user. In technology, it seems that the Cartesian dualism between the controlling mind and the body as an object is being dropped in favour of a more holistic approach, where the body becomes every time more important.

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<sup>105</sup> See p.116 of the thesis.

### 3.1.3 Experience within the immaterial virtual space

#### 3.1.3.1 A shift of focus in the reading of art history

In parallel to the change from Cartesianism to phenomenology, another change began to take place in mid-20<sup>th</sup> century; the prevalence of the idea of the *artistic genius*, as the timeless and mysterious force behind the inspiration of the *Great Artist*, which gained strength with Romanticism, started to wane.

The romantic ideals emphasized the importance of personal feeling, experience, inspiration and collision with the social surroundings, as elements that were crucial to the emergence of a Great Artist, who was supposed to express the *Zeitgeist*, introduce changes and pave the road for the future. In the field of humanities, these ideals established a theoretical scheme that defined history and art history as the result of the actions of Great Men and the sum of their greatest accomplishments.<sup>106</sup>

The same posture was kept towards the interpretation of the history of science, which was viewed as “a kind of heroic biography –great men had great ideas and produced great theories”<sup>107</sup>.

Usually, this “heroic biography” was seen through a “Darwinian vision”,<sup>108</sup> a linear perspective of evolution in form and expressive means, visible in the work of many art historians, such as Clement Greenberg. This vision drafts a history of culture where all its productions are “tidily arranged and clearly identifiable”<sup>109</sup>, where one

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<sup>106</sup> Hans Robert Jauss, *Toward an Aesthetic of Reception*, Minneapolis: University of Minnesota Press, 1982, p.66.

<sup>107</sup> Ihde 2009, p.6.

<sup>108</sup> Bourriaud 2002, p.86.

<sup>109</sup> Bourriaud 2002, p.84.

achievement is built upon the previous one and acts as a base for the next one – whereas the “weakest” cultural features fade out in time.

From mid-20<sup>th</sup> century and on, this teleological concept was abandoned in favour of a more pluralistic approach, that focused on local particularities, cultural and social minorities, with an emphasis on the personal element.

As Lyotard summarizes this evolution

The idea of artistic creation is a notion that comes from the aesthetics of romanticism, the aesthetics of the idea of genius. [...] The idea of the artist as "creator" is, to say the least, of strictly limited utility in our world today. That's no longer where we really are. We're no longer concerned with the philosophy of subjective genius and all the "aura" that goes along with it.<sup>110</sup>

Following multiple perspectives in visual culture not only shifts the focus away from the artistic genius, but also introduces a more diverse range of approaches to the artistic object, with the synergy of different disciplines. In all, it is interesting to see how we have moved from a single perspective and a dominant viewpoint, to a broader spectrum, a new form of reception that opens up the public's perception to uncharted territories.

### 3.1.3.2 A new perspective in the reception of the artwork

The attitude towards artistic creation can have a deep impact in cultural perception. A prime example of this is the discovery of the Renaissance perspective, which for many centuries dominated the western way of *seeing* the world, and as a consequence, the way of *thinking*. Linear perspective aimed to create the illusion of a three-dimensional vision in a two-dimensional surface. It is based on the

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<sup>110</sup> Blistène 1990, p.129.

convention that the subject looks onto the image from a fixed point of view, with one eye only.<sup>111</sup> Despite the fact that this is far from being objective, it has managed to create a doctrine that remained unquestioned for centuries, subjecting the painterly space to mathematical rules. In addition to painting, the illustrations accompanying scientific publications followed the same rules, magnifying thus the impact of the Renaissance perspective on the way people perceived the world for centuries.

It is useful here to note that it is not the mathematical basis that causes the rigid viewpoint of linear perspective; software based art, which usually includes multiple perspectives, is also based on mathematics, as we have highlighted above.

This unilateral way of seeing the world began to be questioned with modernism, which established multiple points of view and opened up human thought and imagination to new ways of seeing. The introduction of technology in visual arts offered new perspectives: cinema and photography introduced a more fragmentary vision of the world, where the whole image could be perceived only by the visualisation of a fraction of it –since a big part of the image stayed outside the frame. Moreover, cinema added the dimension of time and thus heightened the ability of the public to perceive an event through a succession of different frames (panoramic, close ups, people, landscapes).<sup>112</sup>

Benjamin notes that “The camera introduces us to unconscious optics as does psychoanalysis to unconscious impulses).<sup>113</sup> In other words, the camera lens allows

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<sup>111</sup> The discovery of the Renaissance perspective is described by Vasari. See, Giorgio Vasari, *The Lives of the Artists*. Florence, Italy, 1568. [online] <<http://easyweb.easynet.co.uk/giorgio.vasari>> (Accessed: January 20, 2011).

<sup>112</sup> Anna Casanovas “Del cine al móvil: Transformaciones contemporáneas de la imagen-movimiento”, in *Arte, Arquitectura y Sociedad Digital, Arte y arquitectura digital, Net.Art y Universos Virtuales*, Barcelona: Arte, Arquitectura y Sociedad Digital, 2008, pp.17-18.

<sup>113</sup> Benjamín, p. 9

the viewer to perceive details that are difficult to observe in normal conditions; for example, slow motion unrolls the succession of a movement and zoom magnifies details unseen by the naked eye.

This means that the process of illusion changes drastically. According to Anna Casanovas,

The concept of illusion is currently different from the definition of Gombrich, who associated “seeing” with “imagining”. Therefore, Gombrich’s process of substitution (“a frame represents an object when it produces the illusion of such an object”) has changed into the current process of displacement or splitting, according to which possible “truths” alter or overlap raising the doubt over the reality of the world.<sup>114</sup>

Similarly, information technologies have altered our perception; the familiarization with a new medium where one can read, write, search for information, seek entertainment (music, films, videos) and make friends has changed our approach towards material objects and human relations; moreover, it has modified up to a certain extent the way our brain functions: for example, nowadays our memory seems to be more focused on process (how to look for information) rather than storage (what the information is).

While the social and physical limits of the real world have defined the users’ way of thinking and acting, digital culture allows them to redefine those rules and discover new ways of socialising, learning and thinking.

E-mails, social networks, forums, video games and every Internet page that requires the participation of the user, introduces us into a digital world of simulation. Inside this world we can enjoy simulated everyday experience -such as talking to friends- or go beyond the limits of reality by flying, going through walls or killing.

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<sup>114</sup> Anna Casanovas, “El arte de la luz y la ciudad”, en Lourdes Cirlet; Ma Jesús Buxó; Anna Casanovas; Alberto T. Estévez, *Arte, Arquitectura y Sociedad Digital*, Barcelona: Universitat de Barcelona, 2006, pp.114-115.

As a consequence, the perception of time, space, and social rules has changed significantly. Users expect to be given choices, to be left to roam around and explore the potential of a virtual space, once they enter it. They expect to be surprised with a new vision of the world and to be allowed to take an active part in its making.

### 3.1.3.3 Participation, a new role for the audience

As we have highlighted in regard to hypertext and the public's perception of visual arts, being an active creator, rather than a passive consumer, is very important in contemporary culture. However, one should not assume that this creative role is something completely new.

The perception of the artwork is always something active; according to Richard Jauss' *Theory of Reception*, every artwork has a historical and communicative character, a meaning which changes according to how the public in every period perceives it.<sup>115</sup> Thus, the audience has some kind of active participation in the artwork because it can influence it in different ways. For example, people from different periods and places can see different things in the same artwork and give new life and meaning to it, depending on what they 'see' in it. Moreover, the public's expectations –regarding the aesthetic part of the artwork or its symbolic and communicative role and depending on their experience and cultural background- influence the artist who may seek to fulfil or to go against these preconceptions.

As Marcel Duchamp noted,

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<sup>115</sup> Jauss 1982, pp.20-45.



the creative act is not performed by the artist alone; the spectator brings the work in contact with the external world by deciphering and interpreting its inner qualification and thus adds his contribution to the creative act.<sup>116</sup>

This point of view, as well as the shift of interest towards a more diverse approach to humanities and culture (that we have mentioned above), explains the change in the reception of the art object. During the twentieth century artists began to expand their vision beyond the creation of the one and only *sanctified* art object. They started to engage in time-specific actions, in performance, and often counted on the interaction with the public, in happenings. For the first time, the public was called not just to *see* and *worship* the art object, but to form part of the *ritual*, to become part of the creative process.

This change is also relevant to the advent of an age that Benjamin calls “The age of mechanical reproduction”. In his seminal essay, Benjamin notes how the perception of the work of art has changed due to the invention of printmaking in a first phase, followed by photography and cinema. Works of art, like all artefacts, have always been reproducible; however, until the invention of printmaking copies had been made by hand. Therefore the “original” maintained an “aura”, a distance that enhanced the “sacredness” of the art object. As Benjamin notes,

the unique value of the “authentic” work of art has its basis in ritual, the location of its original use value, as a side effect of its uniqueness, restricted possibilities of exhibition and authenticity. This ritualistic basis, however remote, is still recognizable as secularized ritual even in the most profane forms of the cult of beauty.<sup>117</sup>

On the contrary, mechanical reproduction, according to Benjamin, emancipated the work from its dependence on ritual –that echoed its origin in religious ceremonies– and connected it more strongly to politics. Mechanical reproduction allowed a

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<sup>116</sup> Marcel Duchamp, “The Creative Act” in Robert Lebel, *Marcel Duchamp*, New York: Paragraphic Books, 1959, pp.77-78.

<sup>117</sup> Benjamin 2008, p.4

bigger mass of audience to “own” the work and abolished the sense of the “original”, since, within a set of mechanically reproduced artworks, there is no original.

Theodor Adorno disagrees with the transference of the concept of magical aura to the “autonomous work of art”, noting that “the centre of the autonomous work of art does not itself belong on the side of myth [...] but is inherently dialectical; within itself it juxtaposes the magical and the mark of freedom”.<sup>118</sup> So, for Adorno the work of art is more than a magical object with mythical connotations; it’s the beginning of a dialogue with the audience.

Although it is acceptable that mechanical reproduction –and even more so, digital reproduction, as we shall see- made originality less important, and nullified the distance between the art object and the audience, the main focus of this analysis is to show how the waning of interest in the *sacred object* fostered a focus on participation, which could be viewed as a form of ritual –with the word “ritual” used here in a more extensive way, to describe a collective experience.

In this sense, the shift of interest from the *object* to the *non-object* or the *immaterial* has introduced new forms of creating and experiencing art. Therefore, the world *ritual* in the context of the current analysis goes beyond the strict limits of religious ritual, as Benjamin perceived it; we shall use the word *ritual* to refer to a process of creation, based on collaborative effort by the artist and the audience.

The movements that flourished during the 1960s, like performance art and Fluxus, offsprings of Dadaism, introduced a new way of perceiving visual arts and opened the road for Interactive Art; the viewers became trained to use more than their eyes when experiencing art; they got accustomed to the idea that they could employ all of their senses and even contribute to the creative process by taking decisions.

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<sup>118</sup> Theodor Adorno. “Letters to Walter Benjamin”, in Ernst Bloch, *Aesthetics and Politics*, London: Verso, 1980, p.121.

However, these decisions had been usually inscribed within a predetermined frame of action; in other words, in most cases happenings and performance sought a response from the audience, rather than allowing it to take initiative. As Pierre Levy notes “[the open work] remains trapped in the hermeneutic paradigm. The recipients of the open work are invited to fill in the blanks, choose among possible meanings, confront the divergences among their interpretations”,<sup>119</sup> rather than to create meaning.

Still, artistic creation started to become a collaborative process, opening thus the road to interactive art.

Even before the advent of personal computers and internet, Roy Ascott envisioned a ‘distributed authorship’ of the artwork, a cooperation among different authors and a collaboration between the author and the audience. This implied an active involvement of the audience in the creative process.<sup>120</sup>

The former idea is not new in art history; from ancient times artists worked together in workshops. What is different however in new media laboratories is the emphasis on interdisciplinarity, since the final artwork calls for the contribution of different kinds of specialists. This means that the concept of interdisciplinarity is not only important in contemporary art theory and scientific research, as we have mentioned before, but it also extends to artistic practice, as we shall see here. The artists that will be analysed in the following pages often work in groups and create their works in collaboration with researchers, information technology specialists and the audience.

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<sup>119</sup> Pierre Lévy, *Collective intelligence: mankind's emerging world in cyberspace*, New York and London: Plenum Trade, 1997, p.123.

<sup>120</sup> See Edward A. Shanken. “Tele-Agency: Telematics, Telerobotics and the Art of Meaning”, *NeMe*, Texts 620, April, 2007 [online] <<http://www.neme.org/620/tele-agency>> (Accessed September 10, 2009).

In the dusk of the twentieth century, with the expansion of digital technology onto a large stratum of society, the artwork becomes the result of a collective effort.

Rather than a 'finished product' the artwork in interactive art is defined as an on-going process, "a frame or context which provides an environment for new experiences of exchange and learning".<sup>121</sup> Interaction can become a cognitive process, with the potential to influence the participant's consciousness through the associative and communicative elements it fosters.

Through participation, art experience can unfold into wider life experience; the participants are offered the possibility to know more about themselves and their surroundings through a novel environment created by the artists. Instead of maintaining a critical distance from the art object, the audiences are called to intervene in it.

The lack of distance from the artwork is unthinkable for Theodor W. Adorno, who believes that that "just as artworks cannot intervene, the subject cannot intervene in them; distance is the primary condition for any closeness to the content of works".<sup>122</sup> So, when suggesting that the work of art has "dialectical" qualities, as we saw above, Adorno implies silent contemplation, rather than active participation.

Likewise, the fact that immersion in an interactive environment "is characterized by diminishing critical distance to what is shown and increasing emotional involvement in what is happening" is seen by Oliver Grau as a potential threat.<sup>123</sup>

In a way, the question of distance between the viewer and the art object, between art and life, resonates the clear separation lines drawn by Descartes between the

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<sup>121</sup> Lovejoy 2005, 168.

<sup>122</sup> Adorno, Theodor W., *Aesthetic Theory*, London: Continuum International Publishing Group, 2004, p. 293.

<sup>123</sup> Grau 2003, pp.13 and 202.

body and the mind. In a similar way to Husserl, who noted that we cannot observe our body from the outside, in an objective way,<sup>124</sup> Jack Burnham seeks to abolish the distinction between the public and the artwork by saying that one of the greatest changes brought forth by the fusion of information technology with art is that:

...we are being forced to dismiss the classical view of art and reality which insists that man stand outside of reality in order to observe it, and, in art, requires the presence of the picture frame and the sculpture pedestal. The notion that art can be separated from its everyday environment is a cultural fixation [in other words, a mythic structure] as is the ideal of objectivity in science. It may be that the computer will negate the need for such an illusion by fusing both observer and observed, “inside” and “outside”.<sup>125</sup>

So, art, for Jack Burnham cannot be enjoyed from a distance, in a frame or a pedestal that separates it from the everyday world. Art is a part of life, just like technology is. Instead of lamenting for the loss of the pre-existing rules in the established plateau of creating and distributing art, Burnham embraced the change, as we can see in his theoretical texts about the art event *Software* (1970) –one of the first shows to focus on conceptual art and software.<sup>126</sup>

Another question raised by digital technology –just like in any other kind of ephemeral art- is the issue of preservation. Oliver Grau is concerned about the fact that an open artwork is not preserved in time, because for him, the strength of a

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<sup>124</sup> See p.98 of this thesis.

<sup>125</sup> Jack Burnham, “The Aesthetics of Intelligent Systems”, in E. F. Fry (ed.), *On the Future of Art*. New York: The Viking Press, 1969, p. 119.

<sup>126</sup> For more about the *Software* exhibition, see Edward A. Shanken, “The House That Jack Built: Jack Burnham’s Concept of ‘Software’ as a Metaphor for Art”, *Leonardo Electronic Almanac*, 6:10 November, 1998 [online] <http://mitpress.mit.edu/e-journals/LEA/ARTICLES/jack.html> (Accessed: December 10, 2011). In this article E. Shanken explains that despite the multiple failures in the organization of the event, *Software* was pioneering for its conceptual approach and the presentation of technology and conceptual art within the same exhibition. Also see: Edward A. Shanken, “Art in the Information Age: Technology and Conceptual Art”, *Leonardo*, Vol. 35, No. 4, 2002, pp. 433-438.

material work of art lies in its ability to form part of historical memory and testimony.<sup>127</sup>

Within the scope of immateriality and ephemerality, that is innate in interactive art, the question of memory and the role of museums in safeguarding it becomes crucial. Any display of the audio-visual material related to the artwork or even the installation of the work itself is mere documentation of the artistic process. In interactive art, the artwork exists only for as long as the art event takes place, while the audiences are being engaged in it. Subsequently, the traditional role of the museum as an exhibition space for paintings and sculpture gives way to a more audience-centred concept.<sup>128</sup> The exhibition of an artwork is not the end result, but rather a process of creation. As L. Miller and E. Edmonds observe, there is “a general evolution in the concept of the museum from a repository of both objects and authority to a site of questioning and experience”.<sup>129</sup>

In a way, the original meaning of the “museum” as a place of artistic creation and worship for the “muses”, the patronesses of the arts, is partly revived. The participation of the public in the process of creation

changes the relationship of the artist and curator to the audience, and the relationship of the audience to the artwork, creating a culture of participation and contribution rather than consumption.<sup>130</sup>

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<sup>127</sup> Grau 2003, 207.

<sup>128</sup> Véase también: Lia Yoka: Λία Γυιόκα, «Τι είναι ο μουσειακός σκεπτικισμός; Σχόλιο στην ομιλία του David Carrier», *Μουσεία 06, Διαλέξεις και μελέτες για τις πολιτισμικές σπουδές και τις εικαστικές τέχνες*, Ζήτη: Θεσσαλονίκη 2012, pp.114-117 and David Carrier, «Μουσειακός σκεπτικισμός: Η νοσταλγία της επίσκεψης», *Μουσεία 06, Διαλέξεις και μελέτες για τις πολιτισμικές σπουδές και τις εικαστικές τέχνες*, Ζήτη: Θεσσαλονίκη 2012, pp.96-113.

<sup>129</sup> Lizzie Muller; Ernest Edmonds, ‘Living Laboratories: Making and Curating Interactive Art’. *SIGGRAPH 2006 Electronic Art and Animation Catalog*, New York: ACM Press, 2006, p.161.

<sup>130</sup> Muller and Edmonds 2006, p.162.

Within this context, the museum or art space becomes a new “laboratory”, where the work of art is produced through the collaboration of the artist, the audience and technology.

Even though this reality seems novel, the idea could be traced back to Alfred H. Barr, who had envisioned the Museum of Modern Art as “a laboratory: in its experiments the public is invited to participate”.<sup>131</sup> The materialization of this vision in contemporary art spaces requires an intersection of artistic and scientific research.

The artists mentioned in this chapter base their work in scientific research; Char Davies, George Khut, Christa Sommerer, Laurent Mignonneau and Thecla Schiphorst, fuse technology with corporeal elements, in order to create a new language of communication; a language primarily based on experience, intuition and feelings. In a way, they foreshadow further developments in computer technology, which nowadays tends to focus on the body and seeks to incorporate its natural movements in device operation.

At the same time, by examining the reception of their art, we can see how the public has assumed a new role in museums and art spaces, more playful, active and open to communication.

#### **3.1.3.4 Creation as transformation: From appropriation to remix**

The idea of creation as a collaborative effort, analysed above, implies not only taking part in the making of an artwork, but also reusing already existing cultural forms as ‘prime matter’.

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<sup>131</sup> Alfred H. Barr, “Art In Our Time” in *Art in our time: an exhibition to celebrate the tenth anniversary of the Museum of Modern Art and the opening of its new building, held at the time of the New York World's Fair*, New York: Ayer Publishing, 1939, p.15.

It is a decisive step away from the ‘tyranny’ of originality –the modernist notion that one needs to start with a blank canvas or a raw material, and create something unique. Instead, nowadays “the artistic question is no longer: ‘what can we make that is new?’ but ‘how can we make do with what we have?’”<sup>132</sup>

If we were to look for the origin of these practices, we need to start with the 20<sup>th</sup> Century Avant Garde. Duchamp’s ready-mades –such as drawing a moustache over Mona Lisa, for example- are based on the idea of altering known images and using them in a new context. Similarly, the Situationist notion of ‘détournement’, which encouraged a subversive attitude to the capitalist system, by reinterpreting and decontextualizing its rhetoric and its images,<sup>133</sup> as well as the appropriation and alteration of marketing strategies by the culture jammers of the 1980s, were based on the notion of alteration of an existing system.<sup>134</sup>

So, the idea of transforming an existing image or slogan is not new. What changes now, however, is that information technologies have made the resources more accessible. In addition, image and video editing software have augmented the transformative potential of the original visual stimuli. This is also true for artists who work with software, because they base their artworks on already existing technology, altering and extending the code of a program so as to make it serve a different purpose. In other words, we often deal with a constant transformation of image and code, rather than an artwork built from scratch.

As Nicolas Bourriaud notes,

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<sup>132</sup> Bourriaud 2002, 17.

<sup>133</sup> Guy Debord relates *détournement* to the appropriation of pre-existing aesthetic elements, as a way to reveal a hidden dialogue within the poetic-artistic works and to establish a dialogue between the image and human experience. See Guy Debord. *The Society of the Spectacle*, 1983 (1967). Detroit: Black and Red, sections 206, 208.

<sup>134</sup> Wolfgang Ullrich, “Art and brands: Who learns from whom? Brands – competing with art”, in Hans-Jörg Heusser; Kornelia Imesch (ed.), *Art & Branding. Principles – Interaction – Perspectives*, Zürich: Schweizerisches Institut für Kunstwissenschaft, 2006, pp.44-48.



artists' intuitive relationship with art history is now going beyond what we call 'the art of appropriation', which naturally infers an ideology of ownership, and moving toward a culture of the use of forms, a culture of constant activity of signs based on a collective ideal: sharing.<sup>135</sup>

So, sharing information by copying or downloading is not about appropriating – defying ownership or taking something someone else owns- but about helping ideas and cultural objects circulate, morphing them into different meanings; thus one can make an impact in cultural production and political action, as we shall see.

### **3.1.3.5 The politics of the immaterial space: Information sharing as a cultural and political act**

Within the environments created by digital technologies, sharing becomes an act as important as intervening in the creative process. After all, the roles of the artist and the public have become interchangeable and shared; the public takes part in the creative process, whereas the producers or artists base a great part of their work on crowdsourcing and participation.

This two way interaction extends to any kind of content presented online: On one hand, the actions of the internet users –their preferences, their mails and their networks- are registered and analysed by the enterprises that “produce content” in order to maximise the impact of advertisement campaigns or product launches; on the other hand, internet users share, alter and download content, participating thus actively in the dissemination of information and playing a decisive role in the reception of cultural products.<sup>136</sup>

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<sup>135</sup> Bourriaud 2002, p.9.

<sup>136</sup> Jonas Andersson, “For the Good of the Net: The Pirate Bay as a Strategic Sovereign”, *Culture Machine* 10, 2009, pp.72-73.

Within a reality where personal pages and social networks allow any user to produce and disseminate data, information is becoming disassociated from the established cultural and media networks, like museums, official institutions and newspapers, whereas the public becomes an active agent in artistic and political developments.

However, a big part of the images, videos and texts that are shared online are subject to restrictions, stemming from copyright issues or the need to control information that is considered “sensitive”. As a result, the new norms of sharing and enjoying culture have triggered important financial, political and social changes.

The main slogan of the people that go against any restrictions in the dissemination of data is that “information wants to be free”.<sup>137</sup>

Under the same political umbrella of freedom online, one can find different ideologies, with elements from libertarianism, anarchist thought, the free culture movement –rebaptized nowadays into “open source”, so as to remove any political connotations- and hacker culture. In all, these political currents are described as “information age ideologies”.<sup>138</sup>

People that share the information age ideologies “talk about Internet as communication”.<sup>139</sup> Additionally, they defend their right to have access to any kind

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<sup>137</sup> Stewart Brand, *The Media Lab: Inventing the Future at MIT*, New York: Penguin Books, 1989, p.202. The phrase is attributed to Stewart Brand. Although in the original phrase ‘free’ meant costless, taken out of context, it came to represent the idea of liberty on the Internet.

<sup>138</sup> Athina Karatzogianni, “WikiLeaks Affects: Ideology, Conflict and the Revolutionary Virtual”, in Athina Karatzogianni; Dr. Adi Kuntsman, *Digital Cultures and the Politics of Emotion: Feelings, Affect and Technological Change*, ed. Basingstoke: Palgrave Macmillan, 2012, p.59.

<sup>139</sup> Rasmus Fleischer; Palle P. Torsson, “The Grey Commons – Strategic Considerations in the Copyright” (lecture, 22C3 Conference, Berlin, December 2005), [online] <<http://events.ccc.de/congress/2005/fahrplan/attachments/627-Thegreyccommons.rtf>> (accessed April 10, 2012).

of information, demanding unlimited access to cultural products and open sharing of classified documents regarding political life.

During the past two years the information age ideologies have contributed significantly to the shaping of political events, from Wikileaks to the Arab Spring, and from the foundation of the Pirate Party International<sup>140</sup> to anti-crisis protests on the streets. Although a further examination of these political events is not relevant here, it is worth highlighting that the idea of acquiring, altering and sharing data has led to important cultural and socio-political changes.

What is relevant here, on the other hand, is the emergence of ideas such as hacking, hacktivism and piracy<sup>141</sup> as ways of creation and as autonomous artistic practices.

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<sup>140</sup> The Pirate Party International was founded after the trial of the Pirate Bay in Sweden, whose founders were brought to justice for copyright infringement. The basic idea defended by the political party is the free flow of information and transparency in governing. See: [online] <http://www.pp-international.net> (Accessed: April 10, 2012).

<sup>141</sup> Although the three terms are often used within the same breath or interchangeably, there are certain differences between them. Originally used for journalism based on unorthodox methods, the term 'hack' was adopted by the early programmers to describe a creative solution reached through detours and reworking of existing systems. In this sense, hacking is synonymous with evolution in information technologies, since each development is based on the hacking of previous ones. A hacker is someone who enters a system, explores and manipulates its tools, so as to learn how it works and alter it. When this method is used as part of a political action, in order to increase political transparency and to raise awareness, we are talking about hacktivism (a neologism created from the words 'hack' and 'activism'). Although piracy simply refers to the act of leaking and sharing content, the motives can be political as well.

Despite the differences between the terms, they often imply one another –for example, 'hacktivism' could include entering a system and disseminating information. For more details, see Franz Liebl; Thomas Düllo; Martin Kiel, "Before and After Situationism – Before and After Cultural Studies: The Secret History of Cultural Hacking", in Thomas Düllo; Franz Liebl (eds.), *Cultural Hacking, Kunst des Strategischen Handelns*, Wien: Springer, 2005, p.13.

### 3.1.3.6 From code to real space: About “Cultural Hacking”

One could say that, after Beuys’ affirmation that “every person is an artist” and Warhol’s promise that “anyone can be famous”, the current revelation is that *anyone can become a hacker*.

This means that any internet user can participate in the creative act, download and share cultural content, and even transform this content into something new. This action is not only limited to cyberspace, but can extend to real space.

The idea of ‘hacking’ as a means of intervening in a space and expanding the experience of reality has gained the force of a cultural phenomenon. At the roots of this phenomenon, one can locate hacker ethics, on one hand –based on entering a “system” and altering it- and the Dadaist and Situationist actions mentioned above, on the other. From this perspective, street art, artistic actions in the urban space, as well as artworks based on augmented reality, could be considered as ways of hacking in the urban matrix.

‘Cultural hacking’, in parallel to the generalized use of the term ‘hacking’, implies entering a system, learning how it works and creating something new out of it. Summing up its features, Franz Liebl, Thomas Düllo and Martin Kiel noted that it is about orientation and disorientation, seriousness and playfulness, bricolage and experimentation, radicalization of the original idea, intervention onto a system and dissemination.<sup>142</sup>

So, hacking as a practice is intrinsically linked to cultural production:

Hackers create the possibility of new things entering the world. [...] In art, in science, in philosophy and culture, in any production of knowledge where data can be gathered, where

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<sup>142</sup> Liebl, Düllo and Kiel 2005, pp.28-30.

information can be extracted from it, and where in that information new possibilities for the world are produced, there are hackers hacking the new out of the old.<sup>143</sup>

Contemporary artistic practice often encourages people to undertake political action online or to expand their cultural knowledge by hacking. The artworks that are based on hacking –as an artistic medium, as a cultural practice or as a subject- reflect the emergence of alternative ways of (re)acting within the social frame and outline a different future for art and politics. At the same time, they highlight how the immateriality of the virtual space is constantly transformed into new meanings.

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<sup>143</sup> Wark McKenzie, *A Hacker Manifesto*, Cambridge, MA: Harvard University Press, 2004, p.2.

### 3.2 Transformations of the immaterial: From conceptual art to augmented reality

*Each second, each breath is a work  
which is inscribed nowhere,  
which is neither visual nor cerebral.*

Marcel Duchamp<sup>144</sup>

#### 3.2.1 Immateriality in art before the emergence of digital technologies

The first steps towards the immaterial in visual arts could be dated to the beginning of the 20th century, when artists began to break away from the canvas frame or the pedestal, placing more emphasis on expression and pure form than narrative.<sup>145</sup>

In Kasimir Malevich's *Black Square* (1915) and *White On White* (1918) the subject of the artwork and the materiality of the painting give way to pure abstraction; for the painter the white field was synonymous with the *void* behind the feeling represented by the black colour.<sup>146</sup> [Figures 1, 2]

Beyond the materiality of the canvas, Marcel Duchamp experimented with transparency in his *Large Glass* (1915), where the arbitrariness of the cracks on the glass is embraced as part of the artwork. He then elevated artistic action and the initial idea of the artist to the status of a completed artwork, with his *Fountain* (1917). A few years later, he created his "ready-made" *50 cc of Paris Air* (1919), an empty glass recipient; a tribute to emptiness, highlighting that the work of art is the

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<sup>144</sup> Pierre Cabanne, *Dialogues with Marcel Duchamp*. London: Thames and Hudson, 1971, p.72.

<sup>145</sup> Website of the thesis *Art-Breath* [online] <<http://art-breath.com/immateriality-in-art>> (Accessed: February 6, 2013)

<sup>146</sup> Kasimir Malevich, *The Non-Objective World*, Dover Publications, 2003, p.76.

air inside the recipient; this reminds us of the theories of Aristotle and Heidegger about the void, which shall be mentioned ahead.<sup>147</sup> [Figures 3, 4]

The experimentation with the Immaterial in visual arts could be paralleled with John Cage's experimentations with noise and silence. In 1951 Cage entered an *anechoic chamber* -a room where all sounds are absorbed- expecting to experience absolute silence; however, he came across a repeated sound, which was coming from his own body: it was the sound of his nervous system and his blood in circulation.<sup>148</sup> It is important to keep this anecdote in mind, when we study how the immaterial worlds of virtual and augmented reality bring forth a new experience of the body; in the case of Cage, his quest for absolute silence lead him to an environment where the only sounds he could hear were coming from his body, helping him sense what usually goes unperceived.

This experience acted as a catalyst in the composition of *4'33"* -a musical piece where the only element defined is the duration. During the performance of the musical piece the musicians are not expected to make any sound; yet, there is no silence: someone in the audience coughs, another one drags his feet across the floor, another one whispers. In *4'33"* (1952) the audience turns from listener into the performer of the musical piece, participating actively in the composition of the piece.

Thus the composer makes us realize that listening to a piece of music is a time-based experience, deeply impacted by the random sounds that surround or come from the audience. John Cage notes that "Thanks to silence, noise -not just as selection of

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<sup>147</sup> See p.203 of the thesis.

<sup>148</sup> John Cage, *Silence: Lectures and Writings*, Middletown, CT: Wesleyan University Press, 1973 (1961), p.8.

certain noises, but the multiplicity of all noises that exist or may occur- makes a definitive entrance into my music”.<sup>149</sup>

It was not until the emergence of conceptual art in the 1960s that the Immaterial and the Void came into strong focus in visual arts, with an emphasis on the idea, rather than the visual form of the work. For Sol LeWitt “the idea or concept is the most important aspect of the work [...] The idea becomes the machine that makes the art”.<sup>150</sup> As we have previously mentioned in this chapter, focus on the concept enabled a *dematerialization* of the art object, meaning that even though the works still have a certain materiality, it always retreats behind the main idea or action that constitutes the artwork *per se*.

Yves Klein attempted to break free from matter with his constant research on the subject of the void. In his work and his writings we see that the void is used almost synonymously with immateriality. Although we’ve highlighted that the immaterial is not void, but full of meaning and ideas, it is interesting to follow Yves Klein’s attempts towards the immaterial to see how he tried to bring it into focus.

After being initiated to the Japanese philosophy, which considers the void as one of the basic elements of the world -alongside with water, fire, earth and air- Klein incorporates it into his art as basic expressive means.

At first he approaches it through his monochromes, where any sign of pictoriality is gradually diminished, until there is nothing left but a deep blue, that became known as the International Klein Blue (I.K.B.).

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<sup>149</sup> Brandon Labelle, *Background Noise: Perspectives on Sound Art*, New York and London: Continuum Publishing Group, 2006, p.14.

<sup>150</sup> Sol Le Witt, “Paragraphs on Conceptual Art”, *Artforum* 5, no.10 June 1967, p.79.



Hence, Klein could be viewed as one of those poets “who can truly participate in the aerial nature of celestial blue”<sup>151</sup> by creating an all-encompassing world made of I.K.B. –thus becoming a poet in the original sense of the word: *a creator*.<sup>152</sup>

Stepping away from the pictorial space, he dreams of seas, fields, nuclear explosions, the entire surface of France coloured with his favourite tone of blue. Somehow materializing Gaston Bachelard’s famous words that “First there’s nothing. Then there is a deep nothing, then there is a blue depth”<sup>153</sup> –but in a reverse order-, after delving into the blue depth, Klein moves on to a more profound study of the void.

Initially he tries to conquer it by subtracting content from form: painting without lines, then without colour and in the end the painting is missing altogether. For his 1958 exhibition *The Specialization of Sensibility in the Raw Material State into Stabilized Pictorial Sensibility, The Void* (La spécialisation de la sensibilité à l’état matière première en sensibilité picturale stabilisée, Le Vide, 1958)<sup>154</sup> he leaves the gallery space empty; claiming that his paintings were invisible he lets the audience face the void. In a similar way to John Cage’s *4’33”*, where the only sound of the musical piece was produced from the audience, in Klein’s exhibition the only visual stimuli came from the visitors who filled the gallery space. [Figure 6]

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<sup>151</sup> Gaston Bachelard divides poets into “four classifications by their response to the single theme of the celestial blue:

Those who see in an immobile sky a flowing liquid that comes to life with the smallest cloud.

Those who experience the blue sky as though it were an enormous flame –“searing” blue [...]

Those who contemplate the sky as if it were a solidified blue, a painted vault –“compact and hard azure” [...]

Finally, those who can truly participate in the aerial nature of celestial blue”. See Bachelard 1988, p.161.

<sup>152</sup> The word *poet* comes from the greek word *poietis*, which means *poet* and *creator* at the same time (from the verb *poiein* – to create).

<sup>153</sup> Bachelard 1988, p.168.

<sup>154</sup> Exhibition in the Iris Clert Gallery, Paris, France, 1958.

A year later, he managed to convert the Void into gold –almost like an alchemist: he sold to collectors seven *Zones of Immaterial Pictorial Sensibility*, that is, absolutely nothing, in exchange for gold; he then destroyed the receipts and scattered the gold, returning back to nothingness. [Figure 7]

But the void remained vast and unexplored. Thus his research lead him to propose a theatre without a play, with the doors closed and the actors without roles, to write music with one note and symphonies without sound –in line with John Cage’s experimentation with silence- or even to organise an entire Festival of the Void and propagate it through a special edition in the form of a newspaper; on the front page a photomontage of Klein himself leaping into the void (*Saut dans le vide*, 1960). [Figure 5]

“The painter of space leaps into the void!” reads the title, and underneath Klein’s statement: “I am the painter of space. I am not an abstract painter but, on the contrary, a figurative artist, and a realist. Let us be honest, to paint space, I must be in position. I must be in space”.<sup>155</sup>

Somehow he made it; instead of falling down, he remained hovering in an image that holds all the dynamic of leaping into the void. Klein’s leap into the void becomes the symbol of the artist’s brave effort to get to know to the world and to transform it as a whole.

If the conceptual artists of the 1960s could escape matter only moving towards the idea, technology has opened up more possible routes. Contemporary artists can savor this infinite and open space, which was visualized by Klein, by creating a world of code, where new experiences and identities are formed.

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<sup>155</sup> Klein 2007, p.106.

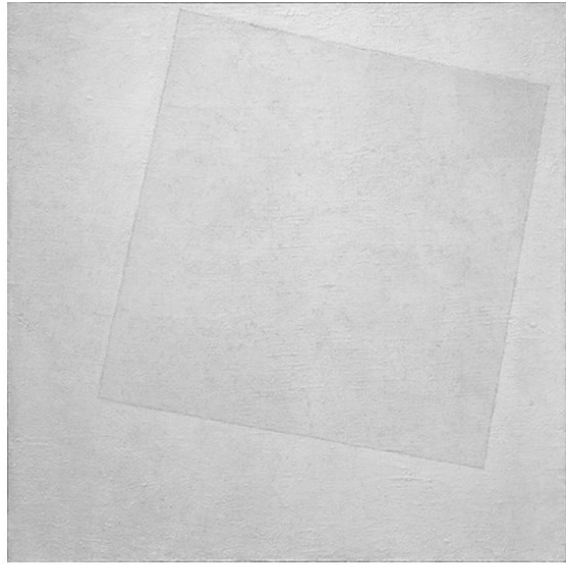
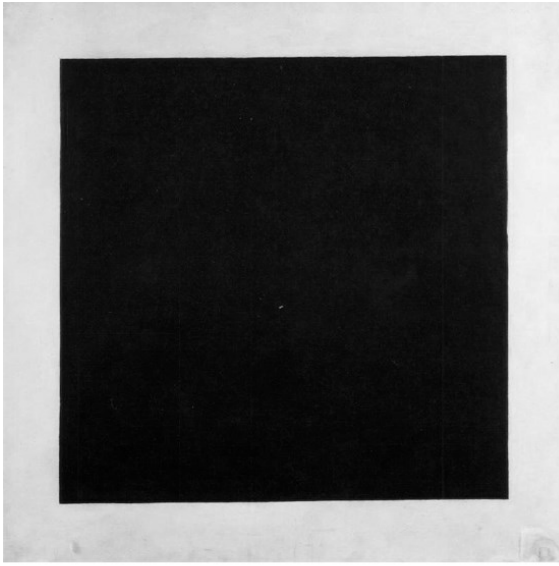


Figure 1. Kazimir Malevich, *Black Square*, 1915. Oil on Canvas, The State Tretyakov Gallery, Moscow.

Figure 2. Kazimir Malevich, *White on White*, 1918. Oil on Canvas, Museum of Modern Art, New York.

Figure 3. Marcel Duchamp, *The Bride Stripped Bare by Her Bachelors, Even (The Large Glass)*, 1915-23. Oil, varnish, lead foil, lead wire, and dust on two glass panels, Philadelphia Museum of Art, Philadelphia.

Figure 4. Marcel Duchamp, *50 cc of Paris Air*, 1919. Glass ampoule (broken and later restored), Philadelphia Museum of Art, Philadelphia.

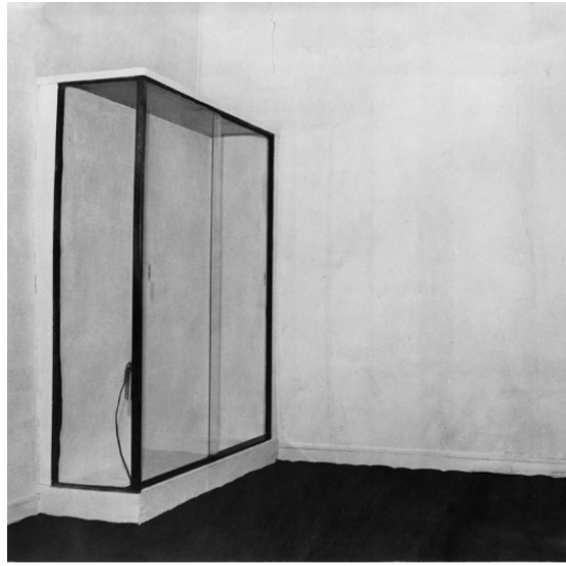


Figure 5. Yves Klein, *Le Saut dans le vide*, 1960. Photomontage by Shunk Kender of a performance by Yves Klein at Rue Gentil-Bernard, Fontenay-aux-Roses.

Figure 6. Yves Klein, *La spécialisation de la sensibilité à l'état matière première en sensibilité picturale stabilisée, Le Vide*, 1958. Galería Iris Clert, Paris, France.

Figure 7. Yves Klein, *Zone de Sensibilité Picturale Immatérielle*, 1959-1962. Artist's book and performance.

### 3.2.2 Char Davies: Bridging the body/mind split

From the day it was first presented until today, Char Davies' *Osmose* (1995)<sup>156</sup> has become the subject of approaches from multiple points of view, such as Phenomenology, Aesthetics and the Theory of Reception.<sup>157</sup> [Figures 8, 9]

The work was very innovative for its time, in the sense that it created an environment where the participants could feel fully immersed, with their body and mind, breaking away from the habitual paths of Virtual Reality.

At the end of the twentieth century the prevailing notion about virtual reality included a Cartesian space, where the mind is in charge and the body is simply a shell for the brain, as we saw in the example of *Neuromancer*.<sup>158</sup> Davies rejected this notion drastically; believing that “it’s important that we reaffirm the body, reassert our materiality”<sup>159</sup> within the virtual spaces, she created an environment where the

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<sup>156</sup> Website of the thesis *Art-Breath* [online] <<http://art-breath.com/char-davies>> (Access: February 6, 2013)

<sup>157</sup> Exhibition Dates:

1995, *Osmose, code*. Ricco-Maresca Gallery, New York City, NY, USA.

1995, *Osmose*. *Osmose* (solo exhibition). Musée d'art contemporain de Montréal, Montréal, Canada.

2002, *Osmose* and *Ephémère*, Biennale of Electronic Arts, John Curtin Gallery, Curtin University of Technology, Perth, Australia.

2003-2004, *Osmose* and *Ephémère*. “Transfigure”, Screen Gallery, Australian Centre for the Moving Image (ACMI), Melbourne, Australia.

2004, *Interior Body Series*. “Art&D: A Showcase of Digital Art Research”, [SAT] Society for Arts and Technology, Montreal, Canada.

2007, *Osmose*. “Feedback”, Laboral Centro de Arte y Creación Industria, La Universidad Laboral, Gijon, Spain.

2007, *Osmose* and *Ephémère*. “New media: when”, Neuberger Museum of Art, Purchase College, State University of New York, USA.

2009 *Osmose* and *Ephémère*. “Shared Spaces”, curated by Natasha Chuk. Online at <<http://www.nocommercialvalue.org>>

<sup>158</sup> Char Davies, “Landscape, Earth, Body, Being, Space, and Time in the Immersive Virtual Environments *Osmose* and *Ephémère*”, in J. Malloy (ed.), *Women, Art and Technology*, Massachusetts: The MIT Press, 2003, p.326.

<sup>159</sup> Mark J. Jones, “Char Davies: VR Through Osmosis”, *CyberStage*, 1995, vol. 2:1, Fall, 24-28.

users, or rather, the ‘immersants’ as she named them, navigate with their body, by leaning slightly or changing their breath rhythm. This way, there is no distance between the world and the person who observes it, as there is usually with computational devices that are operated by a joystick or a mouse. Therefore, one can see that,

The more intensely a participant is involved, interactively and emotionally, in a virtual reality, the less the computer-generated world appears as a construction: Rather, it is construed as personal experience.<sup>160</sup>

This principle foreshadows contemporary mobile devices and video games that try to follow the user’s movements and lifestyle, as was mentioned above.

As a first step of being ‘immersed’ into the world of *Osmose* the visitors needed to wear a head-mounted display and a motion tracking vest. This transferred them to a virtual space, where the navigable landscape balanced with subtle music; image, music and code emerged as a new kind of poetry composing an encompassing environment. Moving within it created a feeling of floating into water, which was the prime source of inspiration for the artist, an experienced diver; below the surface of the sea, one can move by controlling one’s breath, like in the virtual environment created.

The landscape of *Osmose* is dominated by a virtual tree, a pond, a space with fragments of text by thinkers such as Bachelard, Heidegger and Rilke, and colossal columns with code –the actual program code for the work.

It seems like a transparent building, where the structure is visible: *Osmose* is founded on the ideas of these thinkers, which are transformed into a new world, via the creative power of code. Hence, it illustrates the arguments presented above about hypertext, which is a fluid text, open to change, without a linear narrative; the

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<sup>160</sup> Grau 2003, p.200.

fragments are selected based on context, evolving from one idea to another according to their meaning. On the other hand, reading a text –especially when it’s recited out loud- can have a significant impact on the body, as we shall see.<sup>161</sup>

Seeing the code that lies behind the virtual environment brings us back to the immaterial foundations of the artwork, which is built on algorithms instead of matter. It is a world of immense potential, fluid and open to change.

In order to control their journey the “immersants” had to change their breathing rhythm –steady for a smooth journey and faster for a more rapid one- and lean slightly on one side or the other. This way, the artwork stimulated a mutual interaction between the body and the environment: while the body controlled the journey within the virtual landscape, by leaning and breathing, the images the “immersants” came across could in turn have an impact on their emotional state, thus altering their breathing and changing the experience of their journey.

*Osmose* is revealed to the visitor as an inner space for self-reflection, rather than a work of art to admire from a distance. The users note that they experienced the immersive space as ‘contemplative, meditative peace’.<sup>162</sup> This is largely due to the use of breath and body movements as means of navigation; as in Eastern meditation techniques, which are based on breath and body balance, the process of controlling the body functions and movements can put one in a different state of mind.

Even the participants who got a feeling of panic at first were eventually soothed by the experience of the virtual journey: “I had vertigo when looking down [...] After the initial panic, it was amazing and relaxing”, said one of the participants.<sup>163</sup> Such a reaction is normal for someone who experiences a completely unknown space where the laws of nature do not apply; but as the body learns the ‘laws’ of the virtual

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<sup>161</sup> See pp.282-283 of this thesis.

<sup>162</sup> Grau 2003, p.199.

<sup>163</sup> Ibid.

space and becomes familiarized with the new environment through experience, the participant manages to relax. This procedure helps us see how we learn and understand an environment through experience on a daily basis.

Although the users' observations about a feeling of being 'gently cradled' and being put in a trancelike state have a very intimate character, the overall reception of *Osmose* shows that the work is still open to a broader public;<sup>164</sup> as the visitors observe the back-lit silhouette of the 'immersant' along with the images of his or her journey through the virtual space, the work becomes a collective experience.<sup>165</sup>

*Ephémère* (1998)<sup>166</sup> is an exploration of the same values, of a phenomenological approach to the body and mind; this environment, however, is constructed with images of the earth and the interior body. The "immersants" were transferred into a virtual space, where they could navigate by breathing; each inhalation would levitate them into a landscape and each exhalation would drop them towards the earth and underneath its surface, which transformed into a living body, with pulsating organs. In parallel to this 'vertical' movement, the landscape goes through

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<sup>164</sup> For more on *Osmose* see Laurie McRobert. *Char Davies' Immersive Virtual Art and the Essence of Spatiality*, Toronto: University Studio Press, 2007.

<sup>165</sup> Edwina Bartlem, 'Reshaping Spectatorship: Immersive and Distributed Aesthetics', en *The Fibreculture Journal*, issue 7. 2005, [online] <<http://seven.fibreculturejournal.org/fcj-045-reshaping-spectatorship-immersive-and-distributed-aesthetics>> (Accessed: November 25, 2011).

<sup>166</sup> Exhibitions:

2009 *Osmose* and *Ephémère*. "Shared Spaces", curated by Natasha Chuk. [online] <<http://www.nocommercialvalue.org>> (Accessed: September 10, 2011)

2007, *Osmose* and *Ephémère*. "New media: when", Neuberger Museum of Art, Purchase College, State University of New York, USA.

2003-2004, *Osmose* and *Ephémère*. Exhibition, "Transfigure", Screen Gallery, Australian Centre for the Moving Image (ACMI), Melbourne, Australia.

2002, "Osmose and Ephémère", Biennale of Electronic Arts, John Curtin Gallery, Curtin University of Technology, Perth, Australia.

1998, *Osmose* and *Ephémère*, 010101: Art in Technological Times, San Francisco Museum Of Modern Art, San Francisco, CA, 2001.

*Ephémère*. *Ephémère* (solo exhibition). National Gallery of Canada, Ottawa, Canada.



the circles of day and year, from dusk to dawn and from summer to winter, with each visible element holding the potential –when gazed for a long time– to transform into other landscapes. The river also changes from a stream to an artery or vein, the rocks become pulsing body organs, finally turning into ashes and dust.<sup>167</sup> [Figures 10, 11]

Those constant transitions of the images reflect the mind’s mechanism of projection; according to E. H. Gombrich, the mechanism of projecting familiar images into vaguely similar shapes can be traced at the root of artistic creation. Based on psychological tests, the treatise of Alberti about art and historical observations –for example the fact that people have always recognized images in constellations, clouds or rock surfaces– Gombrich highlights the inherent mechanisms existing in the human mind, which enable it to read a constructed image as a representation of the world.<sup>168</sup>

If we keep this theory in mind, we can see how this potential of the human brain to recognize familiar things in abstract images is maximised within a fluid virtual environment such as that of *Ephémère*, where everything is intentionally left ambiguous.

The role of the body is not to control the virtual world, but to connect to it. The means of exploring the possibilities within this environment is body balance, gaze steadiness and breath:

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<sup>167</sup> See Patrick McDonagh, “Char Davies’ Ephémère”, *SoftImage Online*, 1998 [online] <<http://www.immersence.com/publications/1998/1998-PMcDonagh.html>> (Accessed July 10, 2011). Also Char Davies, “Ephémère: Landscape, Earth, Body, and Time in Immersive Virtual Space” in Roy Ascott (ed.), *Reframing Consciousness*. Exeter, England and Portland, OR: Intellect Books (1999) pp. 196-201 and Char Davies, “Changing Space: Virtual Reality as an Arena of Embodied Being” in John Beckman (ed.), *The Virtual Dimension: Architecture, Representation, and Crash Culture*, New York: Princeton Architectural Press, 1998, pp. 144-155.

<sup>168</sup> Ernst Hans Gombrich, *Art and Illusion: A Study in the Psychology of Pictorial Representation*, London: Phaidon, 1977, pp.89-91.

This reliance of breath and balance is intended to reaffirm the role of the living physical body in immersive virtual space, as subjective experiential ground. It is also intended to act as a channel of communion rather than as a tool of control. As in meditation, the practice of following one's breath and being centered in balance opens up a profound way of relating to the world.<sup>169</sup>

At the same time, the use of balance as a means of navigating into a virtual world can also have an impact on the user's state of mind; as Drew Leder notes "When we are properly centered, our experience of Being is in equilibrium. Being well-centered, we can encounter other beings in a more open, receptive way".<sup>170</sup> Therefore, we can change our concentration and the way we relate to others by altering the balance of the body.

Davies places the images of the interior of the body in the lowest level of the landscape, underneath the surface of the earth; thus she indicates that the body is the substratum of all experience, of all perception. At the same time, the artwork is based on biofeedback technologies, which capture data from the body, measure it and translate it into sounds and images. The use of biofeedback technologies helps the participants concentrate on their corporeity, finding a synchronicity between the images they come across during the 'journey' and the respective changes in their body. Thus, they come to a better understanding of corporeal functions –such as eye movements and breath rhythm- that usually go unperceived.

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<sup>169</sup> Davies 2003, p.333.

<sup>170</sup> Leder 1990, p.178.

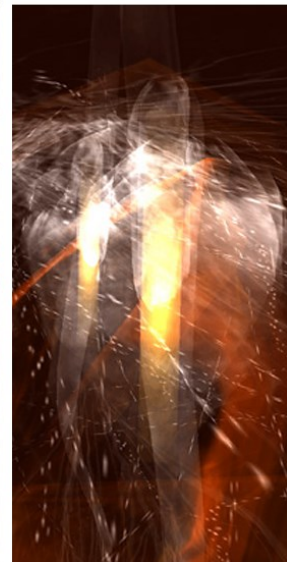
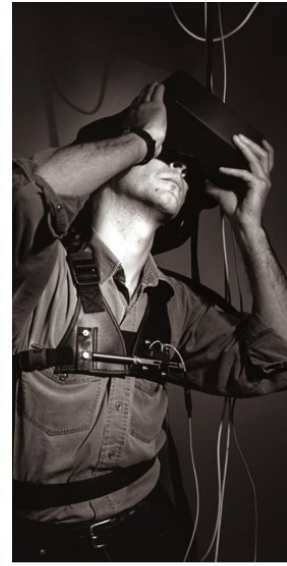
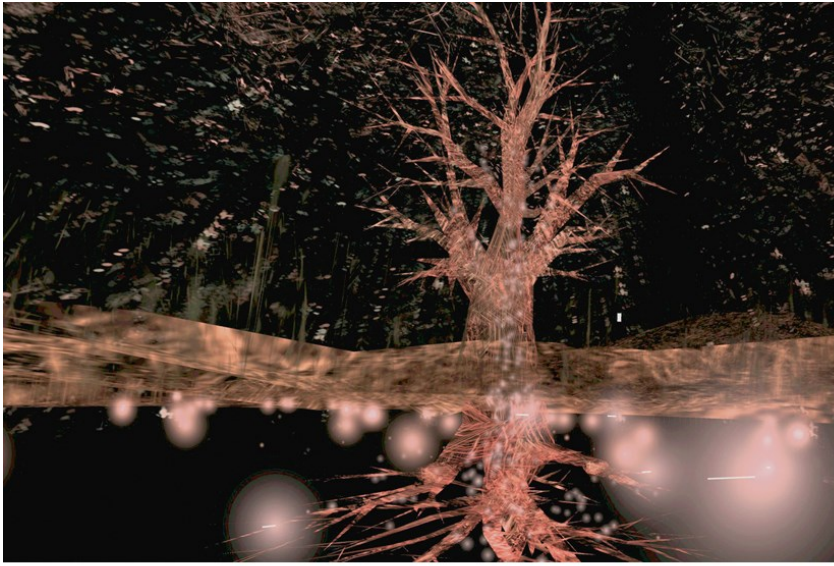


Figure 8. Char Davis, *Osmosis*, 1995. Interactive virtual reality environment.

Figure 9. Char Davis, *Osmosis*, 1995. Interactive virtual reality environment.

Figure 10. Char Davis, *Ephémère*, 1998. Interactive virtual reality environment.

Figure 11. Char Davis, *Ephémère*, 1998. Interactive virtual reality environment.

### 3.2.3 George Khut: A colourful reflection of the inner body

George Khut<sup>171</sup>, like Davies, aims to annihilate the distance between the body and the mind; his work is based on biofeedback technology, which measures the heartbeat and breath of the participants and transforms the collected data into sound and images.

His research on breath and heart rate is reflected in works such as *Drawing Breath v.1* (2004) and *v.2* (2005-2006), *Cardiomorphologies v.1* (2004) and *v.2* (2005-2006), *Res'onance Body [Box]* (2003) and *The Heart Library* (2007-2009). These works are all based on the control of audio-visual patterns on screen through breathing and heart rate, varying in the way they project the unity of body and mind. [Figures 12, 13, 14]

*Drawing Breath v.2* (2005-2006)<sup>172</sup> is an interactive installation activated by the breathing rhythm of the participant. Breath is captured via a sensory belt and transmitted onto a screen in the form of abstract lines, which expand during inhalation and become minimal during exhalation. The simple graphics reflect the gush of air that fills the body with each breath, forming a captivating image. The users could alter the graphics consciously by altering their breath.

An interesting dimension to the work is its breath-activated spoken word soundtrack; as the users breathe, they hear a text in Mandarin and in English, which flows according to their breathing rhythm. The voice at times counts the breaths

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<sup>171</sup> Webpage of the thesis *Art-Breath* [online] <<http://art-breath.com/george-khut>> (Accessed: February 6, 2013).

<sup>172</sup> Exhibition dates:

2006, "Drawing Breath: Triptych", exhibition "Strange Attractors", Zendai Museum of Modern Art, Shanghai, China.

2006, "Drawing Breath v.2" exhibition "Open Letter", Metropolitan Museum, Manila, Philippines.

2006, "Drawing Breath v.2" exhibition "Open Letter", National Art Gallery, Kuala Lumpur, Malaysia.

2005, "Drawing Breath v.2" exhibition "Open Letter", National Gallery, Bangkok, Thailand.

2004, "Drawing Breath v.1" exhibition "Asian Traffic: Phase 5", Gallery 4A, Sydney, Australia.

and at times recites phrases related to breath. Via this soundtrack, the artist manifests how breath is used as a metering device during poetry recitation, whereas the counting of breaths refers to a basic tool of meditation, used as a way of training attention.<sup>173</sup>

The interrelation between poetry recitation and breathing rhythm is demonstrated in medical research, as we shall see. Similarly, the link between breath and meditation techniques will be analysed further.<sup>174</sup> Therefore, as we proceed through our analysis into how interactive art projects the body and mind unity, and how it constitutes a form of expression based on experience –rather than matter- it is important to keep these artworks in mind.

In *Cardiomorphologies V.2* (2005)<sup>175</sup> the visitors are invited to sit on a reclining chair, where they have their heartbeat activity monitored through a hand-held device and their breathing measured by a pressure-sensitive strap placed around the ribs. The collected data are analysed into abstract colours and circles on a screen in front of them, while the sound of their heartbeat and breathing is transmitted through headphones.

As in *Osmose*, there is a two-sided communication between the participant and the artwork; the images on the screen reflect the participant's mood, yet they can also have an impact on it. For this matter, the participants can either sit and observe, or try to control the visuals actively by changing their breathing and their emotional state consciously.

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<sup>173</sup> Khut 2006, pp.134 and 136.

<sup>174</sup> See pp.282-283 of this thesis.

<sup>175</sup> Exhibitions:

2005, Beta\_space Gallery, Powerhouse Museum Sydney, Australia.

2006, *This Secret Location*, Exhibition curated by Helen Cole, Inbetween Time Festival of Live Art & Intrigue, Arnolfini, Bristol, Great Britain.

2007, *I Took a Deep Breath...*, Perth Institute of Contemporary Art, curated by Hannah Matthews as part of Biennial of Electronic Arts, Perth, Australia.

George Khut designed *Cardiomorphologies v.2*, considering the public's experience within each stage of the work's development. As he notes,

My goal through this process was to create a work that allowed participants to explore the embodied nature of their subjectivity through a detailed and sustained focus on their own breathing and heart rate patterns.<sup>176</sup>

That is to say, the artist is primarily concerned with helping the participants gain a new vision of their body functions, and understanding their body and mind as a whole. Thus, the work fulfilled the intention of the artist “to facilitate considerations of body-mind continuities, grounded in the reality of our moment-to-moment experience of ourselves as physiologically embodied subjectivities”.<sup>177</sup>

As we see from the artist's words, George Khut also shares the phenomenological view of the unity of body and mind. Unlike *Osmose*, *Cardiomorphologies v.2* is not an immersive environment, but an interaction from a distance. Still, from the reception of the work we realize that this distance was not of much difference to the participants. On the contrary, they perceived the visuals as a real reflection of their inner feelings and thoughts: for example, one of them claimed that the lights were going out when he thought about his girlfriend, or another one saw the soothing visuals as an effect of his inner calmness. There were users that tried to control the visuals by altering their breathing, describing the process as a ‘joyful experience’, while some others noted that the rhythm of the visuals had an impact on their breathing.<sup>178</sup>

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<sup>176</sup> Khut 2006, p.148.

<sup>177</sup> Khut 2006, p.174.

<sup>178</sup> For more details about the reception of the work, see Lizzie Muller; Greg Turner; George Khut; Ernest Edmonds, “Creating Affective Visualisations for a Physiologically Interactive Artwork”, in *Proceedings of the 10th International Conference of Information Visualisation*, Los Alamitos, California: IEEE Computer Society, 2006, pp.651-658.

Another interesting aspect in the reception of the artwork was that although it was primarily a user-to-screen interaction, not designed to be shared by a group of people, the audience overrode this limit by gathering around the participant and viewing the patterns, which they considered to be a key in understanding the user's emotional state.

Whether it is the novelty of interactive art or a deeply rooted idea, that technology is a tool of communication, the users are fond of acting as a group when being present in such exhibitions.

In *The Heart Library Project* (2008)<sup>179</sup> the biofeedback technology returns to the place where it is usually applied: the installation took place in a hospital, manifesting the connection between the state of the mind and the body in a particularly prominent way. In this interactive installation, the participants would rest on a bed, with their heart rate monitored; initially, they would look onto a reflection of themselves on the ceiling, that would become gradually altered by ripples –as if it were reflected on the surface of water- and by a multi-layered field of coloured spots. These changes reflect the changes in the heart rhythm of the participants, inviting them to contemplate on the link between their emotional state and subtle physical changes in the body and challenging them to control the interaction by evoking different kinds of memories. After the interactive experience, the participants could share their experience by participating in a hand painted experience map. As the description of the project stresses, “The Heart Library

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<sup>179</sup> Exhibitions:

2007, Performance Space (creative development residency) “The Living Room Project”, Australia

2008, “Enfoldings and Disclosures” exhibition with Lisa Jones, UTS Gallery, Sydney NSW.

2008, “Mirror States” group exhibition, Campbelltown Art Centre (NSW) and Moving Image Centre (NZ).

2009, The Heart Library Project: St. Vincent's Public Hospital, Darlinghurst (NSW).

2012, “Wonderland” group exhibition, Museum of Contemporary Art (MoCA) Taipei (TW).

Project celebrates the human body as a felt experience – a body informed by life experiences, worldly relations, and personal motivations.”<sup>180</sup>

The place of the installation is significant; in hospitals the body often becomes objectified as it scanned, observed and analysed during medical exams. On the contrary, in Khut’s installation the participant has a certain control over the action and the installation becomes a bridge between the body and the mind. This way, the work of art can help through the healing process.<sup>181</sup>

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<sup>180</sup> The Heart Library” [online] < <http://georgekhut.com/projects/heartlibrary>> (Accessed: December 10, 2011)

<sup>181</sup> In regard to art as a healing method, one should also keep in mind Lygia Clark’s Therapeutical Objects that are presented in the fourth chapter (see pp.215-220 of this thesis). Also, the phenomenological approach in healing is further explained in the next chapter, in regard to breathlessness (see pp.202-207 of this thesis).



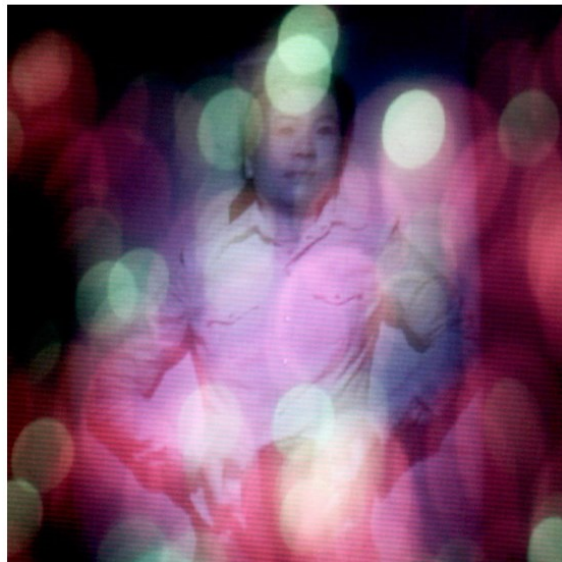
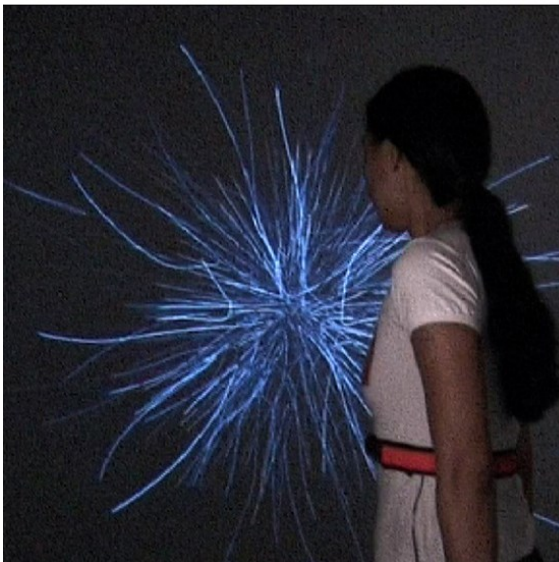
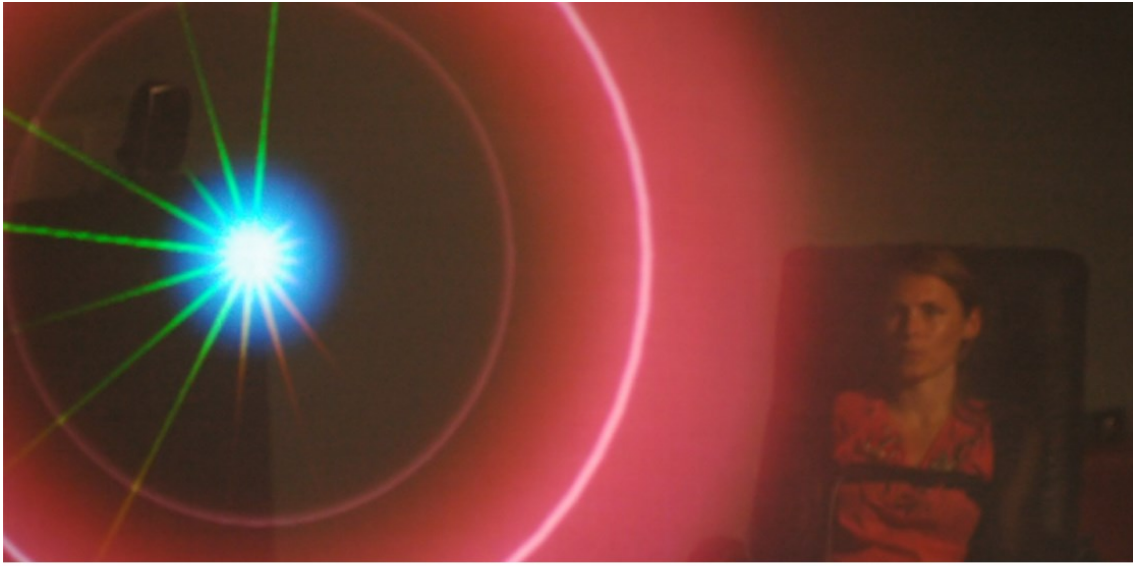


Figure 12. George Khut, *Cardiomorphologies v.2*, 2004-2005. Interactive installation.

Figure 13. George Khut, *Drawing Breath*, 2004. Interactive installation.

Figure 14. George Khut, *The Heart Library Project*, Interactive installation.

### **3.2.4 Christa Sommerer and Laurent Mignonneau: Exploring new means of communication**

Christa Sommerer and Laurent Mignonneau's work<sup>182</sup> illustrates the alliance between art, technology and science. Their diverse backgrounds –art and computer graphics for Sommerer and sculpture and biology for Mignonneau- have equipped them with the theoretical and technological skills to expand their knowledge into different fields of interdisciplinary research, creating artworks based on a fusion of the real world with the digital.

An important part of their work focuses on the creation of artificial life forms that evolve and breed within an interactive environment, which depends as much on code, as on the actions of the participants. This code is inspired by the genetic code of real life forms, and as such, it is subject to the rules and necessities of the real world, adopting biological mechanisms such as growth, reproduction, mutation, adaptation and intelligence. At the same time, the digital code is the result of programming, a mind construction based on mathematics, which can be extending infinitely, depending on the knowledge and imagination of the artists.

In other words, it is the artists who designate the diverse forms the artificial life can take, the possible mutations, the sources of energy it will use, and the way it will breed and eventually die. In this dialogue between the dictations of the real world and the imagination of the artists, the participants are encouraged to intervene, granted with the power to decide which life forms will remain active and which ones will recede into a state of non-existence.

Thus evolves a complex dialogue and a strong interdependence between the digital world and the real world, between the artist, the artwork and the audience.

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<sup>182</sup> Website of the thesis *Art-Breath* [online] <<http://art-breath.com/sommerer-mignonneau>> (Accessed: February 6, 2013)

In order to see how these relations evolve, we will have a look into *PICO\_SCAN* (2000),<sup>183</sup> an artwork that aims to analyse body data coming from the participant and link it to artificial life creatures. The interface of the artwork includes a screen and a small scanner, equipped with a video camera and sensors that capture distance, colour, touch and position. At first, when the users hold the scanner at a certain distance, they see a projection of their image on screen. If, however, they move the scanner closer, this projection is fused with artificial life creatures, that interact with their image. As these creatures ‘feed’ on the pixels of the image –each one having its own designated preferences on a specific colour of pixels– groups of creatures move onto different parts of the image, in order to ‘eat’ their pixels of preference. The creatures that get enough energy from the pixels of their preference are in the position to ‘breed’, producing new creatures that have the same genetic code as their ‘parents’. [Figures 15, 16]

As a consequence, the participants are granted with the authority to influence the growth and reproduction of the artificial life forms, by moving the scanner onto different parts of their bodies, and thus providing the environment with different types of pixels to be ‘consumed’. At the same time, they come across a new reflection of their image, fused with technology.

Sommerer and Mignonneau stress that they ‘aim to create artworks that can interpret and visualize the users’ interaction’.<sup>184</sup>

From a more generalized point of view, the simulation of artificial life projects the individual as part of a universe that can only be explored through observation and movement. However, it is an observation from a subjective point of view, since we

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<sup>183</sup> Exhibition: 2001, Martin Gropius Bau –“ImageCurators and Signs of the 21st Century,” interactive installation *PICO\_SCAN*, Berlin, Germany

<sup>184</sup> Laurent Mignonneau; Christa Sommerer, ‘*PICO\_SCAN* - using body data to create artificial life forms’, in *AROB5th International Symposium on Artificial Life and Robotics Conference Proceedings*, Oita: Oita University, Japan, 2000, pp.124-127.

cannot observe ourselves and our surroundings from an external position, as was mentioned above. Our body image, malleable by the use of technology, changes incessantly, through the frame of the program and the impact of our own decision to interact with it.

In *PICO\_SCAN* the artwork becomes the point where the artificial environment of the computer, which is governed to a certain extent by the laws of nature, merges with the image of the user; the results of this merging are as unpredictable as is interaction within the real world. It is a world that is constructed by a combination of code –an abstract construction– with biology, shaped by the will of the artist and the audience.

The two artists are also concerned with the issue of communication, approaching it with a strong focus on the body. Interacting with others via technological devices is taken for granted in today's reality; mobile technology and the internet have imposed a new social rule, that one needs to be within reach at any time; in addition, the evolution of social networks has created the urge to share intimate thoughts and private information with a large group of people.

It is certain that these advents have enhanced human communication, however, among the images and words exchanged there's an important part of communication that is being lost. This part is intimate contact and the impact of one's presence.

Christa Sommerer and Laurent Mignonneau sought a way to recover this communication in *Mobile Feelings II* (2003)<sup>185</sup>; the artwork is comprised by small

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<sup>185</sup> Exhibitions:

2004, *Microwave Media Art Festival*, Hong Kong.

2004, *European Media Art Festival*, Osnabrueck, Germany.

2005, *STUK Festival*, Leuven, Belgium.

2005, *Wired Next Fest '05*, Chicago Navy Pier, Chicago, USA.

2010-2011, *EXTIMACY - Art, Intimacy and Technology*, ESBALUARD Contemporary Art Museum Palma, Spain.

handheld devices that capture and transmit breathing and heart rate, by means of a combination of electromechanical actuators, vibrators and fans. The breathing rhythm and heart pulsation of the person holding the device is transferred to a device held by another user, by being transformed into a light breeze and a pulsing light respectively. [Figure 17, 18]

The artwork highlights the role of non-verbal communication, which is often intuitive and less premeditated than speech. It also encourages the participants to focus on touch, as the reception of the artwork showed. Some people who experimented with the work said it was a good ‘flirting tool’, as it allowed them to get closer to each other without talking.<sup>186</sup> Others noted that they felt as if they were ‘holding each other’s heart in their hands’.<sup>187</sup> Feeling someone’s breath and heartbeat is the kind of intimacy that only exists between friends, family or lovers; this aspect was the reason the work caused aversion to some users, who felt they revealed too intimate things to a stranger, and appeal to others, who found the experience comforting and sensual.

Even though the question of intimacy created ambivalent feelings, most participants agreed that in order to sense the heart of the other person they had to focus on touch, reducing thus the other sensory input channels. Therefore, the artwork revealed a new way of perception that was not necessarily related to vision, the predominant sense when it comes to experiencing an artwork or most things –at least in the Western tradition.

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2011, *A-Volve, Eau de Jardin, Phototropy, Life Species II, Mobile Feelings*, Arts Santa Monica Barcelona, Spain.

2011, *Art Focus For Technologies: Charm and Challenge*, National Center for Contemporary Arts (NCCA), Yekaterinburg, Russia.

<sup>186</sup> Christa Sommerer; Laurent Mignonneau, “Mobile Feelings –wireless communication of heartbeat and breath for mobile art,” *International Conference on Artificial Reality and Telecommunication Proceedings*, Seoul: ICAT2004, 346-349.

<sup>187</sup> Gerfried Stocker; Christa Sommerer; Laurent Mignonneau, *Christa Sommerer and Laurent Mignonneau: interactive art research*, Vienna: Springer Verlag, 2009, p.207.

One could say that *Mobile Feelings II*, when viewed in relation to Aesthetics, defies Baumgarten's separation between primary senses that belong to the mind and secondary senses that belong to the body, bringing us thus closer to a more complete experience of the world, in line with the phenomenological viewpoint. At the same time, the artwork could be viewed as an extension of Allan Kaprow's *Time Piece*, which was based on the idea of breath as a means of communication, linked to telecommunication technologies.<sup>188</sup>

This observation is also founded on the fact that Sommerer and Mignonneau establish a direct way of communication between the artwork and the audience, as well as between the users and their bodies. After focusing on these mobile devices for a while, the users inadvertently synchronize their breathing and thus establish a new way of telecommunication, based only on corporeal elements. The synchronicity of breath as a way of communication is a subject that is also explored by Thecla Schiphorst, as we shall see below.

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<sup>188</sup> See footnote n.429 of the thesis.

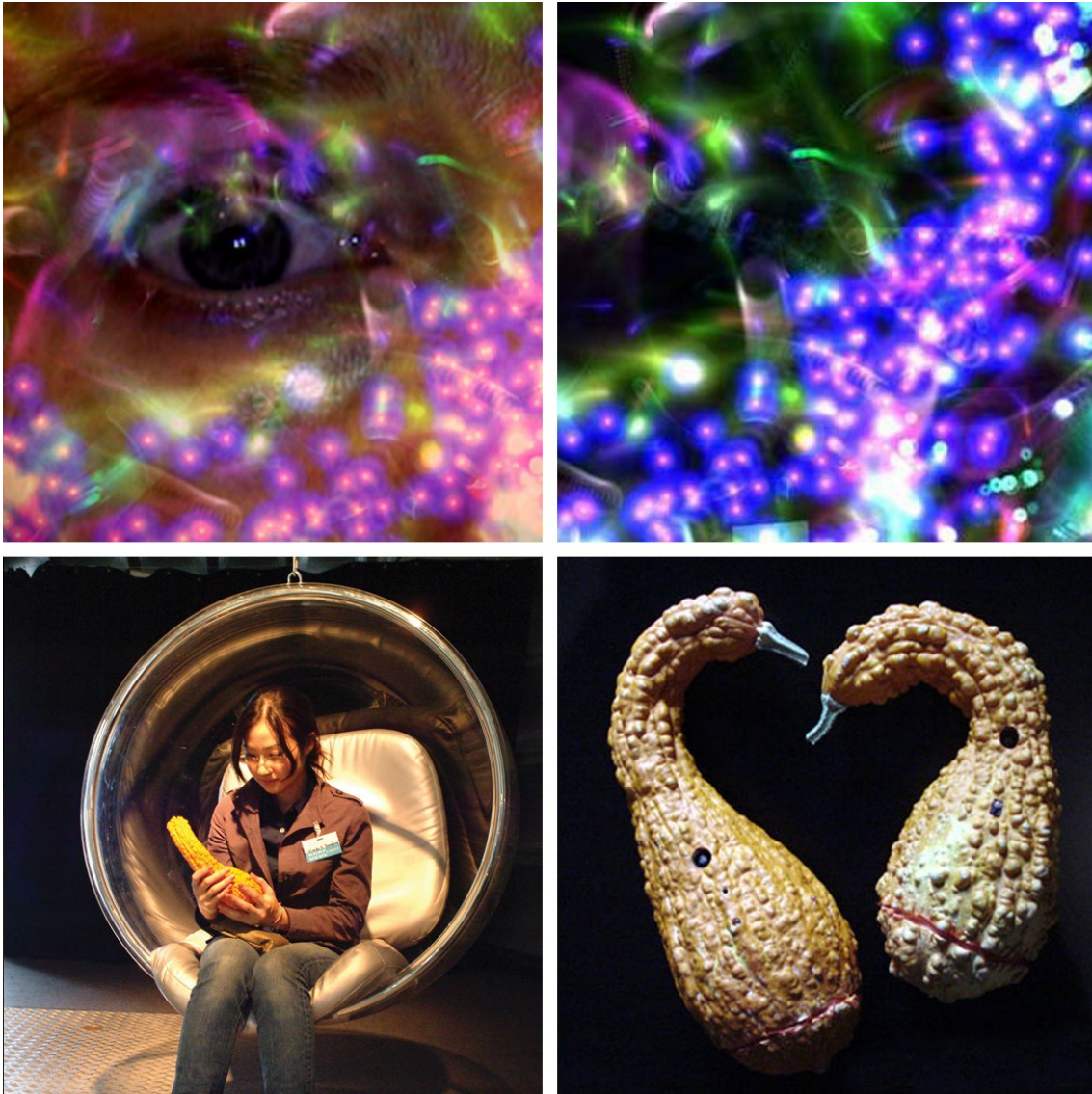


Figure 15. Christa Sommerer and Laurent Mignonneau, *PICO\_SCAN*, 2000. Interactive Installation.

Figure 16. Christa Sommerer and Laurent Mignonneau, *PICO\_SCAN*, 2000. Interactive Installation.

Figure 17. Christa Sommerer and Laurent Mignonneau, *Mobile Feelings II*, 2003. Interactive Installation.

Figure 18. Christa Sommerer and Laurent Mignonneau, *Mobile Feelings II*, 2003. Interactive Installation.

### 3.2.5 Thecla Schiphorst: Wearable technologies and performance

Thecla Schiphorst's work<sup>189</sup> is also focused on bridging the division between body and mind, the artwork and the audience. However, she chooses a different approach in regard to the communicative dimension of her works; she puts the roots of her work within a context where communicating through the body had always been the main focus: performative arts.

As the artist observes, "There is a common ground that exists between the domains of HCI and performance practice: the need to model human experience."<sup>190</sup> That is to say, Human-Computer-Interaction and performance both try to 'decode' human gesture as a way of being in the world, to understand human experience and to add new meaning to it. Schiphorst further explains that:

Performance, as a practice-based domain, contains a longstanding history of constructing, iterating and validating experience models. In my research, I apply performance methodologies to the design of technologically mediated experiences and spaces centred in ambient and wearable technologies: technologies that live close to the body.<sup>191</sup>

Therefore, Thecla Schiphorst's approach combines both known practices from the realm of performance –which will be the subject of a more extensive analysis in this thesis<sup>192</sup> - and novel methods. She uses technology as a tool that expands the expressive means of performance; apart from the movements and gestures that are within the scope of performative arts, she adds a new insight of the inner body by measuring the heart rate, breathing and body temperature and transmitting the data onto networks, via computers, tablets or smartphones.

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<sup>189</sup> Website of the thesis *Art-Breath* [online] <<http://art-breath.com/thecla-schiphorst>> (Access: February 6, 2013)

<sup>190</sup> Schiphorst, Thecla (2007). *From the Inside Out: Design Methodologies of the Self*, CHI 2007 Workshop [online] <<http://swiki.cs.colorado.edu/CHI07Design/uploads/5/schiphorst.pdf>> (Accessed November 2011)

<sup>191</sup> Schiphorst 2007.

<sup>192</sup> See chapter five of this thesis.



In *Whisper[s]* (2003)<sup>193</sup> Thecla Schiphorst and Susan Kozel created an interactive art piece, based on physiological sensors and wireless network transmission embedded in garments worn by the participants.<sup>194</sup> The sensors captured the heart rate and breathing of the participants, along with their bodily movements; this data was transmitted onto a server, that processed and resent the data onto the garments, which subsequently vibrated accordingly. The work was created in order to encourage the participants to feel their body and to explore a new system of communication. [Figures 19, 20]

In a similar line, *Exhale* (2007)<sup>195</sup> is based on a set of wearable high tech garments, which measure the breathing rate of the person who wears them and transfer it to another person or group of people.<sup>196</sup> The artwork permits three kinds of interactions: self to self (meaning that the users observe their own breathing), self to other (when they choose to send their breathing pattern to a different person, who receives it as subtle ventilation under his/her skirt) and self to group (when all users synchronize their breaths and thus activate dimming lights on the surface of their

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<sup>193</sup> Exhibitions:

2003, Dutch Electronic Arts Festival, *DEAF03: Data Knitting*, Rotterdamse Schouwburg Theatre, Rotterdam, The Netherlands.

2003, *Respond Festival*, produced by *Future Physical*, Cambridge UK.

2003, *e-culture fair*, Paradiso Theatre, Amsterdam, The Netherlands

<sup>194</sup> Schiphorst 2007, *ibid.*

<sup>195</sup> Exhibitions:

2005, *Emerging Technologies and Art Gallery*, Siggraph, Los Angeles, USA.

2006, *Fleshing Out*, Symposium + Workshop, V2\_Lab, Rotterdam, The Netherlands.

2006, *Digifest: mods*, Harbourfront Centre and Ontario Science Centre, Toronto, Canada.

2007, *Speculative Data and the Creative Imaginary: shared visions between art and technology*, National Academy of Sciences, Washington D.C, USA.

<sup>196</sup> Thecla Schiphorst, "Really, Really, Small: The Palpability of the Invisible", *CC07, Creativity and Cognition Conference*, Washington, DC, June 13-15, 2007, pp. 298-301.

skirts).<sup>197</sup> Therefore, the artwork functions in many different levels, contributing to self-understanding, communication and collaborative effort. [Figures 21, 22]

The participants that wore those dresses during workshops mentioned a feeling of calmness, introspection, of being at ease within the sounds and motions generated by the dress. It is interesting to see, in comparison to the interactive works mentioned above, that the combination of physical and technological elements has the same effect of tranquillity on the participants, who rediscover the rhythm of their body. At the same time, when breath is not used only as a meditative tool, but also as a means of communication between users, it leads to a feeling of interconnection, as the participants noted.<sup>198</sup> One could observe that the use of biofeedback technologies in interactive art generates a distinctive reception of the artwork: the participants are not so much focused in learning what the technological device can do –as is usually the case when facing technological novelties– but instead, they are curious to see how it can help them connect to their body and the others.<sup>199</sup>

The common theme behind these artworks is the striving to extend bodily awareness through breath and movement. This notion already exists in performative arts,<sup>200</sup> but with the intervention of technology it can be enhanced, enabling a better understanding of the body.

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<sup>197</sup> Thecla Schiphorst, “Breath, skin and clothing: Using wearable technologies as an Interface into ourselves”, *International Journal of Performance Arts and Digital Media*, PADM 2 (2), Intellect 2006, pp. 171-186.

<sup>198</sup> For more detailed observations by the participants, see: Thecla Schiphorst, *The Varieties of User Experience. Bridging Embodied Methodologies from Somatics and Performance to Human Computer Interaction*. PhD dissertation, Plymouth: University of Plymouth, 2008, pp.186-194.

<sup>199</sup> Chris Salter, *Entangled. Technology and the Transformation of Performance*, Boston: MIT Press, 2010, p.338.

<sup>200</sup> See chapter four of this thesis.

For Schiphorst breathing is a way of communication; subconsciously we might be synchronizing our breaths when we try to align communication non-verbally:

Breathing in concert with another is a physical way to synchronize with another's body state, enabling a sharing of internal state, represented through multiple physiological signals, and synchronized through attention. At times of physical duress such as death, illness, distress, and also states of intimacy, human bodies instinctually connect with another through synchronizing breath, either consciously or unconsciously. This can be seen in the work of mid-wives and labour-coaches during birthing; sports coaches during high performance physical training; in meditation techniques that calm and quiet the body; in the work of pain therapists that use attention to re-direct the body's proprioceptive state.<sup>201</sup>

The arguments presented by the artist in relation to breathing as a form of communication<sup>202</sup> reveal an influence from Merleau-Ponty, as well as a conscious employment of breath control techniques, in order to engage the audience in the interaction. Through her artwork, Schiphorst highlights alternative ways of self-expression, by combining corporeal elements with interactive technologies, summarizing thus the main arguments presented above and introducing us to the main scope of the next chapter, which is breath in cultural practices. It is also important that Schiphorst focuses her artistic and scientific research on wearable technologies; this means that the artistic work does not remain within the confines of the exhibition space, but has the possibility to follow the user in the urban space, creating a different way of interaction with the space and the people.

Such technology is very important because it creates new nodes of interaction within space –which is the case with augmented reality as well, as we shall see below.

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<sup>201</sup> Schiphorst 2006, 171-186. For further analysis in the role of breath as a cultural and communicative element see the next chapter of this thesis.

<sup>202</sup> Schiphorst 2006, *ibid.*

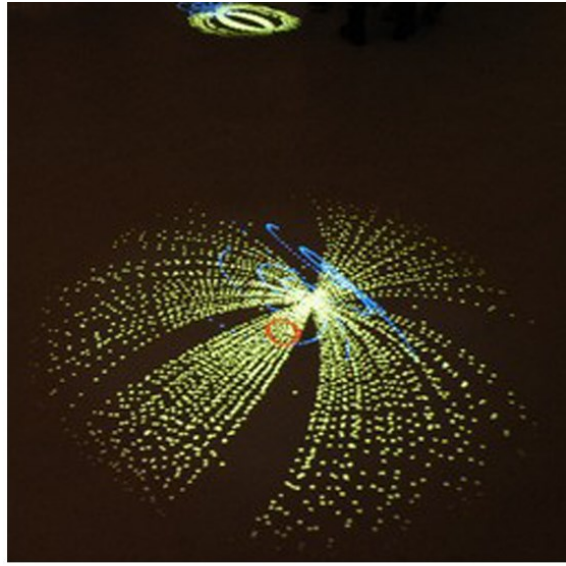


Figure 19. Tecla Schiphorst, *Whisper[s]*, 2003. Interactive Installation.

Figure 20. Tecla Schiphorst, *Whisper[s]*, 2003. Interactive Installation.

Figure 21. Tecla Schiphorst, *Exhale*, 2007. Wearable interface and performance.

Figure 22. Tecla Schiphorst, *Exhale*, 2007. Wearable interface and performance.

### 3.2.6 Hacking the urban space: Augmented reality art

As a substrate for artistic action, the city is a place with already structured symbolic values, which influence the people and their actions. The artists who work within the urban space seem to be aware of this fact; thus the artworks of augmented reality and street art are intrinsically linked to their environment, creating a dialogue with the city and its inhabitants.<sup>203</sup>

Nowadays, it is becoming more evident than ever that the invisible and immaterial space is being oversaturated with information, flowing through the air, waiting to be processed and displayed with the right device. The current trend seems to be augmented reality: the Google glasses<sup>204</sup> that add a layer of virtual reality onto the real world with nonstop information flow, Quick Response codes that can be scanned through mobile devices and lead directly to a website, smartphones that provide constant Internet connection. Within this context, it is interesting to have a look onto augmented reality art that is based on these developments, often preceding them.

Jan Torpus' *lifeClipper 3* (2009-2010)<sup>205</sup> runs the distance between data-saturated air and the surface of the city, by applying augmented reality images onto a park in Basel. By putting on a headset, the users are able to explore a new dimension in space, where a fusion of real images and game-like imagery becomes possible. The users explore this space by moving about, looking around and breathing in different ways. Every walk with *lifeClipper 3* is unique, because the program is affected by the decisions of each user and the specific conditions during the moment of the

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<sup>203</sup> Website of this thesis *Art-Breath* [online] <<http://art-breath.com/augmented-reality-art>> (Accessed: February 6, 2013)

<sup>204</sup> "Project Glass", Website with information about the project, [online] <<https://plus.google.com/111626127367496192147/posts>>, (Accessed: April 10, 2012).

<sup>205</sup> The work was presented in 2011 in St Johann's Park in Basel, Switzerland. For more information see "LifeClipper 3". [online] <<http://www.lifeclipper3.torpus.com>> (Accessed: June 6, 2012).

experience, such as daylight, weather, temperature, and random encounters with people and animals. Therefore, chance and personal will merge to create a unique experience, which alters the way the users perceive the space of the park and their own bodies. [Figure 25]

Julian Oliver's augmented reality also aims to create new forms of experience through the user's movement and actions, with a more subversive mood. The *Artvertiser* (2008)<sup>206</sup> aims at the spots on the city that are filled with advertisement images, acting right on these surfaces. Through a software platform, the advertisement spots are replaced with art in real time. These artworks, created in advance by a multitude of artists –sometimes as a parody or as a response to the original ad, sometimes a completely different creation- become visible when someone looks at the ads through special glasses or a mobile device. As the artwork is based on an open-source code, which can be downloaded and modified by any user, it underlines the ethos of collaborative effort underneath technological evolution. Moreover, it questions the established network of visibility within the city and the hierarchical distribution of space, by visualizing a flow of data that comes from an independent source, and not the authorities, advertisement companies or Internet 'giants' –the most popular sites. [Figure 23]

The *Augmented Reality Advertising Takeover* (2011)<sup>207</sup> by Public Ad Campaign and the Heavy Projects is driven by a similar mood to subvert the politics of distribution

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<sup>206</sup> "The Artvertiser", Website with information about the work, [online] <<http://theartvertiser.com>> (Accessed: April 10, 2012). The project was presented in the following festivals:

2010, Transmediale, Berlin

2010, Media Facades Festival, Brussels

2011, Image Festival, Rotterdam

2011, M-CULT, Helsinki.

<sup>207</sup> The project was presented in 2011 in Times Square, New York. For more information see "Augmented Reality Takeover in Times Square" [online]

<<http://www.theworldsbestever.com/2011/07/26/augmented-reality-advertising-takeover-in-times-square>> (Accessed: July 30, 2012).

of artistic and advertisement images, traditionally assigned to art institutions and economic-political establishments respectively. After installing the application of the project on a mobile device (a smartphone or a tablet), the viewer can see a real time replacement of the giant billboard advertisements with works by by Ron English, John Fekner, Posterboy, Doctor D and OX. It is an augmented reality exhibition of street art images, that breaks away from the strict confines of exhibition spaces and expands onto the city. [Figure 24]

The choice of works underlines the subversive character of the project. The artists presented here have a significant trajectory in the urban space, invading the city and changing its predetermined appearance; most of them belong to the first generation of street artists, who intervened on advertisement images and introduced their own messages by “culture jamming”. Street art seizes the “non-places” of the city – massive housing blocks, crumbling walls, decadent neighbourhoods, chain stores and highways- and de-anonymizes them, making the invisible visible again. Like hackers, these artists alter the established rules of the urban matrix and find “detours” for changing it, by creating new nodes of meaning in space.

By using street art images that are visualised not on the real walls of the city, but through a digital reflection, the project alludes to the strong connection between Street Art and the Internet. Even though Street Art came before the expansion of information technologies, the Internet gave it a significant boost: in fact, Street Art has been described as “the first truly post-Internet art movement, equally at home in real and digital spaces as an ongoing continuum”.<sup>208</sup>

Street art is the first massive artistic movement that has flourished because of the Internet; its inherent ephemerality is counterbalanced by the extensive documentation of street art images online, through digital files that enable the

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<sup>208</sup> Martin Irvine, “The Work on the Street: Street Art and Visual Culture”, in Barry Sandywell; Ian Heywood (eds.), *The Handbook of Visual Culture*, London and New York: Berg, 2012, pp.235-278.

preservation and growth of the movement. What is equally important here is the fact that the public has acted as a catalyst to the popularity and omnipresence of Street Art. As it is accessible to everyone, people take pictures and disseminate them through the web, making them visible to a large audience and motivating thus more artists to get involved in the movement.

This development illustrates how downloading and sharing information contributes to the creation of culture, as was mentioned above. It is “the work of art in the age of instant digital dissemination”.<sup>209</sup>

In short, through the use of the latest augmented reality art, the experience of the immaterial and virtual space extends beyond computer screen and art spaces; it comes to the core of everyday life, it incorporates our body movements and our daily experience and transforms it into something new. In this transformation the users play an active part along with the artists, as they have the power not only to guide their experience according to their wishes and movements, but also to intervene actively, by downloading and changing the code behind those artworks or to disseminate them and change the reception of particular art movements. This way, they can give the urban space a new form, which is not dependent on official architecture, but is based on one’s personal vision.

As Web 2.0 gives way to Mobile Internet, and the users remain permanently connected, through their smartphones and mobile devices, it becomes every time easier to have access to augmented reality art; the special devices of the past, such as headsets, are replaced by easily downloadable applications, that spread the augmented world practically everywhere.

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<sup>209</sup> Irvine 2010, pp.235-278.



Breaking through protective glasses, frames and pedestals, art reaches the public beyond the rigid walls of the museums and beyond the traditional modes of perception, in the core of everyday life.

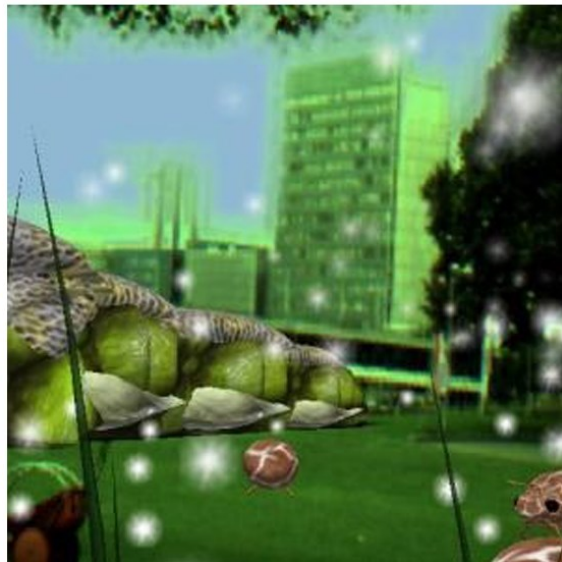


Figure 23. Julian Oliver, *Artvertiser*, 2008. Augmented reality intervention in the public space.

Figure 24. Public Ad Campaign and the Heavy Projects, *Augmented Reality Advertising Takeover*, 2011. Augmented reality intervention in the public space.

Figure 25. Jan Torpus, *lifeClipper 3*, 2009-2010. Augmented reality intervention in the public space.

**Chapter Four**

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**An Index of Breath: Philosophy, Cultural Practice and  
Artistic Creation**



*Words come from chaos  
To illuminate an interval in life  
and then return to where we are [...]  
The ball of life  
With a breath you will be able to fly  
Above the roofs of the world  
Konstantinos Vita<sup>210</sup>*

#### **4.0 The path of Breath: A link between philosophy, ritual and artistic creation**

In the previous chapter it was explained how the immaterial condition –a state where minimal matter carries maximal load of information- has expanded the experience of culture and the human body. Within this context, the traditional divisions between body and mind, technology and art have been abolished. Taking this research a step further, it is interesting to see how the corporeal and the intellect are linked in different traditions, through the dynamics of breath, and how these traditions have had an impact on artistic thought and action.

Breath is a basic corporeal function that connects the self with the world and reaffirms the unity of body and mind. As an almost immaterial expression of corporeal existence, it is used in different cultural practices and artistic actions to engage the public with the ritual or the work in question. This became evident through the artworks presented previously, that employ biofeedback technologies. Beyond the high-tech universe, numerous cultures in different times and places

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<sup>210</sup> Konstantinos Vita, “Οι γερανοί”, *Super Stella*, Athens: Minos EMI, 1999.

have developed breath-related practices that help people gain awareness of their mind and their body and alter their state of consciousness.

These practices will be brought into focus here, starting with an analysis of breath in ancient philosophy and the cultural practices that are related to breathing. These will help approach works of art where breath is the prime matter that brings the artwork into existence or the main subject of reference.

Respiration has been stimulating human thought even from the time people interpreted their bodies and their surroundings through the nebula of myth. From ancient times, breath was something more than just air in and out of the body; it was a vehicle of life, thought, knowledge. This will become evident through an approach to ancient Greek philosophy, where air and breath are described as the most basic elements of the universe and human life, respectively. Beyond theory, it is also important to keep in mind that breath has been a focus of interest for different traditional and religious practices. Bringing together theory and practice, Indian culture has developed a system of thought and action where breath is at the epicenter, as a basic tool that helps the formation of thought.<sup>211</sup>

The intercultural dialogue about the relation between ritual and art is common within European and Eastern thinkers. Involving both in the theoretical analysis of this chapter provides multiple points of perspective and expands the discourse towards new directions. One should not disregard the existing risk in approaching intercultural facets and expressions from a particular perspective, which is, in this case, the Greek and Western European tradition, due to the cultural origin and educational background of the researcher, as described previously.

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<sup>211</sup> Juan Eduardo Cirlot, *Diccionario de símbolos*, Madrid: Siruela, 2006 (1958), lemmas: *aire* and *respiración*.

As is usually the case with interdisciplinary approaches, one should avoid the peril of looking through different cultures through “Western” eyes, where every culture is subjected to an analysis that follows the “lingua franca of science, dominated by western criteria”.<sup>212</sup> As Pepi Rigopoulou further observes in respect to this issue,

Every intercultural approach includes spoken or unspoken tendencies of syncretism, an attempt to allow the emergence of new schemes and solutions in the private space of the other –or a space that we want to have in common- from the dialogue with the other.<sup>213</sup>

Going through such diverse expressions of culture also entails a high risk of oversimplification. For this matter, the main tool during our analysis will not be comparison, but analogy between the tendencies examined. It is of particular importance here to stress that the main interest is not an overview of the cultures mentioned, but the concept of breath control in those and how this concept extends into artistic practice.

In other words, the analysis of traditions and theories will go as far as it helps understand the path of breath within the body, as well as its impact on artistic expression.

Furthermore, we will look into Luce Irigaray’s philosophy of breath, as a theory that proposes a new ontology of being, and make an attempt to denote the main characteristics of a phenomenology of breathlessness. This way we will create a frame as complete as possible in order to understand how the question of breath is related to the subject of the immaterial in visual culture, and how artistic action is influenced by diverse theories and pre-existing cultural practices.

The main works of art examined here will be art installations that focus on breath or breathlessness. The first step of the analysis puts the subject of breath in a historical

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<sup>212</sup> Pepi Rigopoulou: Πέπη Ρηγοπούλου, *Το σώμα, Ικεσία και απειλή*, Αθήνα: Πλέθρον, 2003, p.186.

<sup>213</sup> Ibid., p.189.

perspective, through the examples of Piero Manzoni, who believed that one could make art with any part of the body, Francisco Torres, who saw breath as a repetitive action and Giuseppe Penone, whose research focuses on the shape of breath and the relation of man to nature. Subsequently, we will follow the individual work of artists of the late 20<sup>th</sup> and early 21<sup>st</sup> century. Although the analysis is artist-oriented and not subject-oriented –therefore, certain themes are repeated in the work of the artists mentioned- most of the artists focus on a different aspect of breath and work with diverse materials. For example Lygia Clark’s work is oriented towards the therapeutic qualities of breath. Nikos Navridis, on the other hand, has explored the subject of breath extensively, in video installations, live actions, soundscapes, paintings and architectural constructions, creating a thorough ‘index’ of breath with artistic means; for this matter, his work will become a main case of study in this chapter. Subsequently, a combination of breath with different elements comes into focus, through the works of Bill Viola, who brings together breath with water, as a basic vocabulary of talking about life and death, Danae Stratou, an artist who works with earth and breath, and Kimsooja, who mainly explores breath in combination with light. The analysis will be concluded with the works of Edith Kollath, which highlight the fragility and transformational qualities of breath and Sabrina Raaf, who keeps a more ‘pragmatic’ vision, by analyzing the chemical substance and living organisms within breath into colours.

As is evident here, the poetics of breath bring together artists from all over the world –Italy, Brazil, Catalonia, Greece, America, Korea and Germany- who work with different means. The selection of artists was made on the basis of the emphasis they place on breath within the larger frame of their work –thus excluding other artists who have worked on breath without devoting a substantial amount of their corpus of work into it.



Without doubt one could propose alternative subjects relevant with breath –some of those, such as smell, for example, are mentioned briefly; however, the choice of works follows the theoretical frame, that stresses the role of breath as an immaterial element that brings together the body with the world, as a symbol of life and death and as an active practice that can lead to another state of consciousness.

## 4.1 Theoretical background

*I've held my breath for years-held it for dear life. And I might have suffocated if (in spite of myself) I hadn't had to let go of it periodically. Was it mine, after all? Letting it go, did I lose it? Was (is) exhaling simply a stream of speeded up molecules squirting out of my nose?*

Allan Kaprow<sup>214</sup>

### 4.1.1 Materiality and spirituality of breath: Aristotle and the ancient Greek tradition

The notion that air is an element that unites our body with the universe and our mind with the body, which resonates in the artworks presented in this chapter, is particularly prominent in Greek culture, becoming evident through a linguistic and philosophical approach.

In Greek, the concepts of breath, spirit and soul are etymologically interconnected. *Psyche* (soul) comes from the verb *psycho*, which means to breathe, to blow. A synonym to this verb is *pneo*, which is the root for the words *pnoe* –a blow of air, a breath- and *pneuma* –spirit or mind. *Anapnoe* is a repetitive *pnoe*, in other words, respiration.

In short, the concepts of air, mind, spirit and soul are to be found within *anapnoe*, and for this matter, it is not surprising that for the ancient Greek culture these meanings are interdependent.

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<sup>214</sup> Allan Kaprow, *Essays on the Blurring of Art and Life*, Berkeley: University of California Press, 1993, p.196.

In Homeric poetry breath is identified with life. Air flowing into the body was even capable of generating life, as we see in the *Iliad*,<sup>215</sup> where the wind Zephyrus fathered Achilles' horses. Furthermore, according to the Homeric tradition thinking originated from the lungs, that provided the air for speaking<sup>216</sup> -as we will see in the forthcoming chapter.

Air and breathing become a focus of constant research in ancient Greek philosophy and science. Air was identified as an element by the pre-Socratic philosophers, an element unifying the natural world, yet at the same time multiple in its nature. The Greeks make a basic division between *aer*, the moist atmosphere surrounding the earth, and *aether*, the bright air above the clouds; furthermore, air is described differently depending on its aspect, appearance and state, resulting thus in a distinction between breath (*pnoe*, *pneuma*) and wind.<sup>217</sup>

For Anaximenes of Miletus air is the originative principle of the universe; according to him all the elements of the natural world come out of air, whether it is rarefied – and thus becomes fire- or condensed –and thus becomes water and earth. He believed the air to be the breath of the universe, an ever-living and divine source.<sup>218</sup> He thinks of the human soul as the air that holds us together; moreover, he considers breath and air as the elements that surround the whole cosmos: “As our

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<sup>215</sup> Homer. *Iliad*, Original text [online] <<http://el.wikisource.org/wiki/Ιλιάς>> (Accessed September 6, 2011), lines 148-151:

[...] Αὐτομέδων ὕπαγε ζυγὸν ὠκέας ἵππους / Ἐάνθον καὶ Βαλίον, τὼ ἅμα πνοιῆσι πετέσθην, / τοὺς ἔτεκε Ζεφύρω ἀνέμῳ Ἄρπυια Ποδάργη / βοσκομένη λειμῶνι παρὰ ῥόον Ὠκεανοῖο.

([...] Automedon put swift horses in the harnesses—Xanthus and Balius, who flew along as swiftly as the wind. These horses Podarge, the harpy, had conceived with West Wind, as she grazed in a meadow beside the stream of Oceanus).

<sup>216</sup> See pp.277-279 of the thesis.

<sup>217</sup> Steven Connor, “Breathing Building Space”, in Monika Bakke (ed.), *Going Aerial, Air, Art, Architecture*, Maastricht: Jan Van Eyck Academie, 2006, p.50.

<sup>218</sup> Georgios T. Halkias, “Between Breaths”, in: Monika Bakke, (ed.), *Going aerial, air, art, architecture*, Maastricht: Jan van Eyck Academie, 2006, pp.48-61.

soul, [...] being air, holds us together and controls us, so does breath and air enclose the whole world”.<sup>219</sup> According to Aetius, Anaximenes uses air and breath synonymously.<sup>220</sup>

For Anaximenes, the air is something substantial; therefore, human soul has a certain material aspect, since it is made of air<sup>221</sup> -the same matter that runs through the universe. In this regard, it becomes clear that for Anaximenes the division between matter and spirit, body and mind, the self and the world is insignificant; it is the same air, or breath that runs through the environment and any kind of life. Therefore, Anaximenes’ viewpoint stands at the opposite of the separatist tendency that would begin with Socrates and Plato and culminate in Cartesianism much later;<sup>222</sup> at the same time, his unified vision over the world puts him in the same line with Eastern theories that will be examined further in this chapter.

Following an equally materialistic approach, Democritus argues that the main function of breath is to exert pressure onto the body, so that the soul and the mind stay in place. Democritus set the basis for the development of atom theory, so his viewing of breath is to be seen within this context. According to him, the soul and mind, just like everything else in the body,<sup>223</sup> are atoms; in other words, breath, soul

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<sup>219</sup> Aetius 1, 3, 4 in Kirk G. S.; Raven, J. E.; Schofield M. (eds). *The Presocratic Philosophers: A Critical History with a Selection of Texts*, Cambridge: Cambridge University Press, 1983 (1957), p. 158-9 (the highlighting is mine): «Ἀναξιμένης Εὐρυστράτου Μιλήσιος ἀρχὴν τῶν ὄντων ἀέρα ἀπεφήνατο· ἐκ γὰρ τούτου πάντα γίνεσθαι καὶ εἰς αὐτὸν πάλιν ἀναλύεσθαι. Οἶον ἢ ψυχὴν, φησὶν, ἢ ἡμετέρα ἀήρ οὐσα συγκρατεῖ ἡμᾶς, καὶ ὅλον τὸν κόσμον πνεῦμα καὶ ἀήρ περιέχει· λέγεται δὲ συνωνύμως ἀήρ καὶ πνεῦμα».

<sup>220</sup> Ibid.

<sup>221</sup> Aetius uses the words *αἴρ* (air) and *πνεῦμα* (blow, spirit, breath) respectively. See Aetius 1, 3, 4 and Silvia Benso, “*Psychē, Pneuma and Air: Levinas and Anaximenes in Proximity*”, *Athena*, 2006, Nr.2. [online] <<http://lkti.lt/athena/pdf/2/16-28.pdf>> (Accessed May 12, 2012).

<sup>222</sup> Benso 2006. Ibid.

<sup>223</sup> Aristotle, *On Breath*, chapter IV, 472: «Δημόκριτος δ' ὅτι μὲν ἐκ τῆς ἀναπνοῆς συμβαίνει τι τοῖς ἀναπνεύουσι λέγει, φάσκων κωλύειν ἐκθλίβεσθαι τὴν ψυχὴν· [...]λέγει δ' ὡς ἡ ψυχὴ καὶ τὸ θερμὸν ταύτόν, τὰ πρῶτα σχήματα τῶν σφαιροειδῶν». (Democritus says that the result of breath on

and mind are of material substance. The atoms that constitute the soul, which make life and movement possible, are kept in place due to the power of respiration. If it weren't for breath, the pressure of the atmosphere onto the body would force the atoms to leave it. When breath ceases, there is nothing to keep the soul and the mind inside the body, so the soul atoms flow out and are dispersed into the atmosphere, leading to death.<sup>224</sup>

A contemporary of Democritus, Hippocrates was one of the most prominent figures in medicine; although in his writings a distinction between mind and the body is visible, it is interesting to see how he considers breathing as the element that connects the whole. According to Hippocrates the brain is

the interpreter of what comes to the body from the air [...] Because it is the air that provides consciousness [...] When it comes to knowledge, the brain is the part that transfers meanings; for when man draws in a breath, the air arrives first on the brain and from there it is being distributed over the rest of the body, leaving on the brain its best part and any elements of consciousness and thought.<sup>225</sup>

Regardless of the lack of medical accuracy of the Hippocratic theory, what is interesting here is his belief that air is linked to human consciousness, by bringing

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breathing animals is that it prevents the soul from leaving the body; [...] He also says that soul and warmth is the same thing, they're elementary spherical particles).

<sup>224</sup> See also: Ronald M. Polansky, *Aristotle's De Anima*, Cambridge: Cambridge University Press, 2007, p.68.

<sup>225</sup> Hippocrates [c.400 BC], *On the sacred disease*, Paris: E. Littre, 1849, paragraph 16. My translation from the original text: "Κατὰ ταῦτα νομίζω τὸν ἐγκέφαλον δύναμιν πλείστην ἔχειν ἐν τῷ ἀνθρώπῳ· οὗτος γὰρ ἡμῖν ἐστι τῶν ἀπὸ τοῦ ἥερος γινομένων ἐρμηνεύς, ἣν ὑγιαίνων τυγχάνη· τὴν δὲ φρόνησιν αὐτῷ ὁ ἀὴρ παρέχεται. Οἱ δὲ ὀφθαλμοὶ καὶ τὰ οὖα καὶ ἡ γλῶσσα καὶ αἱ χεῖρες καὶ οἱ πόδες οἷα ἂν ὁ ἐγκέφαλος γινώσκῃ, τοιαῦτα πρήσσοι· γίνεται γὰρ παντὶ τῷ σώματι τῆς φρονήσιος, ὡς ἂν μετέχη τοῦ ἥερος. Ἐς δὲ τὴν ξύνεσιν ὁ ἐγκέφαλος ἐστὶν ὁ διαγγέλλων· ὀκότες γὰρ σπάσῃ τὸ πνεῦμα ὄνθρωπος ἐς ἑωυτὸν, ἐς τὸν ἐγκέφαλον πρῶτον ἀφικνέεται, καὶ οὕτως ἐς τὸ λοιπὸν σῶμα σκιδνάται ὁ ἀὴρ, καταλιπὼν ἐν τῷ ἐγκεφάλῳ ἑωυτοῦ τὴν ἀκμὴν καὶ ὅ τι ἂν ἔη φρόνιμον τε καὶ γνῶμην ἔχον". Original text [online] <[http://el.wikisource.org/wiki/περί\\_ιερῆς\\_νοῦσου](http://el.wikisource.org/wiki/περί_ιερῆς_νοῦσου)> (Accessed: June 20, 2012).

meanings and thoughts into the human brain.<sup>226</sup> In this sense, there is a certain relevance to eastern practices, where controlling breath results in different states of consciousness. But more importantly, Hippocrates was right in seeing the air as a carrier of meaning; as was highlighted before, air is a carrier of information, which becomes even more evident in contemporary reality.<sup>227</sup>

For Plato breath is an element of constant interchange with the environment, that helps the body keep its temperature. Plato focused on breath as a bodily function, believing that the whole body participates in the process of respiration, and not just the mouth and nose. Considering the fact that there can be no vacuum in nature, in *Timaius*<sup>228</sup> he analyses the process of respiration in the body as a constant interchange of air with the environment; during exhalation, for example, the air surrounding the body enters through the skin. Breathing warms the air and expels it warm into the environment. Again, scientific accuracy is of little importance here, as we are more concerned with how Platonic vision has influenced diverse philosophical notions about breath and the body –and especially how breath relates the body with the world.

Aristotle's treatise *On Breath* seeks to combine a physiological approach on breath with a reference to the soul. Although it lacks the consistency of his other works and thus the authorship of this treatise is in dispute, it has been integrated into the western philosophy as part of the Aristotelian tradition and therefore it is useful to see how the concepts of breath and matter are presented.

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<sup>226</sup> Traditional Chinese medicine also deals with the flow of breath within the body: Ch'i, the vital breath, flows inside the body in channels, which are called meridians. If this flow is disrupted, blocked or unbalanced, it can end up in disease. Subsequently, therapeutic techniques have to be applied in order to adjust the circulation of Ch'i. Sreenath Nair, *Restoration of Breath, Consciousness and Performance*, Amsterdam: Rodopi, 2007, pp.58-63.

<sup>227</sup> See p.246 of this thesis

<sup>228</sup> Plato: Πλάτων, *Τιμαίος*, Αθήνα: Κάκτος, 1993

Aristotle begins with an analysis of the views of preceding philosophers on breath. Then he explores the function of breath inside the body and argues that soul and emotion are interconnected with the dynamics of breath.

For Aristotle respiration, pulsation and food digestion are the main functions of the body. Air nourishes the body the same way that food does. So, for Aristotle breath has a material substance; it is air that enters the body and turns into matter and energy, just like nutrition.

Apart from the physical dimension, Aristotle focuses on how emotions –fear, expectation, conflict- can influence the body’s pulsation and breathing.

What is more, for Aristotle breath is the element unifying the mind and the body, which he views as two separate entities. The dynamic of air into the body triggers psycho-physical movements that result in different kind of emotions, thoughts and actions. So, as breath makes the body move, awakens the senses and helps the mind function, it emerges as the main element in the formation of the soul.

Therefore, the most prominent Greek thinkers all study the material basis of breath and how it unites the body to the environment and the corporeal dimension of being with the mind. So even though breath and air are invisible, intangible elements that verge on the immaterial, they still become a subject of study based on the way they are sensed and the effects they have on the human being and the world respectively. In this way, they illustrate how immateriality and breath constitute elements of artistic creation: by focusing on process –and not the artistic object- and on experience –instead of appearance.

#### 4.1.2 From theory to practice: Breath control in the Indian tradition

As observed in the previous section, the theoretical approach to the phenomenon of breath crosses the limits between diverse disciplines and activities; from medicine to physics and philosophy, breath becomes the link that brings different fields of action together, within Greek culture.

The same observation could be made by moving onto another part of the world, where breath becomes an even more complete way of knowledge and experience: the Indian tradition has a strong connection with breathing, starting with literary and religious texts and extending to philosophy, medicine and everyday cultural practices. The multiple dimensions of the phenomenon of breath in the Indian culture make it particularly difficult to observe and to present; each text, each philosophical school has its own ramifications and differentiations in breath theory and practice. Therefore, without disregarding the richness of Indian philosophy and culture, here we will mainly focus on very specific examples, so as not to lose the main focus of analysis, which is how breathing practices affect artistic practice. For this matter, it is more useful to see how breath is generally viewed in Indian culture, starting from sacred Sanskrit texts and ending in philosophical practices that have broken the barriers of time and culture and have formed part of contemporary cultural practices, such as Yoga.

The main concepts about air and breath remain unchanged through the centuries, within the frame of a philosophical evolution with an almost unbroken sequence. Breath was the prime indicator of life for ancient India, connecting the universal spirit (*Brahman*) with the individual soul (*Atman*). It is interesting here to note that etymologically, the word is connected to the Sanskrit word *Atma*, meaning wind, breath and soul, indicating that as in Greek, in Indian culture as well, the connection between these concepts can be traced back to the initial meaning of the word.



Since the observation of the body and the world begins with breath, a basic concept of the Indian philosophical thinking is *prana*, the inhaled air; it is the vital breath of mankind and the main manifestation of one's soul. The process of respiration is completed with *apana*, the exhaled air. Breathing was completed through the body – a distant reminiscence of the Platonic and Hippocratic theories on breath- but not through the lungs: the locus of vital breath was considered to be the heart. The respiratory process was thought to be carried out through vessels, that let breath flow through the body and stimulate the functions of the body, producing different types of vital breath.<sup>229</sup>

These breaths are described in the Indian and Tibetan medical tradition, differentiated according to their movement within the body: upwards, downwards, outwards, inwards or in all directions. More analytically, the five different breaths are: *prana* (the life supporting wind), which is located in the chest and moves towards the mouth and nose and is associated with the respiratory system; *apana* (downward pressing wind) which follows the opposite direction, from the navel to the feet, and is responsible for the excretory and the reproductive system; *samana* (fire equalizing wind), which moves between *prana* and *apana*, from chest to navel, and is associated with digestion and the feelings of pleasure and pain; *udana* (upward moving wind) that moves from the nose upwards into the head and is responsible for speech; *vyana* (diffused wind) that spreads throughout the body and is responsible for the nervous system, keeping the equilibrium among the other four breaths.<sup>230</sup>

The focus on the psychological and physiological dimensions of breath is present in the sacred texts in Sanskrit, the *Vedas* (1500 BC) and the *Upanishads* (800-400 BC).

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<sup>229</sup> Kenneth G. Zysk, "The Science of Respiration and the Doctrine of the Bodily Winds in Ancient India", *Journal of the American Oriental Society*, Vol. 113, No. 2, April - June, 1993, p.198.

<sup>230</sup> Halkias 2006, p.51.

The *Vedas* (*Rigveda*, *Yajurveda*, *Samaveda*, *Atharvaveda*) contain hymns and instructions about rituals,<sup>231</sup> highlighting the importance of breath repeatedly. The *Rigveda* associates *prana* with life; it parallels the cosmic wind in the atmosphere to breathing, in the sense that it fosters life. In the *Atharvaveda* the link between the wind and breath is further explored, presenting *prana* as the primary force of all the things in the universe; wind is breath's principal link to the cosmos, being the source of breath and the element that purifies it. Earthly and atmospheric fires breathe, water gives breath and time contains breath and mind; in other words, there is a strong connection between breath and air with everything in the universe.<sup>232</sup> In this sense, there is an analogy with Anaximenes' view that everything comes from air.

The Atharvavedic verses also mention that breath is born from the soul, the single immortal part of a human.<sup>233</sup> What is also interesting is that they link speech and recitation to breathing, as an initial step in breath control; as will be analyzed further in the next chapter, this assertion is verified by medical research.<sup>234</sup>

The *Upanishads* move further into the questions of breath control, providing instructions on how to achieve the maximum mental and physical potential by means of breath. The observation of breath, which is common with the classical medical treatises, here starts to take a different direction towards breath control and rhythmic respiration.<sup>235</sup>

Sreenath Nair, in his treatise *The Restoration of Breath* provides a detailed analysis of how breath control is presented in the *Upanishads* and in subsequent philosophical and medical texts:

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<sup>231</sup> Nair 2007, p.69.

<sup>232</sup> Zysk 1993, p.200.

<sup>233</sup> Zysk 1993, p.202.

<sup>234</sup> See pp.282-283 of this thesis.

<sup>235</sup> Zysk 1993, p.204.

Individual consciousness emerges due to the bipolar movements of breath taking place in the body and there is no sense of consciousness before the movement of breath, the *Nada*, takes place in the body. Bindu is explained in the *Mandukya Upanishad* as *Brahman*, the unmanifest potential energy from which the universe emerges through a bi-polar movement. The most important information we gain from the *Mandukya Upanishad* in the context of our discussion is that breath causes the emergence of individual consciousness.<sup>236</sup>

Through different examples, Nair solidifies his theory about how breath control can bring the mind to an altered state of consciousness –also focusing on its use in actor training and performance, as we will see in the next chapter.<sup>237</sup> Breath is linked to reaching a different state of mind, it is a tool in the process of understanding the self, and it helps towards a better canalization of body energy:

There are several sections in the Taittiriya Upanishad which clearly uphold the connection between breath and the vital energy source of the body by saying that breath is the most important tool of practice to explore the potential energy concealed within the body.<sup>238</sup>

Within the same research, Nair presents in a concise manner the different breaths in regard to the effects they produce within the body and the everyday actions they are connected to. There is a strong focus on the common notion in the Indian tradition that we normally breathe freely through one nostril at a time; in other words, as we can easily observe through our everyday experience, the air volume that enters each nostril differs. The nostril that breathes in stronger is the “dominant” one, changing according to the days of the week and the circles of the sun and the moon. When the nostrils do not follow these optimal circles of alteration, changes in body chemistry occur, along with a feeling of unease. For this matter, Indian tradition provides specific techniques of breath control, so as to correct any abnormality in nostril operation. Moreover, it includes lengthy analyses on how to combine the circles of nostril operation so as to designate the activities that are more suitable to

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<sup>236</sup> Nair 2007, p.75.

<sup>237</sup> See pp.268-271 of the thesis.

<sup>238</sup> Nair 2007, pp.75-76.

each dominant nostril.<sup>239</sup> Thus, breath control is linked to every manifestation of everyday life, from work to corporeal well-being.

The development of breath control practices led to a bifurcation of the theories concerning bodily wind within Indian culture, leading thus to an even richer breath-related tradition; the bodily winds remained within the spectrum of study of the medical science, whereas breath control became a standard practice of yoga philosophers.<sup>240</sup>

*Yoga* is a philosophical school based on the knowledge about the different bodily winds that comes from medical tradition; however, it is more focused on techniques of controlling the breathing process, so as to come to another level of consciousness, where one reaches spiritual and corporeal balance. *Yoga* is a complete system of philosophical theory combined with practice that deals with meditation, the posture of the body, social behavior, concentration, well-being and breathing. Each of these matters is dealt with in separate classifications or “limbs”: the fourth one is *Pranayama*, defined as the extension of breath. Through controlled respiration *pranayama* brings breath and mind together, by restraining the senses and allowing a heightened state of consciousness to ensue, where one’s soul can dwell with the universal spirit. Breath control is also to be found in the fifth limb, where it is used to control the mind. The sixth limb also deals with meditation through breath-related techniques; the objective is to explore the capacities of body and mind. The ultimate stage is *Samadhi*, where contact with the potential source energy located in the cosmology of the body is achieved.<sup>241</sup>

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<sup>239</sup> For example it is suggested that you set off on a journey to a far-off place when left nostril operates, while you’d better return from it when right nostril operates. Left nostril is associated with planting, gardening, friendship, peace – right nostril with practicing medicine, killing, driving, gambling etc. See Nair 2007, pp.88-100.

<sup>240</sup> Zysk 1993, p.204.

<sup>241</sup> Nair 2007, p.79.

Yoga and breathing techniques originating from India have travelled all over the world, finding a way into popular culture. From there, they have had a strong impact onto visual culture.

Indian culture shows that to breathe differently is to think differently. This knowledge, that is to be found in rituals and religious practices in many cultures around the world, is also used by visual artists, who seek to influence the viewers' breath, so as to engage them into the artwork more actively.

#### **4.1.3 Breath in religious and cultural practices**

It is an everyday knowledge that our breathing rate alters depending on our physical activity or our state of mind. For example, if we exercise, breathing becomes more intense, something that can also happen if we get excited, stressed or angry. On the contrary, if we are calm or asleep, our breathing becomes slow and regular. We can easily verify that the opposite is also possible, that is, to consciously follow different breathing patterns in order to change our state of mind; so, we can alter the rhythm of our breath in order to change our mind or feelings. For example, in case of anxiety one can try to regulate one's breath to feel calmer: when changing our breathing mode (by guiding the air to the stomach instead of the lungs) or when reducing the oxygen intake<sup>242</sup> the stress symptoms can be relieved.

The idea that breath control can alter consciousness is widespread in different cultural practices all over the world, from the realm of philosophy to everyday practices like prayer, or fighting the evil through breathing.

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<sup>242</sup> When we are in stress we tend to inhale more air than we need. Thus appears a deficiency of carbon dioxide in our body, which is called hypocapnia; if hypocapnia is chronic, it can trigger complex physical and psychological problems – like numbness or a panic attack, for example. A common “cure” for people facing this problem is to put a paper bag in front of their noses, so that they breathe back in the carbon dioxide of their exhalation. See Halkias 2006, p.56.

The biggest religions, like Christianity, Islam, Buddhism and Hinduism include practices where breathing is combined with prayer in order to change the mental state of the practitioner. This shows that the relation between breathing rhythm and psychophysical state was an easily observable fact, which found its way into different religions and cultures; on the other hand, these cultures have enabled breathing practices to become common knowledge.

We've already covered the role of breath in Hinduism. Similar meditational techniques are to be found within the Buddhist tradition, which encourages awareness of breathing through conscious observation. The "Breath-Mindfulness Discourse" (*Anapanasati Sutta*) includes instructions on breathing, so as to enter a state of meditation. It advises the initiants to be aware of the quality of each breath (if it's long, short or deep, for example) and to control the state of the body, the mind and the feelings when breathing.<sup>243</sup> Breath control determines not only spiritual awareness during lifetime, but also the smooth passage onto the "clear light of awareness" in the moment of death.

In the Judeo-Christian tradition breath is linked to life in the description from Genesis, where god creates man from the ground and breathes into his nostrils the breath of life.

Within Judaism, the Kabbalah includes meditation techniques combined with prayer. The believers are supposed to meditate on the four letters of the name of god (which is transcribed into the Latin alphabet as YHVH) as they are breathing: think

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<sup>243</sup> "While breathing in long, he knows "I am breathing in long" [...] making the bodily process calm I will breathe out [...] experiencing pleasure I will breathe in [...] experiencing the mind I will breathe out". See "Ānāpānasatisuttam", in *Majjhima Nikaya* 118, <http://www.ancient-buddhist-texts.net/Texts-and-Translations/Anapanasati/Anapanasatisuttam-2.htm> (Accessed: July 2012).

about Yod (Y) as the body is empty of breath, Heh (H) along with the in-breath, Vav (V) as the body is full of breath and Heh (H) during exhalation.<sup>244</sup>

Also in Islam there is a practice that relates prayer to breathing; the act of *dhikr* (remembrance), a manifestation of devotion before and after the prayer, includes the repetition of the names of god, as well as phrases from the hadith texts and Quran verses that refer to god. A common technique of the practice is to say 'la ilaha' (there is no god) during inhalation and 'illa Allah' (except god) during exhalation.

Similarly, within the realm of the Christian Orthodox Church there is a combination of repetitive prayer with breath control that leads to enlightenment. *Hesychasm* is a spiritual movement mainly associated with monastic life in Mount Athos, Greece. The practitioners pronounce repeatedly the prayer "Lord Jesus Christ, son of god, have mercy upon me", combined with rhythmic breathing. This leads them to see a light, which they believe to be of divine origin.

Moreover, in the Eastern Orthodox Church breath plays an important part in other rituals, either directly linked to religion or just part of pseudo-medical processes connected to witchcraft. In these, the priest or the person that performs the ritual puffs and blows, in order to drive the evil away or to sanctify something. During baptism, for example, the priest blows onto the holy water to sanctify it. On the opposite, if someone yawns deeply it could mean that the person standing across him or her is suffering from the "bad eye".<sup>245</sup> Subsequently, the effect of the "bad

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<sup>244</sup> David Seidenberg, "The Body in Kabbalah, A Study in the Process of Jewish Renewal", [online] <<http://www.shalomctr.org>> (Accessed: July 10, 2009)

<sup>245</sup> "Having the bad eye" means that somebody looked at you in a malicious way and as a result you suffer from headache.

eye” needs to be driven out of the sufferer into the healer’s body, who yawns repeatedly until the malice goes away.<sup>246</sup>

There are similar rituals, based on breathing in different cultures worldwide; they often involve blowing smoke onto the person who is supposed to be healed, and belching to take the evil out of the body, as in *Mexhica Pactili* (pre-Hispanic Mexican medicine)<sup>247</sup> or breathing onto another person to make a wish come true.<sup>248</sup>

An intercultural approach to this phenomenon could form subject of an extensive anthropological study. However, it is not the objective of this chapter to cover up the entire prism of the use of breath in cultures of distant places and times. What is interesting here is to confirm that the use of breath control for meditative or ritualistic purposes goes beyond the limits of philosophy. Through religious rituals, superstitious beliefs and simple observation, breath control becomes part of a knowledge that is at the roots of different cultures. As such, it is used by the artists and the public in order to enhance the communicative means of contemporary art.

Therefore, one can see how some philosophical views find their way into popular culture: they are diffused into it by tradition, trends, popular books or movies and end up being a familiar “code” of our culture –explaining why philosophy is not an exclusive doctrine, but a system of thought that can reach different stratum of culture.

This is an idea that one should bear in mind while taking a leap onto contemporary thinking to see how it deals with air and breath –within the realm of the corporeal and the immaterial.

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<sup>246</sup> For a thorough presentation of the role of breath in different religious systems, see: Halkias 2006, pp.48-61.

<sup>247</sup> Vanda Playford. [video] *Coca-Cola and Cigarettes, healing the soul of Sarah Katherine*, 2007.

<sup>248</sup> Halkias 2006, *ibid.*



#### 4.1.4 From East to West: Luce Irigaray's ontology of breath

Formulated as an answer to Western philosophy, but with a steady look towards the East, Luce Irigaray's thought is the ideal point where these worlds of past and present, East and West merge.

The philosopher strives to find an alternative path to Western philosophy, creating a field where the opposites –corporeal and spiritual, male and female- coexist in harmony. To achieve that, she starts with Eastern teachings.

Irigaray is a carrier of the western philosophical tradition and religion; yet she revises it through the spectrum of Eastern practices that focus on breath. She is concerned about the fact that Western philosophy starts from *logos* and focuses on word, whereas in Eastern practices the root of every theory is the body and the experience of the body.

More analytically, in Christian tradition “in the beginning there was *logos*”, whereas for the Indian tradition “the divine is not situated in an inaccessible transcendence. It is what I can become”<sup>249</sup>.

Observing that Western culture overemphasizes the importance of *logos* and art, limiting physical exercise only to the extent that it maintains us fit to pursue these things, she proposes a look towards the East, where the body itself can become spirit through the cultivation of breathing.<sup>250</sup> Thus, breath control enhances spirituality.

Cultivation of breath is presented as an alternative to the usual path towards understanding, that for Western standards requires intense thinking, phenomenological reduction, acute observation. According to Irigaray awareness of breathing can equally bridge the gap between body and consciousness, activity and

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<sup>249</sup> Irigaray 2002, p.43.

<sup>250</sup> Irigaray 2002, p.7.

passivity, immanence and transcendence.<sup>251</sup> Thus one can reach a knowledge of the self, avoiding the problematic oppositions of western thinking, the dichotomies between time and space, form and matter, mind and body, self and other, man and woman.

Regarding the latter opposition, several feminists have observed that the ontological division between body and consciousness –that lies at the heart of Cartesian dualism<sup>252</sup> is reflected in our conception of the difference between the sexes. Woman is identified with the body while man is consciousness, mind and spirit.<sup>253</sup>

More analytically, woman was thought to be acting based on feeling with no careful consideration and lacked the element of the “Genius”.<sup>254</sup> This division is reflected in the traditional roles of man and woman in parenting, where women are thought to contribute through their body, by carrying and feeding the child –blood and milk<sup>255</sup> whereas men are supposed to educate it and take care of its spiritual needs.

As we’ve seen through the analysis of Greek and Indian philosophy, breath is considered to be a substance between body and spirit; if body is considered as a “female” attribute and spirit as a “male” feature, a philosophy of breath has the potential to act as a bridge between man and woman, shattering a centuries-old culture of segregation between the two sexes. Hence, Irigaray’s theory goes against the traditional division between body and consciousness, which is reflected in the stereotypes about the sexes.

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<sup>251</sup> Johanna Oksala. “From Sexual Difference to the Way of Breath: Toward a Feminist Ontology of Ourselves”, in Ellen Mortensen (ed.), *Sex, Breath and Force: Sexual Difference in a post-feminist era*, Oxford: Lexington Books, 2006, p.44.

<sup>252</sup> See pp.101-102 of the thesis.

<sup>253</sup> Oksala, p.44.

<sup>254</sup> Also see: Christina Grammatikopoulou, “Women, art and education in early 20<sup>th</sup> century Greece”, *Interartive*, #12, August 2009 [online] <<http://interartive.org/index.php/2009/08/women-art-education>> (Accessed: July 10, 2012)

<sup>255</sup> Irigaray 2002, p. 81

The philosopher restores the position of women by putting emphasis on how they engender through their breath. From the uterus, children share their breath with their mother; after they leave their mother's womb, they become independent by breathing on their own:

Breathing corresponds to the first autonomous gesture of the living human being. To come into the world supposes inhaling and exhaling by oneself.<sup>256</sup>

So since the day of birth to the day of death, our breathing marks the autonomy of our Being. At the same time, autonomous breathing distances the baby from the mother and establishes a new kind of relation to her:

To breathe is to separate from [the mother or nature], to be reborn, and to give back to her a share of breath: through air, through praise, through work of life and of living spirit. To breathe is to leave prenatal passivity, to leave the infantile state, dependent or mimetic, to leave simple contiguity with the natural universe, in order to maintain and cultivate a status as an autonomous living being.<sup>257</sup>

In other words, to breathe is to take care of one's own life, to carve one's own path through life. There are two levels of breathing according to Irigaray, the *natural breath*, which is the corporal breathing that begins with breath, and the *cultural breath*, which is the spiritual breathing. However, "we are not really born, not really autonomous or living as long as we do not take care, in a conscious and voluntary way, of our breathing", for this matter we need to train our breathing with daily practice –with yoga, for example. By becoming more and more conscious of our

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<sup>256</sup> Ibid.

<sup>257</sup> Luce Irigaray, "From *The Forgetting of Air to To Be two*", in Nancy Holland; Patricia Huntington. *Feminist Interpretations of Martin Heidegger*, Pennsylvania: Pennsylvania State University Press, 2001, p.309.

breathing, we can transform our natural breath into a spiritual breathing and thus enhance our spirituality.<sup>258</sup>

Air is also the place where the two sexes meet, “remaining two” –guarding their individuality- but coexisting peacefully. Therefore, Irigaray accepts sexual difference, but puts emphasis on symbiosis and mutual complementation:

The gathering of our existence can be fulfilled through breathing. It is a vehicle both of proximity and of distancing, of fidelity and of destiny, of life and of cultivation [...] Life is cultivated by life itself, in breathing. This practice produces a distance, an estrangement, a proper becoming that is a renunciation of adherence to the environment. The near becomes one's own, through air. If breathing estranges me from the other, this gesture also signifies a sharing with the world that surrounds me and with the community that inhabits it. Food and even speech can be assimilated, partially become mine. It is not the same for air. I can breathe in my own way, but the air will never simply be mine.<sup>259</sup>

So, air is an element that we can never fully appropriate. We can simply exist within it, use it to sustain our body and spirit, and share it with the others. For this matter, breathing unites us with the others, at the same time that it underlines our individuality; it generates proximity and distancing at the same time. In other words, Irigaray believes that breathing is the element that unites us with our environment and the others.

In an attempt to revise Western philosophical thinking, Irigaray tries to centre her philosophy on the essential element that was forgotten by most philosophers, air.

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<sup>258</sup> Irigaray 2002, *ibid*, pp.75-76.

<sup>259</sup> Irigaray 2001, p.309.

In the book *The Forgetting of Air*<sup>260</sup> Irigaray attempts to redirect the western philosophical framework, which focused for centuries on the act of thinking, to air, as a requisite for life, thought and action.

Air has been neglected from western philosophy because “air does not show itself. As such, it escapes appearing as (a) being. It allows itself to be forgotten”<sup>261</sup>. So it’s the air’s ubiquitous presence that becomes an absence and allows us to forget it so easily.

The human being is made of matter and breath, and lives in earth, as well as air. But western philosophers, like Martin Heidegger, do not leave the ground, “whether it be that of the earth or that of *logos*”<sup>262</sup>.

She believes that western thinking has blossomed in air, but instead of analyzing the very core of its existence, it has completely overlooked it, subsequently creating a void “by using up the air for telling without ever telling of air itself”.<sup>263</sup> Thus has evolved a philosophy that she calls the philosophy of forgetting; in order to counterbalance it she proposes a philosophy of breathing<sup>264</sup> –that is, a philosophy that takes air into account.

So, for Irigaray, a philosophy of breath is a philosophy of remembrance, of memory –an idea that will reemerge in the second part of this chapter, within the context of Visual Arts.<sup>265</sup>

The philosophy of breathing aims to approach the issues of Being, using air as the starting point. We are surrounded and penetrated by air, so no thought or artistic

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<sup>260</sup> Irigaray 1999, p.5.

<sup>261</sup> Ibid., p.14.

<sup>262</sup> Irigaray 2001, p.310.

<sup>263</sup> Irigaray 1999, p.5.

<sup>264</sup> *ibid.*, p.7

<sup>265</sup> See the second part of this chapter, as well as the quote by Nikos Navridis in p.308 of this thesis.

creation is possible without it. In opposition to Heidegger, who claims that “to be human being means to be on the earth as a mortal”,<sup>266</sup> Irigaray asks “Can man live elsewhere than in air?”. Air is “the place of all presence and absence”.<sup>267</sup> Air is breath and the place of no breath is the place of disappearance.

Although Irigaray’s *The Forgetting of Air* is often being perceived as a criticism towards Heideggerian thought, in fact, it does not go against his line of philosophy, but merely seeks to expand it; she clarifies that through her work she wants to

celebrate the work of Martin Heidegger. To succeed in this gesture implied not appropriating his thought, but respecting it in its difference. To pay homage to Martin Heidegger in his relationship to the earth, to the sky, to the divinities and to the mortals presupposed for me the unveiling and the affirmation of another possible relation to this fourfold.<sup>268</sup>

After all, it seems that Heidegger does not disregard air altogether. In *The Thing* he uses the metaphor of a jug to assert that the “vessel’s thingness does not lie at all in the material of which it consists, but in the void that holds”,<sup>269</sup> a void that keeps and holds what’s being poured in. It is a metaphor that reflects Aristotle, who stated that “It seems that place is not only the walls of the vessel but also the void between them”.<sup>270</sup>

So the jug’s thingness does not come from the substance that holds its walls, earth, but the content that rests inside, the air. In other words, it is a void with presence and substance, held inside the walls of the jug and filling it up. At the same time, the

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<sup>266</sup> Martin Heidegger, “Building dwelling thinking”, *Poetry, Language and Thought*, New York: Harper & Row, 2001 (1971), p.161.

<sup>267</sup> Irigaray 1999, *ibid*, p.7.

<sup>268</sup> Irigaray 2001, p.315.

<sup>269</sup> Heidegger 2001, p. 167.

<sup>270</sup> Aristotle: Αριστοτέλης, *Φυσικά*, IV, 212a: “φαίνεται γὰρ οὐ μόνον τὰ πέρατα τοῦ ἀγγείου εἶναι ὁ τόπος, ἀλλὰ καὶ τὸ μεταξὺ ὡς κενόν”.

metaphor of the vessel somehow alludes to the idea of femininity; by actively holding it means that it is not only passive, but active as well.<sup>271</sup>

Therefore, one could say that Irigaray aims to expand Western thought towards the realm of breath, by bringing air into a strong focus. Irigaray bridges the philosophy of the West with the philosophical and cultural practices of the East by focusing on breath control. She uses air and breath as a prime element of thinking, that enhances the understanding of the contradictions of Being and unifies dualities, such as male and female, personal and collective, corporeal and spiritual. As such, Irigaray's work synthesizes the main questioning about breath presented within philosophical and artistic research.

#### **4.1.5 Breathlessness, suffering and death: A phenomenological approach**

The issue of the role of breath control in reaching an altered state of consciousness brings forth the subject of breathlessness, and how it can have an impact on the experience of the body. This is because during breath exercises, one does not let the air flow freely into the body, but also holds it consciously, overriding the reflex to inhale and exhale spontaneously. However, there are cases when breathlessness is not deliberate, coming during breath control, but becomes an illness, a chronic suffering for the body.

As an element of life, breath is linked to physical and spiritual wellbeing, autonomous existence and coexistence, memory and thought, as was noted above. On the reverse side, phenomena of breathlessness, dyspnoea and asphyxia bring theoretical and artistic research to the realm of pain, suffering and death.

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<sup>271</sup> Carol Bigwood. "Sappho. The She-Greek Heidegger Forgot", in Holland, Nancy J.; Huntington, Patricia J. *Feminist Interpretations of Martin Heidegger*, Pennsylvania: The Pennsylvania State University, 2001, p.173.

Pain lies at the basis of every cultural endeavour; “Without pain no language, no love, no poetry, no art – without pain no thought and no memory”.<sup>272</sup> The “aesthetic of pain” runs through western Western art, from the images of Crucifixion and the iconographical type of *Memento Mori* to performance art of the 1960s and 1970s, where the artists inflicted pain onto themselves and at times approached the verge of death through extreme actions.<sup>273</sup>

In order to see how art that employs extreme breathing and dyspnoea as expressive means has an impact on the sense of self, one needs to keep in mind how a malfunctioning of the body –chronic illness and the threat of death- is lived by the subject and the observers.

Merleau Ponty’s distinction between the ‘objective body’ (biological body) and the ‘lived body’ (I-body),<sup>274</sup> is a first step into the understanding of such phenomena. When our body functions flawlessly the biological body is identical to the lived one. In our respiratory system this equals to a breathing rate of thirteen to fifteen breaths per minute, that is 21,000 to 21,600 breaths a day. In normal conditions our body

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<sup>272</sup> Sigrid Weigel, “Homo dolens. Der Schmerz als bedeutungsgebendes Vermögen“, in Eugen Blume; Annemarie Hürlimann; Thomas Schnalke; Daniel Tyradellis, *Schmerz, Kunst und Wissenschaft*, Berlin: Dumont, 2007 (exhibition catalogue), p.281.

<sup>273</sup> Catherine Nichols, “Den Schrei malen. Zwischen Ästhetik und Anästhetik in der zeitgenössischen Kunst”, in Eugen Blume; Annemarie Hürlimann; Thomas Schnalke; Daniel Tyradellis, *Schmerz, Kunst und Wissenschaft*, Berlin: Dumont, 2007 (exhibition catalogue), pp.217-226.

<sup>274</sup> Alphonso Lingis, “Translator’s Preface”, in Maurice Merleau-Ponty. *The visible and the invisible*, Chicago 1968, p.liv: “The subject’s own corporeity is given to him as his ‘lived body’ or ‘I-body’ distinguished from his objective body, appearing publicly as a thing among things of the world”. The lived-body is your own body as experienced by yourself, as yourself. Your own body manifests itself to you mainly as your possibilities of acting in the world. It is what lets you reach out and grab something, for instance, but it also allows for the possibility of changing your point of view. This helps you differentiate one thing from another by the experience of moving around it, seeing new aspects of it (often referred to as making the absent present and the present absent), and still retaining the notion that this is the same thing that you saw other aspects of just a moment ago (it is identical).



feels transparent;<sup>275</sup> we can climb the stairs or run or perform any simple activity without feeling tired or breathless; our body is like Heidegger's tool, that becomes an extension of our will as long as it functions correctly.<sup>276</sup>

When we're in this state of 'transparency', death is a real, but distant prospect: "where death is, I am no longer and where I am, death is not",<sup>277</sup> said Epicurus in order to describe the impossibility of death for someone living. If you are alive death is nothing to you and if you are dead you do not feel anything, so the fear of death is something irrational, according to him.

Even Heidegger, who presented death as a constant presence in life and viewed life through the prism of finiteness,<sup>278</sup> highlighted that human beings cannot deal with death until they have to face the physicality of their existence: "'Dying' is leveled down to an event which does concern Da-sein, but which belongs to no one in particular". So, people accept death as a fact, as something that happens, but are unable to understand their own, until they experience suffering. In this moment, the "Being-towards-death"<sup>279</sup> gets to face the "eminent imminence"<sup>280</sup> of death.

In cases of breathlessness one gets to sense the fragility of our physical existence and the connection with the mind, reaching an altered understanding of the world, where the epicenter is the sense of the body and the prevalence of suffering.

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<sup>275</sup> Havi Carel. "Take my breath away: A phenomenology of breathlessness", *Take a deep breath* Symposium, Tate Modern, London. November 16, 2007 (lecture).

<sup>276</sup> See pp.104-105 of this thesis.

<sup>277</sup> Epicurus wrote: «Ὁ θάνατος οὐθεν προς ἡμάς, ἐπειδήπερ ὅταν μεν ἡμεῖς ὄμεν, ὁ θάνατος οὐ παρέστιν, ὅταν δε ὁ θάνατος παρη, τοθ' ἡμεῖς οὐκ ἔσμεν», in Επικούρου, *Οἱ τρεῖς ἐπιστολές*, Πάτρα: Πανεπιστήμιο Πατρῶν, 1996.

<sup>278</sup> Havi Carel, *Life and Death in Freud and Heidegger*, 2006, Amsterdam/New York, p.186.

<sup>279</sup> Heidegger 1993, §253.

<sup>280</sup> Ibid., §251-263.

When approaching suffering from a phenomenological point of view, one gets to see a more complete vision of illness, further from the “objective” image of science that focuses on the frailties and failures of the human body. From a medical viewpoint the body is an object meant to be scanned, analysed and restored back to health; it is a deeply Cartesian notion that separates the diseased body from the person that suffers.<sup>281</sup>

Phenomenology on the other hand views illness through a different perspective: as a lived experience of what happens when the “transparency” of health is removed and the deficiencies of the body become evident.<sup>282</sup> Like Heidegger’s broken tool, that becomes visible when it stops functioning,<sup>283</sup> the understanding or the experience of the ill body helps us embrace frailness as part of life and approach the subject of suffering in an in-depth way.

In the previous sections, we saw how breathing is used in cultural and medical practices as a medium that brings the body to equilibrium and elevates the mind to a state of heightened consciousness. Breathlessness, on the other hand, is experienced as existential angst by the people who suffer from it, as is observed by phenomenological studies onto patients that struggle with respiratory problems.<sup>284</sup> Breath is no longer something to be taken for granted, but it often requires struggle. At this point the patients face the deficiencies of their own body; they reach a point where “Da-sein is unable to bypass the possibility of death”.<sup>285</sup>

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<sup>281</sup> Ibid., §249-251.

<sup>282</sup> See Fredrik Svenaeus. “Das unheimliche – Towards a phenomenology of illness”, *Medicine, Health Care and Philosophy*, 3, 2000, pp.3–16.

<sup>283</sup> As an example of the phenomenological theories in the therapeutical process, see the work of George Khut, presented in the previous chapter.

<sup>284</sup> See for example David A. Nicholls, “The experience of chronic breathlessness”, *Physiotherapy Theory and Practice*, 19, pp. 123-136, 2003.

<sup>285</sup> Heidegger 1996, §249-251. “Da-sein”, usually translated as “existence”, literally means “being-there”.

The artists examined in this chapter, that bring the human body to the point of breathlessness, do not simply represent suffering, but they actually recreate a condition of suffering, arousing feelings of compassion, empathy and fear to the viewers, as any real incident of pain and illness. More than that, the inherent capacity of breath-related artworks to cause a synchronicity of breathing between the artist and the viewers, breaks the limits between the vision of the suffering body and the observer. By annulling distanced observation, suffering is no longer raised to a sublime level,<sup>286</sup> it is presented as a part of living, a common destiny for human beings and an experience that alters the way people view the world and their existence within it.

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<sup>286</sup> Catherine Nichols 2007, pp.217-219.

## 4.2 Breath as a prime matter of artistic creation

*Breathing, you invisible poem!  
 Worldspace incessantly having its pure  
 traffic with our own being. Counterweight system  
 in which I rhythmically occur.  
 Lone wave, whose  
 gradual sea I am;  
 you sparsest of possible seas-  
 making room.  
 How many places in space have already  
 been inside me! Many a wind  
 is like a son to me...  
 Do you know me, air? You, full of places which  
 once were mine? You – once the smooth rind,  
 the roundless and leaf of my speech*

R. M. Rilke<sup>287</sup>

### 4.2.1 Manzoni, Torres and Penone: Some first notes on breath as an artistic material

As we have seen in the previous chapter, immateriality and invisibility can be approached artistically through a junction of theory and experience. Through the artistic examples analysed in the previous chapter it became evident that breathing, when it forms part of an interactive software-based installation, can become a tool to gain a new experience of the self. In the artworks examined here – mainly video art and installation- the impact of breathing is still very strong but more subtle; the visitors are influenced by the sound of breathing, the shapes and colours that the

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<sup>287</sup> R. M. Rilke, *Sonnets to Orpheus II*, Connecticut: Wesleyan University, p.57.

artists translate it into, but they have a more limited role in the creative process. What is important here, however, is that the more “concrete” format of the artwork gives more space to the exploration of the qualities of breath *per se*, as a life sustaining force that has been charged with multiple cultural meanings.

Although our analysis here is mainly shaped by artworks of the past two decades, it is useful to trace the beginnings of this quest into the realm of respiration and the senses and see how they came to be diffused into contemporary art.<sup>288</sup>

In line with Duchamp’s experiments with transparency and immateriality<sup>289</sup> Piero Manzoni explored new territories in art. After projecting the concept of the ‘live sculpture’, which was created by the artist’s signature on a live, naked body, Manzoni gained notoriety in the art world when he saved his excrements in sealed cans and set their value to the equivalent of their weight in gold.<sup>290</sup> Provocative though as they may seem, these actions underlined that art was more than a creation of the hands; in fact, any part of the body could create art –the lungs as well- and even the body itself could be considered as an artwork.

Furthermore, Manzoni created a series of *Bodies of Air* (1956),<sup>291</sup> that consisted of wooden boxes containing a balloon, a stand for the balloon and an air pump; they were incomplete sculptures, waiting for the final touch –the air- to be added by the purchaser. For an additional charge of two hundred liras per litre of air, the purchaser could buy the bodies of air filled with the *Artist’s Breath* (1956).<sup>292</sup> As Manzoni stated, “when I blow up a balloon, I am breathing my soul into an object

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<sup>288</sup> Website of the thesis *Art-Breath* [online] <<http://art-breath.com/manzoni-torres-penone>> (Accessed: February 6, 2013)

<sup>289</sup> See pp.126-127 of this thesis.

<sup>290</sup> See Piero Manzoni, *Piero Manzoni Paintings, Reliefs & Objects*, London 1974.

<sup>291</sup> The work was presented in 1960 in Galleria Azimut, Milan.

<sup>292</sup> One of this series of works is to be found at the Tate collection. For more details see [online] <<http://www.tate.org.uk/art/artworks/manzoni-artists-breath-t07589>> (Accessed September 9, 2012).

that becomes eternal”.<sup>293</sup> So, the artist had incorporated in his vision the philosophical beliefs presented previously, that breath is the carrier of soul.<sup>294</sup> It seems a bit ironic that the balloons deflated a while after the artwork’s completion; by that time, however, Manzoni had already begun to experiment with different aspects of breathing. [Figure 26]

His *Space Sculptures* (1959), a collection of spherical bodies of about 2.50 metres in diameter, reproduce the function of breathing in a more active manner. These globes were meant to pulsate by means of an air compressor with a slow unsynchronized breathing rhythm. The artist envisioned expanding the project into architectural constructions, creating pneumatically pulsating ceilings and walls.

Even though his projects remained unrealized due to his untimely death, his revolutionary ideas were important, not only because he expanded the potential of the body to create art, but also due to the projection of breath as the essence that gives shape and life to an artwork.

Taking this idea a step further, Francesc Torres employed the dynamic of breath to explore the realm of the immaterial and the effect of human activity on a certain space. In his *Occupation of a given space through a human action* (1973)<sup>295</sup> he filled one thousand plastic bags with his own breath,<sup>296</sup> projecting respiration as a conscious act that can fill or alter space. Breath becomes a mundane task, a repetitive work that gives a final “product”, making us wonder how many breaths it takes to complete a specific work, a building, or a commercial product. At the same time, breath here becomes a measure of space, with an evident amount of volume. [Figure 27]

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<sup>293</sup> Germano Celant; Piero Manzoni; Jon Thompson, *Piero Manzoni*, Charta: London 1998, p.144.

<sup>294</sup> See for example section 4.1.1 of this thesis.

<sup>295</sup> Torres repeated the installation in 2008 for the exhibition “Da Capo” in MACBA, Barcelona.

<sup>296</sup> Iria Candela; Bartomeu Marí, Francesc Torres, *Da Capo*, (catálogo de exposición), Barcelona: Edicions de l’ Eixample, 2008, p.13.

Giuseppe Penone's research also focused on the shape, volume and ambient created by breath.<sup>297</sup> His experimentations with basic materials such as breath, clay, leaves, are to be viewed within his involvement with the Arte Povera movement,<sup>298</sup> which favoured the empirical and the anthropological dimension in art, questioning the existing hierarchies within the art world.<sup>299</sup>

Beginning with photographs of exhaled clouds of smoke, Penone then attempted to solidify these shapes on clay.

His series of *Breaths* (1978)<sup>300</sup> were clay sculptures in the size of a human, which imitated the shape of glass after the first blow of the glassblower. On one side of the sculptures the artist pressed himself against the material, in order to leave behind the shape of his body -the outline of the person who "breathed" life into the artwork. Moreover, he moulded a piece of clay inside his mouth and added it to the final sculpture. Therefore, the sculptures could be viewed as a reflection of the path of breath, from the body, to the mouth, into the world. [Figure 28]

Profoundly interested in nature, he was inspired from smelling leaves in order to create his *Breath of leaves* series (1979-1991). After collecting a heap of leaves, the artist would lay down on his head, breathing into the pile; when the action was over, the shape of his silhouette remained onto the pile, just like in his *Breath* sculptures. However, the imprint of his body is not to be seen as an emptied mould, but as an inverse cast of his body, filled with air. [Figure 29]

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<sup>297</sup> Centro Galego de Arte Contemporáneo; Giuseppe Penone. *Giuseppe Penone, 1968-1998*, (catálogo de exposición), Santiago de Compostela: Xunta de Galicia, 1999.

<sup>298</sup> For more on Arte Povera, see for example Carolyn Christov-Bakargiev. *Arte Povera*, London: Phaidon, 1999.

<sup>299</sup> Giuseppe Penone. *Giuseppe Penone*, Barcelona: Fundació La Caixa, 2004.

<sup>300</sup> One of these *Breaths* is at the Tate Collection and another one at the Centre Georges Pompidou in Paris. For more information see [online] <<http://www.tate.org.uk/art/artworks/penone-breath-5-t03420>> (Accessed September 12, 2012).

In his installation *Breathing the shadow* (1999-2000)<sup>301</sup> he lined the walls of a room with laurel leaves, creating an architectural environment with a natural resonance. At the same time, the smell pervading the space opened up a direct path of communication with the memory and emotion of the viewers –in a similar manner to Lygia Clark’s works, that will be viewed in continuance.

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<sup>301</sup> Exhibitions:

2000, “La Beauté, Beauty in Fabula”, Papal Palace, Avignon, France

2000, “To breathe the shadow”, Marian Goodman Gallery, New York

2004, “Giuseppe Penone: Retrospective Exhibition 1968-2004”, Centre Pompidou, Paris.





Figure 26. Piero Manzoni, *Fiato d'artista*, 1956. Balloon, rope, lead seals and bronze plaque on wooden base, Tate Modern Gallery, London.

Figure 27. Francesc Torres, *Ocupació d'un espai donat a través d'una acció humana*, 1973. Photograph.

Figure 28. Giuseppe Penone, *Soffio*, 1978. Clay sculpture.

Figure 29. Giuseppe Penone, *Soffio di foglie*, 1979-1991. Installation of heap on leaves and performance.

#### 4.2.2 Lygia Clark: Odour and breath, art and therapy

In the work of Lygia Clark<sup>302</sup> breathing becomes a means to create an artwork that not only has the power to alter consciousness, but also to heal trauma. As it expands through the decades from the post-war era to the late 1980s and from Constructivism to Tropicalia and Interactive art, it becomes the ideal transition from the art of the 1960s and 1970s to contemporary art.

Guy Brett observes that Clark “produced many devices to dissolve the visual sense into an awareness of the body”.<sup>303</sup> Her works involve specially designed hoods and suits that are intended to enhance the senses of their participants, favouring smell and touch over sight. She treated the body and mind as a unity and disregarded the divisions between artist and audience. For her, the artistic object is co-created by the artist and the participant, acquiring meaning and structure only through interaction.

Lygia Clark explained that the emphasis on her work shifts from the artistic object to experience and from matter to the surrounding space, the “empty-full”<sup>304</sup> surrounding an object and filling a body:

the more diverse the lived experiences are, the more open is the proposition and it is therefore more important. In fact, I think that now I am proposing the same type of issue that before was still achieved via the object: the empty-full, the form and its own space, the organicity.<sup>305</sup>

The contradictions of empty and full, heavy and weightless, inside and outside become particularly prominent in the work *Air and Stone* (1966). The artist provides

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<sup>302</sup> Website of the thesis *Art-Breath* [online] <<http://art-breath.com/lygia-clark>> (Accessed: February 6, 2013)

<sup>303</sup> Guy Brett. “Lygia Clark: In search of the body”, *Art in America*, July, 1994, p.62.

<sup>304</sup> The idea of the “empty-full” is present in the work of Marina Abramović as well, see p.326 of the thesis.

<sup>305</sup> Lygia Clark. “Letter to Hélio Oiticica”, November 14, 1968, in Claire Bishop (ed.), *Participation*, London and Cambridge, MA: Whitechapel and The MIT Press, 2006, p.113.

the materials of the main action: a small plastic bag, an elastic band and a pebble. The participants were instructed to breathe into the bag and fill it with air, to seal it with the band and put the pebble on top, placing it between the hands and pressing it with systolic and diastolic movements; thus they created a movement that resembled respiration. Considering the fact that the elastic band had been given to the artist to protect her wrist, after breaking it in a time of personal crisis,<sup>306</sup> it becomes obvious that the act of saving a breath in a container and holding it between the hands must have had a healing effect for her. The work reproduces the movement of life; as the solidness of the stone faces the immateriality of the surrounding air, it seems like an embryo floating in the amniotic fluid. The references to life, childbirth, and intimacy are numerous. [Figure 30]

In *Breathe with me* (1966) the artist invited the participants to form a rubber tube into a circle and hold it next to their ear, listening to the sound of air entering and exiting the tube's ends. The artwork focuses on the act of hearing, bringing to mind the experience of listening to the sound of the air passing through a sea shell –as well as the sound of our own body, like in Cage's anechoic chamber.<sup>307</sup> [Figure 31]

Throughout her career Clark experimented with hoods, tubes and plastic bags worn over the head. In the *Sensorial Hoods* (1967) perception is altered by eyepieces with small mirrors, ear coverings and a small nose bag with aromatic seeds. The hoods alienate the participants from the environment and create a cocoon with new stimulants, where they can rediscover their bodies and themselves. Similarly, in *Abyss Masks* (1967) the face of the participant is covered by a large air bag, weighed

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<sup>306</sup> See Suely Rolnik. "Molding a Contemporary Soul: The Empty-Full of Lygia Clark", in: Rina Carvajal; Alma Ruiz (eds.). *The Experimental Exercise of Freedom: Lygia Clark, Gego, Mathias Goeritz, Hélio Oiticica and Mira Schendel*. Los Angeles: The Museum of Contemporary Art, 1999, pp. 55-108.

<sup>307</sup> See p.134 of this thesis.

down with a stone, where the sound of breathing within the hood can reproduce the movement of air within the body. [Figures 32, 33]

There is a strong political tone emerging from these artworks, especially if one considers the fact that the artist's home country, Brazil, was under a military dictatorship when they were created. However, there is also a positive charge within those works, despite the feeling of confinement. The stimulation of the other senses –rather than vision- creates a similar experience to when one stays within the darkness for too long, and one's eyes begin to discern things that were initially invisible. In these series, the artwork is not the object, but the new sensations that it produces to the viewer:

with these new sensorial masks, it is man who discovers himself in all his plenitude, and even when he fills the plastic bags [...] he feels that he is casting himself (in the sense that he exhales the air and the bag takes shape). This same space that comes out of him, as he becomes conscious of his own bodily space that goes beyond him, takes a form that would fill the actual space around him. I for instance, feel that after formulating these large plastic bags with my own lungs, when lying down on the floor in my flat I could touch, with a simple gesture, the ceiling, which is no less than 6 metres high . . . It is as if I had created an egg of space that belongs to me and that embraces me.<sup>308</sup>

The artist describes the experience as “the most organic *Breathe with me* yet less illustrative”,<sup>309</sup> revealing an interior evolution from the pictorial to the sensorial and abstract.

So in these artworks, what becomes important is not only smell and sight, but also the experience it stimulates: the feeling of the participants that they mould the surrounding air via the force of breath, as the protected, womb-like environment, provides a new awareness of the body.

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<sup>308</sup> Clark 1968, p.114.

<sup>309</sup> Ibid.

Up until this point, it has become clear that these artworks can receive multiple approaches, favouring the political, the phenomenological, or the sensorial aspect. In regard to the latter, one could focus on the importance of smell in the work of Clark.

Smell has a strong relevance to breathing, as odours approach us involuntarily, through breathing. A great number of artworks employ odours as a means of reaching the audience, from the Avant-Garde movements of the early 20<sup>th</sup> century, to Fluxus and contemporary art.

Smell has often been marginalized as a secondary sense, relating to the body;<sup>310</sup> however, it has been observed that it plays a most significant role in our everyday life, from the day we are born and learn to discern our mother's smell, to the capture of pheromones, that contribute to attraction or aversion towards the others,<sup>311</sup> and the warnings of danger –like fire, death or rotten food, for example.

What is particularly striking about smell is that it does not consist only of the odours themselves, but also the experiences and emotions associated with them; it is a very subjective experience that is difficult to describe with words. Therefore, the sense of smell breaks the traditional separations we place within the world because

Odours cannot be readily contained, they escape and cross boundaries, blending different entities into olfactory wholes. Such a sensory model can be opposed to our modern linear world view with its emphasis on privacy, discrete divisions and superficial interactions.<sup>312</sup>

So, the marginalisation of smell is largely due to its ability to transgress personal boundaries and to stir up memories and emotions.

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<sup>310</sup> See pp.97-98 of the thesis.

<sup>311</sup> Evi Papadopoulou. "The olfactory dimension of contemporary art", *Interartive*, #13, September, 2009. <<http://interartive.org/2009/09/odour-art>> (Accessed August 21, 2012)

<sup>312</sup> Constance Classen; David Howes; Anthony Synnott. *Aroma, The Cultural History of Smell*, London: Routledge, 1994, p.4.

Therefore, the use of smell as an artistic medium takes the participants to a more personal realm, that brings them in direct contact with their most intimate thoughts and emotions. As Gaston Bachelard observes,

Perfumes [...] have infinite resonances. They bind memories to desires, an enormous past to an immense and unformulated future. [...] Odours are perceptible bonds. There is a continuity in their very bodies. There are no discontinuous odours.<sup>313</sup>

Smells act as unifying elements between imagination, desire, the past and the future. They transgress the boundaries of space and time, lingering like a powerful projection of the past onto the present:

...when for a long-distant past nothing subsists, after the people are dead, after the things are broken and scattered, still, alone, more fragile, but with more vitality, more unsubstantial, more persistent, more faithful, the smell and taste of things remain poised for a long time, like souls, ready to remind us, waiting and hoping for their moment, amid the ruins of all the rest; and bear unfaltering, in the tiny and almost impalpable drop of their essence, the vast structure of recollection.<sup>314</sup>

In the work of Lygia Clark, the connection of the senses to memory and emotion became an even stronger focus during her later work. From the 1970s and on, the artist employed her *Relational Objects* –as she named these hoods and suits- in healing processes, to treat patients with psychological problems. Thus, she restored the link between art and medicine, which was present in ancient cultures, like the Greek culture –where the music was seen as a magical means of purification and healing- and the Chinese culture, where the concept of *Chi* runs through the fields of philosophy, medicine and art.<sup>315</sup> As the artist revealed, the therapeutic aspect of her work aims to recover a notion of the body’s “plenitude”.<sup>316</sup>

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<sup>313</sup> Bachelard 1988, p.137.

<sup>314</sup> Marcel Proust, *Swann’s Way*, Middlesex: The Echo Library, 2006, p.37

<sup>315</sup> See footnote n.226 of this thesis.

<sup>316</sup> Brett 1994, p. 108.

In this sense, Lygia Clark's work illustrates how art can have a lasting impact on the way the participant perceives the world, sometimes even healing trauma. At the same time, her *Relational Objects* show how it is the experience of using an object that becomes more important than the object itself, illustrating the theories of Heidegger and Merleau-Ponty about the way we relate to objects.<sup>317</sup>

In the work of Lygia Clark, philosophy, art and therapeutic rituals come together to connect the participants to their innermost thoughts, emotions and traumas.

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<sup>317</sup> See pp.104-105 of the thesis.

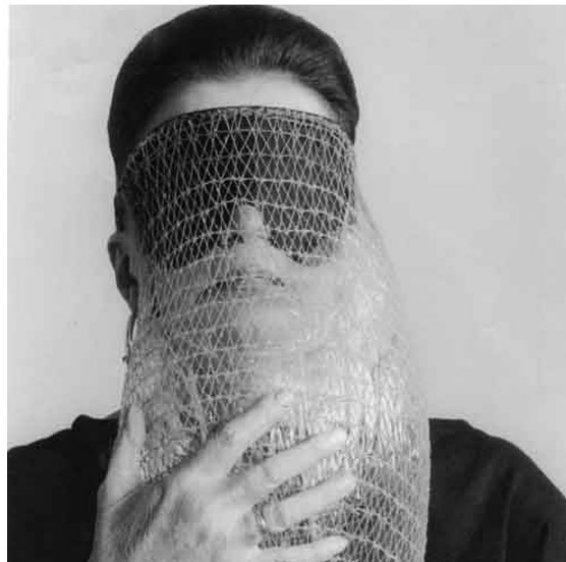
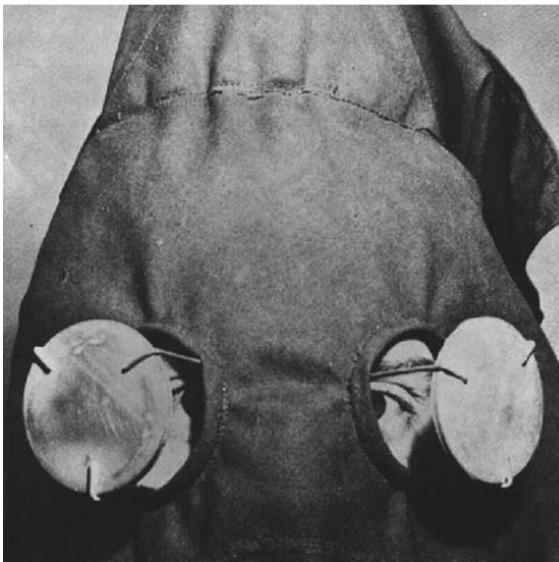


Figure 30. Lygia Clark, *Ar e Pedra*, 1966. 'Relational Object'.

Figure 31. Lygia Clark, *Respire Comigo*, 1966. 'Relational Object'.

Figure 32. Lygia Clark, *Máscaras sensoriais*, 1967. 'Relational Object'.

Figure 33. Lygia Clark, *Máscara Abismo*, 1967. 'Relational Object'.



#### 4.2.3 Nikos Navridis: Infinite transformations of breath and void

The work of Nikos Navridis<sup>318</sup> is founded on the verge of the immaterial, where the void meets human breath. For this matter it is an ideal exemplification of the philosophical theories analysed so far in this thesis. In his work we see the birth and evolution of these concepts; like a musical score, the leitmotiv of one artwork becomes the main theme or a variation in the next one.

Navridis seeks to find an answer to the questions that emerge from the void and the human body, through visual means. He contends that “the difference between philosophy and art is that although both demonstrate the same things, the first one talks and the other shows”.<sup>319</sup> So, in a similar way to Yves Klein,<sup>320</sup> Navridis articulates his work in the form of a philosophical research onto basic concepts about the world and the self.

His first tentative approach to an exploration of the void started by searching for the void in traditional techniques; having a background as an architect, he entered the field of visual arts with an exploration of the empty space, the void between surfaces. Because an architect does not only pay attention to the structure, but also to the breath that flows within the building and formulates it, as Le Corbusier noted: “A building is like a soap bubble. This bubble is perfect and harmonious if the breath has been evenly distributed and regulated from the inside”.<sup>321</sup>

Hence, the question of the void and the role of breath, the idea of the interior and exterior and Aristotle’s definition of space as the container and the contained<sup>322</sup> are

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<sup>318</sup> Website of the thesis *Art-Breath* [online] <<http://art-breath.com/navridis>> (Accessed: February 6, 2013)

<sup>319</sup> Katerina Koskina, *Nikos Navridis*, exhibition catalogue, Athens: Kafayan Gallery, 1995, p.3.

<sup>320</sup> See pp.128-130 of the thesis.

<sup>321</sup> Le Corbusier. *Towards a New Architecture*, New York: Dover Publications, 1986 (1931), p.181.

<sup>322</sup> See p.190-191 of the thesis.

at the basis of his artistic work. He begins his artistic quest with installations where the elements are carefully distributed in space and sculptural casts, which are actually constructed out of void; it is the void of the cast that fills up with matter and becomes a solidified form.<sup>323</sup>

In his work *Untitled* (1995) from the series *The Question of the Age of the Void* (1996)<sup>324</sup> Navridis places two plaster heads at the edge of vices, which bring a latex balloon to the limits of rupture. He takes an element from the ancient Greek heritage, and brings it into a new context that emphasizes the notions of space and pressure. The artist creates a delicate balance that explores the different tensions present in space, between different cultural artefacts or people. [Figure 34]

This “in between” space is also created, moulded and brought to its limits in another work from the series *The Question of the Age of the Void*: a video installation that projects the image of two identical twins inflating a balloon using two mouthpieces located at opposite ends. In one of the videos of the installation, as they blow up the balloon, the space between them grows, pushing them out of the limits of the projection. They try to diminish the distance, by pushing their heads onto the latex membrane of the balloon, in a way that they remind us of the casts in *Untitled* and –

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<sup>323</sup> See also Eva Pryce. *Invisible transformations in the work of Nikos Navridis*, London: Foyle, 2007.

<sup>324</sup> Exhibitions:

1995, Kalfayan Gallery, Athens

1996, "Dematerialization", 23rd Biennial of Sao Paolo

1997, Epikentro Gallery, Athens

1998, Köln Sculpture, Art Cologne '98, Cologne

1999, "Nikos Navridis. El Vacio en el Vacio", Museo Universitario Contemporaneo de Arte, MUCA Gallery, Mexico City

1999, "Hot Air", Granship, Performing Arts Center, Shizuoka, Japan

2000, "Beyond Origin. Video Art", Hellenic American Union Galleries, Athens

2002, Institute of Technology, Carlow, Ireland

2002, "No Air", Ares & Pensares, SESC, Sao Paolo

2002, "Conversation", Athens School of Fine arts, The Factory, Athens

2004, "Nikos Navridis-Difficult Breaths", Fundación "La Caixa", Madrid

even stronger- two fetuses in the maternal womb. Indeed, the life of these girls started out as one cell, which then became split in two, evolving inside the same body. When they exited the protected space of the womb, the vessel holding them, and took their first breaths, they became autonomous from their mother and from each other. Therefore, bridging this distance seems an impossible struggle; every breath they take in life distances them from each other. However, if we keep into mind Irigaray's theory that the breathing space not only estranges us from each other, but also brings us together,<sup>325</sup> we could see how the void trapped between the walls of the balloon and outside becomes a potential for coexistence. [Figure 35]

The references to the beginning of human life, through the elements of breath and water, were particularly strong in the work *On Life, Beauty, Translations and other Difficulties* (1997),<sup>326</sup> which was installed in the Yerebatan Cistern in Istanbul, a construction used to provide the city with water during medieval times. In four planes that hung above the water of the cistern, four videos were projected, showing people trying to blow up balloons. The somehow vague projections, filmed from the interior of the balloon, were mirrored onto the surface of the water, creating –along with the sound of breathing reverberated across the cistern- an all-encompassing environment. As Rosa Martinez observes, the lips of the people that blow up the balloon become similar to a navel, suggesting biological metaphors about birth and

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<sup>325</sup> See pp.187-188 of the thesis.

<sup>326</sup> Exhibitions:

1997, "On life, beauty, translations and other difficulties", 5th International Istanbul Biennial, Istanbul

2000, "Leaving the Island", PICAF Metropolitan Museum of Pusan, Korea.

2004, "Nikos Navridis. Difficult Breaths", Fundación "La Caixa", Madrid

2004, "Man and woman- God becomes a man", The Museum of New Art, Parnu, Estonia

2010, "Respiro", Vicenza

communicating “affections, feelings and emotions that envelop the spectators and virtually enclose them within these uterus-balloons”.<sup>327</sup>

The same projection was presented in Vicenza (2010), where the images of the people blowing up the balloons were reflected onto the surface of the floor, as the only source of illumination for the space, breaking thus the materiality of the architectural space. The work challenged the limits of the material space, in a similar way that the people in the videos confront the confines of the “void”. By struggling with the latex surface these people seek to shape and control the void inside, while their breaths make it bigger and bigger. The sound of deep breathing from the projections affected the mood of the people that moved within the exhibition space, as they became subjected to a breathing rhythm that wasn't their own. [Figure 37]

The theme of people struggling against their own breaths is repeated in *Traps* (1998),<sup>328</sup> a video installation with two projections of a man and a woman, both of them naked, rubbing inflated balloons against their chests. The man embraces the balloon in an almost erotic manner, caressing it and blowing it to make it even bigger, whereas the woman tries to break it, as if it held inside a life that she was supposed to deliver into the world; eventually she succeeds in her effort, releasing the void that was contained inside the balloon into her surroundings. There is a

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<sup>327</sup> Rosa Martínez. “Difficult Breaths”, in VVAA, *Nikos Navridis*, Madrid, 2004 (exhibition catalogue).

<sup>328</sup> Exhibitions:

1998, "Mediatization", Edsvik Art Center, Sollentuna, Sweden

1999, "Project Rooms", ARCO, Madrid

1999, Epikentro Gallery, Athens

1999, "Nikos Navridis. El Vacío en el Vacío", Museo Universitario Contemporáneo de Arte, MUCA Gallery, Mexico City

2000, "Friends and Neighbours", EVA 2000, Limerick

2001, "Beyond Origin" Video Art, Hellenic American Union Galleries, Athens

2001, "TransSexual Express: A classic for the third millenium", Kunsthalle Múcsarnok, Budapest

2004, "Nikos Navridis, Difficult Breaths", Fundación "La Caixa", Madrid

2004, "Monument to Now", Deste Foundation for Contemporary Art, Athens

2006, Magnus Müller Gallery, Berlin

difference in the way the two sexes relate to the latex balloons and the air they contain; still, in regard to this action the artist admitted that “breaths are not defined by gender”.<sup>329</sup> The juxtaposition of male and female brings to mind the ideas of Luce Irigaray, who emphasized that the air is the place where the two sexes coexist peacefully, still guarding their individuality.<sup>330</sup> [Figure 36]

In order to fully understand *Traps*, we need to keep in mind that, in regard to the main theme in his work, the artist has stated that:

It is people that are trapped in roles. I am interested in the [...] behaviour of these people when they get trapped in these roles and the relationships among them. When people get trapped into a role, I believe that they are trapped into their own breaths. I'm interested in these trapped breaths. Because that's when they invent a new life. I often work with this invented life.<sup>331</sup>

With a stronger focus on the audience, in two of his large installations, *Orange Auto Portrait or When Breaths return to the body* (2001)<sup>332</sup> and *Snow balloons or Trapping their own breaths* (2003),<sup>333</sup> he invited the viewers to trap their breaths in a wall construction that was made of deflated balloons. These artworks acquire their final image and volume through the intervention of the participants, who contribute their innermost essence, the breath that sustains them to life. Instead of letting their exhalations flow into the air, they save them for a while; hence the installation becomes a collection of different breaths. This is an element that will return often in

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<sup>329</sup> Nikos Navridis, *Selected Works 1996-2005*, [DVD] Athens, 2005.

<sup>330</sup> See pp.186-188 of this thesis.

<sup>331</sup> Paraskevi Katimertzi: Παρασκευή Κατημερτζή, «Νίκος Ναυρίδης, Εισπνοές και εκπνοές τέχνης (και ζωής)», *Τα Νέα*, 3 Μαρτίου 2004.

<sup>332</sup> Exhibitions:

2001, "TranSexual Express: A classic for the third millenium", Centre d' Art Santa Monica, Barcelona

2002, "TranSexual Express: A classic for the third millenium", Palacio Municipal de Exposiciones, Kiosco Alfonso, La Curuña

<sup>333</sup> The project was presented in 2003, in the 2nd Echigo-Tsumari Art Triennial, Ecjhigo Tsumari, Tokamachi, Japan

Navridis' work; the idea of the participants that add their breath to the work and the role of the artist as a collector of exhalations, a "breath collector". The artist views the air as the garbage that our body exhales and he saves this air as something valuable.<sup>334</sup> This notion will also be present in his adaptation of Beckett's breath, as we shall see in the next chapter.<sup>335</sup> [Figure 38]

Breath comes forth as an insurmountable task and at the same time as an element that constitutes a great force in the video installation *With no hands or When She Leans on her Own Breath* (2000-2003).<sup>336</sup> The work is comprised of two video installations. In the first one, we see a woman lying on her stomach on the floor. As the action proceeds, we understand that she is lying on a balloon, which she is slowly filling with her own breath. As the balloon fills with air, her body is slowly lifted up, by the force and volume of her own breathing. At that point it becomes clear that the second video shows the same action from the interior of the balloon. The projection from the inside of the latex –in this work, as well as in *On Life, Beauty Translations and other Difficulties*- marks the inner path of breath within the body.<sup>337</sup> [Figure 39]

When the balloon reaches its limits and is about to burst, the woman lets go of her task and falls again onto the floor, evidently relieved. According to the artist, the performer "gave birth to her body before the camera by trapping her own breathing",<sup>338</sup> linking once more the notion of breath to the concept of life –an idea shared by different cultures and philosophical theories that have been analysed in this chapter. The artist reveals how something as minimal and fragile as breath has

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<sup>334</sup> Unpublished interview with the artist, August 2010.

<sup>335</sup> See pp.307-308 of this thesis.

<sup>336</sup> Exhibitions:

2003, "Light, Image, Reality", Aegina Academy, Aegina, Greece

2004, Fundación "La Caixa", Madrid

<sup>337</sup> Marina Kotzamani, "Athens in the twenty first century", *PAJ*, Vol.31, No.2, May, 2009, pp.11-44.

<sup>338</sup> Unpublished interview with the artist, August 2010.

the power to sustain and lift our body. At the same time, he shows how certain tasks, sometimes as simple as breathing, can become an unbearable weight. This could be perceived a metaphor for difficult situations that consume all our energy, until we give up and let go.

In regard to his work, Navridis has stated that

What interests me is not the finding of breath in art and its utilization. It's the human being and the way that it faces the world. The human being as a measure of the world, the human lived experience.<sup>339</sup>

This statement resonates the famous saying by Protagoras, that “the human being is the measure of all things”.<sup>340</sup> Under this prism, *Looking for a Place* (1999-2000)<sup>341</sup> could be seen as a research into the human condition. The video installation is comprised of four consecutive screens that are complementary views of the same succession of action. In those, we see sets of inflated balloons –a red one inside a white one, like eggs- filling up the space, where faceless figures wander around. These people have their face covered up in latex, that blows up as their breathe and

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<sup>339</sup> Katimertzi 2004.

<sup>340</sup> Protagoras emphasized on the role of subjectivity and relativity to human knowledge, as our perception is the only way to understand the world; he said that “The human being is the measurement of all things, of things which are, that they are and of things which are not, that they are not” – in ancient Greek: “πάντων χρημάτων μέτρον ἐστὶν ἄνθρωπος, τῶν μὲν ὄντων ὡς ἔστιν, τῶν δὲ οὐκ ὄντων ὡς οὐκ ἔστιν” (This quotation is recapitulated in Plato's *Theaetetus*, section 152a). Protagoras' phrase, resonating in Navridis' words, is of particular interest for this thesis, as the human body and the artistic use of one of its functions, breath, is used as a means to explore the world and express human thoughts and emotions.

<sup>341</sup> Exhibitions:

1999, "Looking for a place", 3rd Biennial of Site Santa Fe, Santa Fe

2000, "Synopsis I-Communications", National Museum of Contemporary Art, Athens

2001, "49th Biennial of Venice", Greek Pavilion, Venice

2002, "Art in Transition II - Some kind of dream", Contemporary Art Museum (CAM), Raleigh North Carolina.

2003, Banquete, Palau de la Virreina, Barcelona, Spain

2004, "Nikos Navridis. Difficult Breaths", Fundación "La Caixa", Madrid

deflates as they exhale. When the latex sticks onto their faces they resemble marble heads, like the ones that pushed the latex balloons in *Untitled*, linking thus the action to the earliest works of the artist and the Greek cultural heritage. These faces, just like the ancient sculptures, look blind; as the artist explains,

The original idea was to follow a breath as it is being diffused into the world. But as breath remains invisible, people who follow it behave like blind. They are forced to invent another life which is parallel to the existing one and human behaviours which negotiate basic notions of life.<sup>342</sup>

The action becomes a metaphor of the way people occasionally face challenges, by inventing a parallel life. But as they live this parallel life, their breathing becomes difficult; they hold the inflated balloons as a precious belonging, and it is indeed: it's full of the air that has been denied to them, full of the life they can't enjoy freely. As the balloon isolates them from the outer world, the sensory deprivation gives them the opportunity to concentrate on their striving breath and their body. It can be viewed as a necessary phase of introspection, before escaping their torture and reestablishing their bonds with the world. One woman manages to do so by freeing herself out of the balloon and breathing freely. [Figure 40]

The protagonists in Navridis' video installations often perform marginal breaths; in *Difficult Breaths* (2004),<sup>343</sup> a series of works comprising of photos and videos, the artist explores this realm even further. He documents actions that require a special kind of breathing; weightlifters, swimmers, a yogi, a shepherd that blows the skin of an animal in order to separate it from the flesh, a performer blowing out fire and a group of girls blowing out water are images that manifest how breath can become more than a life sustaining force. In regard to this work, the artist explains that "I

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<sup>342</sup> Navridis 2005.

<sup>343</sup> The work was presented in 2004, La Caixa Foundation, Madrid.



wished to transform breaths into a form of index, a way to measure the world.”<sup>344</sup>

[Figure 41]

So, it is not just the human being that is used as a measure of all things, it is the very breath that is used as a measurement of time and space. At the same time, the video of the yogi highlights the connection of the artist with the Eastern philosophies that employ breath as an element of cleansing the body and spirit. Therefore, the breathing sounds and the images of people breathing, that are repeated in Navridis' work, have the power to lead the audience to an introspective path, towards their own breaths and their own body, contributing thus to a mind altering experience.

This introspective mood is also present in *Tomorrow will be a wonderful day* (2008),<sup>345</sup> where the artist follows the path of one and only breath, that unrolls like a mass of lines onto the exhibition space. The work could be viewed as a self-portrait of the artist;<sup>346</sup> it is the imaginary landscape produced by one breath of the artist, within and outside his body. The artist creates an encompassing environment, where the floors and the walls are all covered up by the linear drawing that represents his breath; the visitors are invited to walk around the space, following an internal route towards his subconscious and their own.<sup>347</sup> So the path of breath brings us closer to the human mind; breath is presented as an element that brings together the mind with the body and the environment with the self. [Figure 42]

In the work of Nikos Navridis, the philosophical quest of the void leads to a constant exploration of the poetics of breath. One could view his body of work as one piece

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<sup>344</sup> Ibid.

<sup>345</sup> The work was presented in 2008, at the Bernier-Eliades Gallery in Athens.

<sup>346</sup> Unpublished interview with the artist, February 2011.

<sup>347</sup> Thanos Stathopoulos. “Nikos Navridis. Tomorrow will be a beautiful day”, *Kaput*, n.2, 2008 [online] <<http://www.meatspaceart.org/meatspacesite/kaput02/02/thanos.htm>> (Accessed: July 20, 2012).

that keeps evolving, changing shape like his latex balloons or as individual pieces, which constitute together a symphony of breaths.

By exploring dualities such as void/plenum, content/container, interior/exterior<sup>348</sup> Nikos Navridis plays with the blurred limits between those ideas, which overlap at the flexible surface of his latex balloons. Overall, the way he illustrates the notion of boundaries complies with Heidegger's viewing of the concept: "A boundary is not that at which something stops but, as the Greeks recognized, the boundary is that from which something *begins its presencing*".<sup>349</sup>

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<sup>348</sup> Elias Levin. "El vacío en la edad del vacío", in *Nikos Navridis: La cuestión de la edad del vacío*, Mexico: UNAM, 1999 (exhibition catalogue), pp.3-7.

<sup>349</sup> Heidegger 2001, p.152.

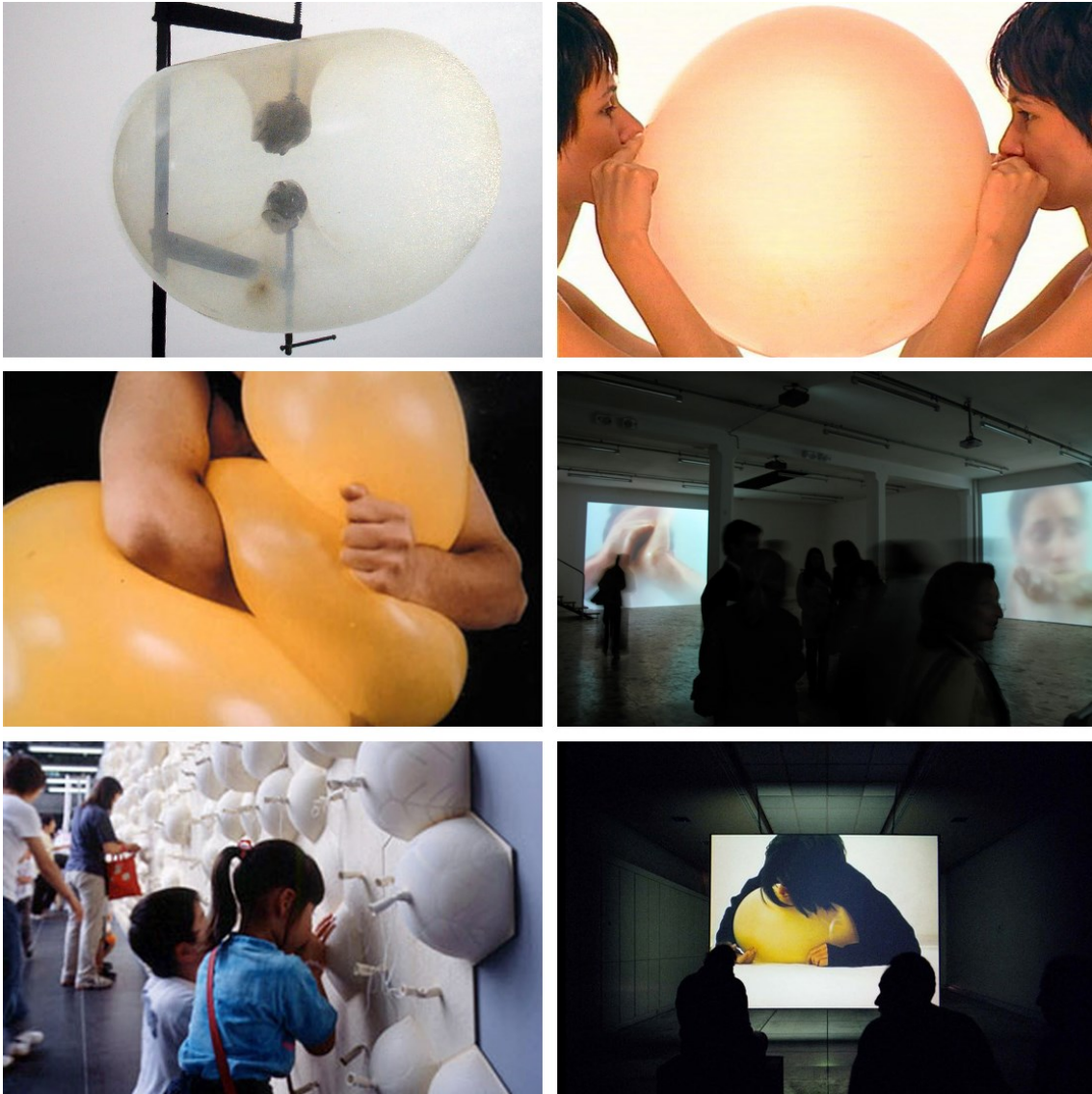


Figure 34. Nikos Navridis, *Untitled*, 1995. Vices, plaster, balloons.

Figure 35. Nikos Navridis, *The Question of the Age of the Void*, 1996. Video and photography installation.

Figure 36. Nikos Navridis, *Traps*, 1998. Double video projection.

Figure 37. Nikos Navridis, *On life, beauty, translation and other difficulties*, 1997 and 2010. Video installation, Vicenza.

Figure 38. Nikos Navridis, *Snow balloons or Trapping their own breaths*, 2003. Installation.

Figure 39. Nikos Navridis, *With no hands or When She Leans on her Own Breath*, 2000-2003. Video.

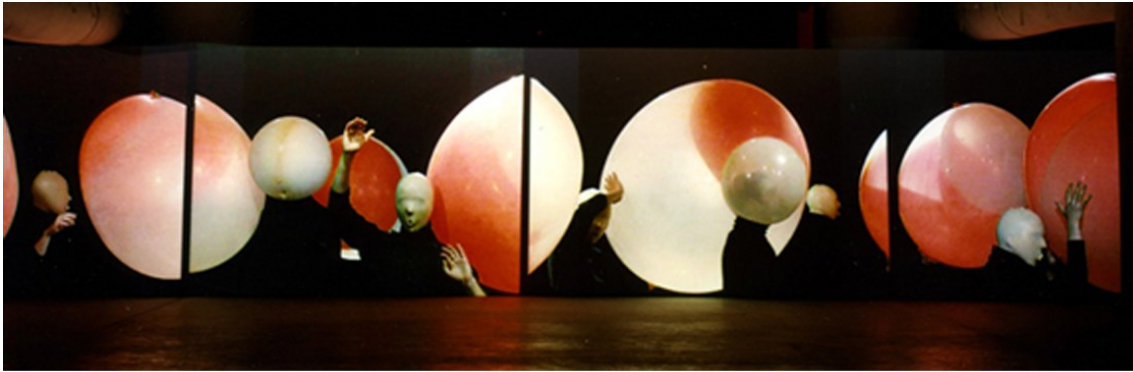


Figure 40. Nikos Navridis, *Looking for a Place*, 1999-2000. Video installation.

Figure 41. Nikos Navridis, *Difficult Breaths*, 2004. Photograph.

Figure 42. Nikos Navridis, *Tomorrow will be a wonderful day*, 2008. Installation.

#### 4.2.4 Bill Viola: Underwater visions between the first breath and the last breath

Bringing monumentality and simplicity to an equilibrium, Bill Viola<sup>350</sup> employs the strong symbolic and audiovisual qualities of breath as a means of raising everyday images to a sublime level.<sup>351</sup> Although Viola has mostly excelled in grand scale video installations of high quality images and sophisticated technology, there is an inherent minimalism and an underlying mystic quality in his imagery, which is linked to his interest in eastern philosophies, mostly Zen, Taoism and Buddhism.<sup>352</sup> In addition, Viola adopts a phenomenological position, stating that “the five senses are not individual things but, integrated with the mind, they form a total system and create [...] an experiential field which is the basis of conscious awareness. This is the only true whole image”.<sup>353</sup> So, the artist views the mind, the body and the senses as a whole, distancing himself from any divisionist notion:

There is still a strong mistrust in intellectual circles about things which speak to the mind via the body. It's as if they can see that this direction will ultimately lead to opening the locked gate to the forbidden zone of the deep emotional energies. In my opinion, the emotions are precisely the missing key.<sup>354</sup>

Hence, it is important to keep in mind that Viola's artworks are to be understood and felt with all the senses, not just the mind; in this sense, *pnoe* and *apnoea* are states of the corporeal, that help the audience feel the artwork with the body and the mind at the same time.

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<sup>350</sup> Website of the thesis *Art-Breath* [online] <<http://art-breath.com/bill-viola>> (Accessed: February 6, 2013)

<sup>351</sup> Lourdes Cirlot, “La revitalización de las imágenes del cuerpo renacentista en la obra de Bill Viola”, in Lourdes Cirlot; Ma Jesús Buxó; Anna Casanovas; Alberto T. Estévez, *Arte, Arquitectura y Sociedad Digital*, Barcelona: Universitat de Barcelona, 2006, pp.9-16.

<sup>352</sup> Yvette Bíró. *Turbulence and Flow in Film: The Rhythmic Design*, Bloomington: Indiana University Press, 2008, p.172.

<sup>353</sup> Bill Viola; Robert Violette (ed.). *Reasons for Knocking at an Empty House: Writings 1973-1994*, London: Thames & Hudson, 1996, p.268.

<sup>354</sup> *Ibid.*, p.242.

*The Passing* (1991)<sup>355</sup> is a key work to perceive Bill Viola's imagery and trajectory; being shot between 1987 and 1991, a time of personal loss and creative crisis, as the artist has admitted,<sup>356</sup> the image is a mixture of life memories, dreamy sequences and empty landscapes. Among the sequences, one sees the birth of the artist's second son juxtaposed to a close-up of his dying mother, a child's birthday party, children playing, a man floating underwater covered up in sheets, a man falling asleep, scenes from the desert, a train getting out of a tunnel before it submerges into darkness. [Figure 43]

These miscellaneous images are bound together by the unifying sound of constant breathing, which at times gives way to distant muffled sounds. The sound plays a central part in the video; Rainer Usselman observes that "Viola creates soundscapes, which amplify the spatio-temporal element in his work".<sup>357</sup> Through the sound, the space of the video is extended towards the viewers, as if they were experiencing a dream inside their heads, where all the sounds come from a distance except the sound of their breathing. Thus, breath becomes the invisible protagonist within the work, imposing the sleeping man's breathing rhythm –the artist himself– onto the viewers' bodies, converting a visual experience to a corporeal one.

It is a passing between different states of consciousness, between life and death: "the passing of the artist's mother and the passing on of genetic and cultural material to his infant son, [...] the passing of time [...] and a passing between dream and waking".<sup>358</sup> This trajectory from one state to another is marked by memories of

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<sup>355</sup> The work was presented for the first time in South London Gallery, London.

<sup>356</sup> Hunter Drohojowska-Philip; Bill Viola. (1997). 'The Self-Discovery Channel' in *Art News*, v.96, November 1997, p.209.

<sup>357</sup> Rainer Usselman. "Flow and Presence in Bill Viola's 'The Passing'", *Rainer Usselman, Text and Images*, March 2009 <<http://www.rainerusselman.net/2009/03/flow-and-presence-in-bill-violas.html>> (Accessed July 30, 2012)

<sup>358</sup> Sean Cubitt, "On Interpretation: Bill Viola's The Passing" in *Screen*, v.36, Summer 1995, pp. 113-130.

family life, loneliness, joy and suffering. The images are rife with symbolism; like the train that comes out of the tunnel and into the darkness, representing birth, the first breath of a baby and the last breath of an old woman, or the artist that is asleep and the man that is floating into the water, reviving the experience of sleep. Through the repetition and juxtaposition of images the sense of time is diluted and the narrative falls apart, creating a transcendental atmosphere.<sup>359</sup>

The images of the first breath of his baby son and the last breath of his mother are presented repeatedly within his work; in *Heaven and Earth* (1992) he placed two screens with these projections, facing each other, almost touching, creating a luminous layer between them; this layer is where human life evolves, between the first breath and the last breath. [Figure 44]

It is this luminous space mentioned by Nikos Kazantzakis:

We come from a dark Abyss, we end in a dark abyss, and we call the luminous interval life.<sup>360</sup>

The *Nantes Triptych* (1992)<sup>361</sup> is constituted by three consecutive projections, of the birth of his son, a man submerging underwater and his dying mother. So what we have is the first autonomous gesture of Being, the moment that life begins, the final struggle of the ill body and the life that comes in between. The idea of breath as a symbol of life returns in other artists, as well as the performances inspired by Beckett, that will be analysed later on.<sup>362</sup> [Figure 45]

Like Heidegger, Bill Viola also views death as a constant presence in life, that transforms all dreams and actions through the scope of finitude.<sup>363</sup> The presence of

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<sup>359</sup> Usselman 2009.

<sup>360</sup> Nikos Kazantzakis: Νίκος Καζαντζάκης, *Ασκητική*, Αθήνα: Εκδόσεις Καζαντζάκη, 2009 (1927).

<sup>361</sup> The work was presented for the first time in Chappelle de l'Oratoire, Musée des Beaux-Arts, Nantes, France.

<sup>362</sup> See the work of Adriano and Fernando Guimarães, pp.300-303 of the thesis.

<sup>363</sup> See pp. 193-194 of the thesis.

the woman could be viewed within the tradition of *memento mori*, but not as *vanitas*; the man in the water keeps struggling for his life, like “floating in another world with the experience of life and death”.<sup>364</sup>

The recurring figure of a man submerging into the water comes from Viola’s own life memories: when he was a child, he almost drowned. However, the experience wasn’t traumatic for the artist:

It was possibly the most profound, life-changing and transcendent experience I’ve ever had. It was accompanied by a complete lack of fear — only calm and peace. When I think about it now it centers me again. I had no idea I was almost drowning at the time.<sup>365</sup>

So, the state of breathlessness opened up a different mental state for the artist, another level of consciousness. This is probably why for him water is not presented as a threat, but as a place of knowledge and experience, as “death... life... time... memory... self-image... illusion... nirvana... a lot of things”;<sup>366</sup> Viola is inspired by the Persian poet Rumi, according to whom

...each human life is analogous to a bowl floating on the surface of an infinite ocean. As it moves along, it is slowly filling with the water around it. That’s a metaphor for the acquisition of knowledge. When the water in the bowl finally reaches the same level as the water outside, there is no longer any need for the container, and it drops away as the inner water merges with the outside water. We call this the moment of death. That analogy returns to me over and over as a metaphor for ourselves.<sup>367</sup>

The symbolism of breath and water return in *The Messenger* (1996),<sup>368</sup> a video installation of a man submerged under water. The undulations of the water slightly

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<sup>364</sup> Statement by Bill Viola at the Tate Modern Gallery Website, [online]  
<<http://www.tate.org.uk/modern/exhibitions/cinema/viola.htm>> (Accessed: October 15, 2009)

<sup>365</sup> Sarah Douglas. “Bill Viola, Interview”, *Artinfo*, May 11, 2007, [online]  
<<http://www.artinfo.com/news/story/1484/bill-viola>> (Accessed: July 15, 2012)

<sup>366</sup> Tate Modern Gallery Website, op.cit.

<sup>367</sup> Ibid.

<sup>368</sup> Exhibitions:



distort the image of the body, which becomes a fluid vision, constantly changing. As the man lifts towards the surface of the water, his image becomes clearer. When his head comes out, he takes a few deep breaths, that resonate within the exhibition space, and then submerges again. It's not the hasty, agonizing breath of someone who has been asphyxiating; on the contrary, it is a calm, rhythmic, conscious breathing. As he returns to the liquid embrace of the water, the sound of breath is replaced by mumbling sounds, as if the projected sound is what the man hears underwater. Therefore, the viewers assume the point of view of the Messenger. Although the projection seems to be playing in real time, the prolonged periods of breathlessness provoke a feeling of agony to the viewers, as if the action was being slowed down and time came to a halt. The fact that the video is projected in a dark space erases all references to here and now and transfers the action to an internal time-space. [Figure 46]

The video of the *Messenger* was included in the exhibition *Fire, Water, Breath* (1997)<sup>369</sup> in the Guggenheim museum, as the representation of breath. Fire and water were represented by the videos of a person going through a curtain of fire and a curtain of water respectively. Both projections give out a feeling of calmness, which breaks only for a moment, when the figures in the videos face the elements of nature. Through these recorded images, Viola seems to present the body as an immaterial, primarily spiritual entity, that remains unharmed by the forces of nature; at the same time, the bodies of the people presented remain bound to their corporeality, facing danger when they go through water and fire. Therefore, the

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1996, Durham Cathedral, Visual Arts UK, Durham. 1996, South London Gallery, Londres.

1996, Video Positiva-Moviola, Liverpool.

1996, The Fruitmarket Gallery, Edinburgh.

1996, Oriel Mostyn, Gwynedd.

1997, The Douglas Hyde Gallery, Trinity College, Dublin.

1997, La Chapelle Saint Louis de la Salpêtrière, Paris

<sup>369</sup> The exhibition took place in the Guggenheim Museum (SoHo), New York, 1997.

artist presents the body as the medium that helps us experience the world, but still manages to visualize its intangible qualities by projecting images that “shift between a space occupied by a body, and a memory of a body occupied by an abstract space”.<sup>370</sup>

The moment when the body comes into danger is when the “transparency” of the lived body is lifted and the limits of its physicality become palpable.<sup>371</sup> In *Nine Attempts to Achieve Immortality* the artist reaches those limits, as he repeatedly holds his breath, then takes a deep breath and holds it again. The visual and conceptual counterpart of this image could be traced in the performative actions in the works by brothers Guimaraes and Nikos Navridis, that will be presented in the next chapter.<sup>372</sup> At the same time, conscious breathing leads to another state of consciousness, as we have previously seen in this chapter. As his hindered breathing impacts the audience, that may inadvertently follow his breathing rhythm, the exhibited work becomes a collective experience for the body and the mind. [Figure 47]

Through the constant presence of breathing and the cyclical repetition of images, Bill Viola guides his viewers towards a state of calmness. In his work immateriality balances with corporeality and breathing becomes the element that completes the image. Viola’s imagery comes forth as an illustration of the theories about breath presented previously, representing the element between the body and the mind, the first autonomous action of life and the last one.

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<sup>370</sup> Lisa Jaye Young, “The Elemental Sublime. Bill Viola: ‘Fire, Water, Breath’ by Bill Viola”, *Performing Arts Journal*, Vol. 19, No. 3, September 1997, pp. 65-71.

<sup>371</sup> See pp.192-193 of this thesis.

<sup>372</sup> See sections 5.2.2.3 and 5.2.2.4 of this thesis.

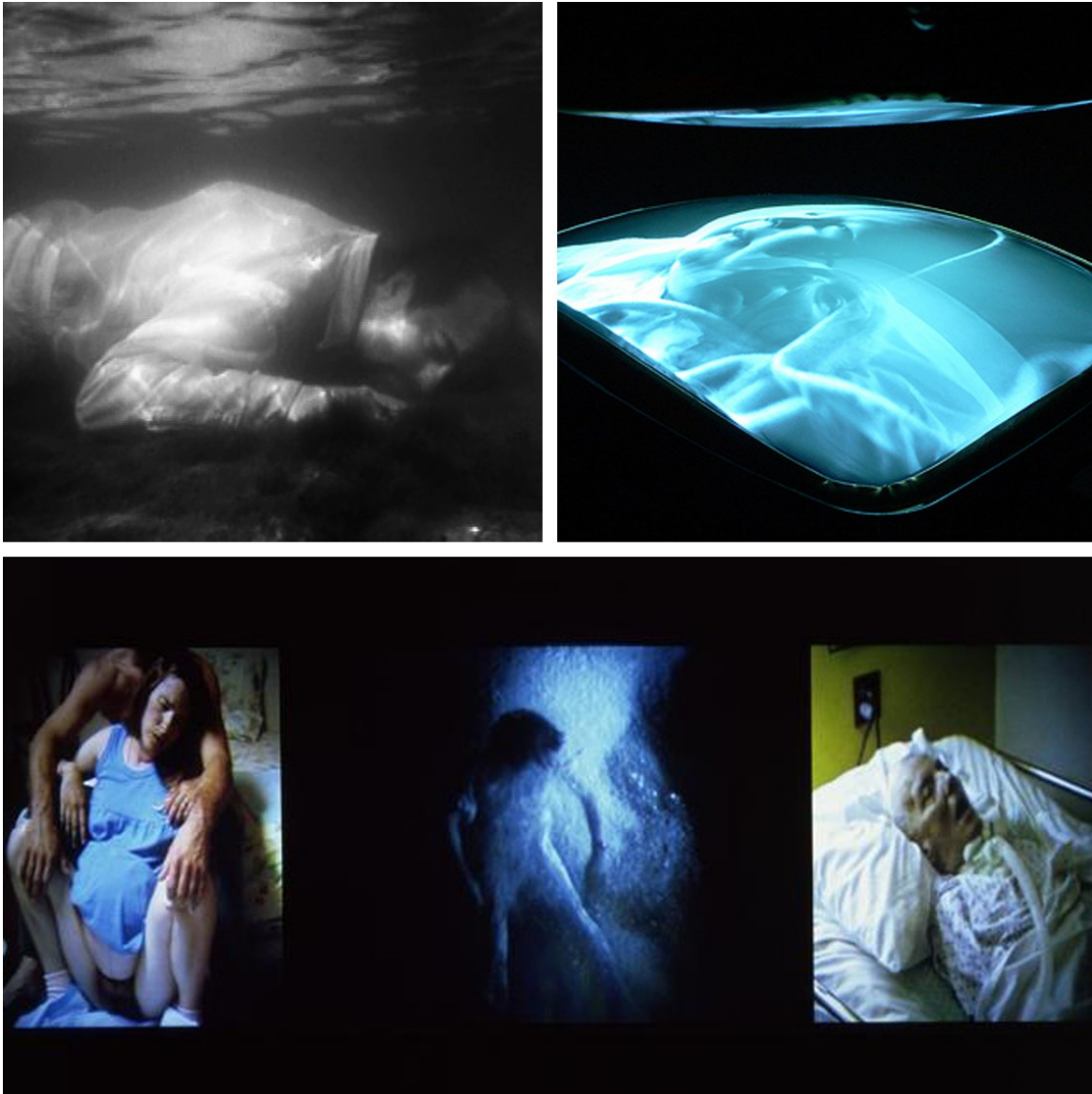


Figure 43. Bill Viola, *The Passing*, 1991. Video.

Figure 44. Bill Viola, *Heaven and Earth*, 1992. Video installation.

Figure 45. Bill Viola, *Nantes Triptych*, 1992. Video installation.



Figure 46. Bill Viola, *The Messenger*, 1996. Video installation.

Figure 47. Bill Viola, *Nine Attempts to Achieve Immortality*, 1996. Video installation.

#### 4.2.5 Danae Stratou: The breath of earth and the transformation of the natural landscape

Inspired by the human body and the relation of man to nature, Danae Stratou<sup>373</sup> transfers her 'breaths' into the open air. She uses earth and breath as the prime materials and main subjects of her work, which constitutes a dialogue with the natural environment and the cultural surroundings.

Between 1995 and 1997 Danae Stratou, with the aid of Alexandra Stratou and Stella Constantinides, confronted the adverse conditions of the eastern Sahara desert, close to the Red Sea in Egypt, to create a giant artwork of a hundred thousand square meters. *Desert Breath* (1997) consists of two interlocking logarithmic spirals of 178 cones; one of the spirals is formed by protruding cones and the other one by incised ones, becoming in both cases smaller as they reach the centre of the whirl. The centre is marked by a circular pond, of a thirty-meter diameter, filled with water to its rim. [Figure 48]

The desert does seem like a breathing body, indeed; with the sand protruding as it inhales and tucking in as it exhales. What is more, the shape of the cones reflects the sand hills of the desert and echoes the shape of the pyramids, making thus a clear reference to the cultural heritage of Egypt. Therefore, the artwork blends in with the environment and the human body opens up to the universe.

The artist explains that

The project is rooted in our common desire to work in the desert. In our mind's eye the desert was a place where one experiences infinity. We were addressing the desert as a state of mind, a landscape of the mind.<sup>374</sup>

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<sup>373</sup> Website of the thesis *Art-Breath* [online] <<http://art-breath.com/danae-stratou>> (Accessed: February 6, 2013)

<sup>374</sup> Danae Stratou, "Desert Breath" [online] <<http://www.danaestratou.com>> (Accessed July 20, 2012).

So, for Stratou the desert is more than a landscape; it equals thought and infinity. In a way, the work and her words bring forth Anaximenes' 'breath of the universe' and recall the Atharvavedic verses about the connection of earth, fire and water through the force of breath;<sup>375</sup> resembling the shape of the galaxy, the artwork seems to be a reflection of the universe that opens up above the desert.

Far from people, out in the open desert, the work was left to the forces of nature that began to eliminate it since the very day of its completion. What matters here is not permanence; it is presence, even within a limited time span.

Despite its monumental scale, the transience of the artwork makes it surprisingly intimate: a memory of building castles in the sand –only to watch them being carried away by the sea; a constant struggle to transform the environment and adjust it to the scale of man; momentary footsteps on the ground and fleeting breaths: the artwork reminds us of the traces of our existence that turn into dust with the passage of time. Thus, by incorporating the transitory elements of earth into her work Danae Stratou manages to bring forth primordial aspects of being: existence, memory, effort, decay.

Breath, water and earth are the main elements that articulate *Breathe and water section* (2000)<sup>376</sup> as well. The installation consisted of two separate spaces in the warehouse of an old mill. The water section was filled with still water, with its glass surface filling the space with a cold austerity. On the contrary, the 'breathe' section emitted a mystic feeling; the floor of the space was filled with earth, that appeared to be pulsating, stretching out and being tucked in, like a human belly inflating and

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<sup>375</sup> See pp.170-171 and pp.178 of this thesis, respectively.

<sup>376</sup> Exhibitions:

2000, Sarantopoulos, Molina de Harina, Athens.

2001, "Body and Sin", Bienal de Valencia.

2001, Christie's Contemporary, Athens.

deflating with air. At the same time, the sound of breathing filled the space, following the rhythm of the 'breathing' floor. [Figure 49]

The installation encouraged a personal and esoteric reception by the visitors, that got mesmerized by the breathing rhythm, focusing on the breath of the earth and their own bodies at the same time. This intimate feeling is intrinsically linked to the moment that sparked Stratou's imagination for her breathing series: as the artist was playing with her daughter on the beach, she covered her body with sand and observed her child's belly moving underneath the sand, as she breathed.<sup>377</sup> Therefore, the installation is linked to the exploration of nature, our bodies and our inner selves, that starts as a game when we are children and continues with art, philosophy and science as we grow older.

It is worth noticing that most of the times Danae Stratou uses the word 'breathe' instead of 'breath'; it is an imperative meant to stimulate the viewers to feel their bodies and to live to the full.

This imperative returns in thirty five different languages in *Breathe Wall* (2002). The installation was a commission for a high school in central Athens, with students from multicultural backgrounds, coming from Greek and migrant families. By imprinting the word 'breathe' in many different languages on the concrete wall of the schoolyard, the artist wanted to create a point of unity for the students. As she explains,

The fact that the imperative "breathe" appears in 35 different languages suggests that the world is out there; waiting for them to explore it. In addition, many of the children attending this school come from migrant families. I thought it would be important for them

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<sup>377</sup> Unpublished interview with the artist, August 2008 in Sani, Greece.

to read the word in their own language; that it would invite them to feel as part of the whole.<sup>378</sup>

In short, for Danae Stratou breathing is not only a life sustaining force; it is a symbol of exploring the world and an act that brings people together, whatever their origin is. Breathing signifies a sharing with the world that surrounds us and the community that inhabits it, as Luce Irigaray observes.<sup>379</sup> [Figure 50]

The work *The Breathing Circle* (2008) is also dominated by the imperative 'breathe', which is spelled out in a circle of letters installed in the open air. Inside the circle created by these seven letters there's only earth.<sup>380</sup> The mirror surface of the letters reflects the high trees that frame the sky above them, with their leafy branches moving in the air and their trunks carrying carved initials –promises for never-ending love and attempts to mark one's presence for eternity. When the visitors stand or lie down in the middle of the circle, they can hear the sounds of breathing and a heart pulsating, as if they heard the sound of the earth's breath and pulse (whereas, in fact, these sounds come from speakers that are hidden in the trees). [Figure 51]

The basic elements of the installation –a loud breath that imposes its steady rhythm, a closed circle, the earth and the letters that reflect the environment and the fleeting presence of the visitors- connect the people with their surroundings and the natural environment with a manmade cultural object. The catalyst that provides coherence to the whole is the imperative 'breathe', an invitation to conscious action and thought.

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<sup>378</sup> Danae Stratou, "Breathe Wall" [online] <<http://www.danaestratou.com>> (Accessed July 20, 2012).

<sup>379</sup> See pp.187-188 of this thesis.

<sup>380</sup> Christina Grammatikopoulou. "A handful of earth and three breaths: Notes on Danae Stratou", *Interartive*, #8, March 2009. [online] <[http://interartive.org/2009/03/desert\\_breath](http://interartive.org/2009/03/desert_breath)> (Accessed: July 30, 2012)



By bringing together earth and breath, Danae Stratou creates environments where man comes into peaceful coexistence with nature and the others, where difference becomes a source of cultural wealth and memory becomes a way of understanding the world.

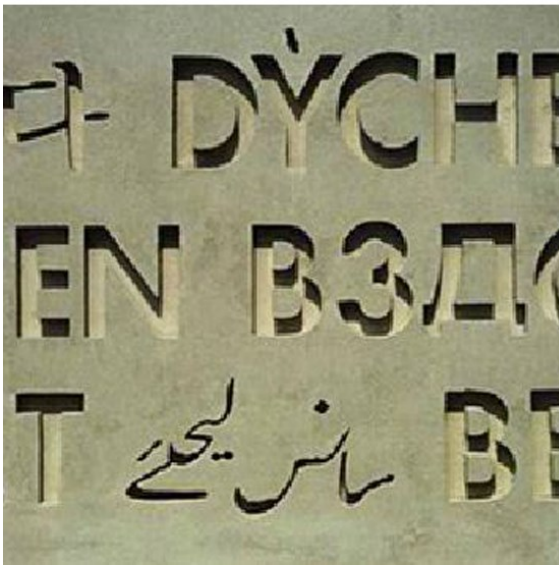
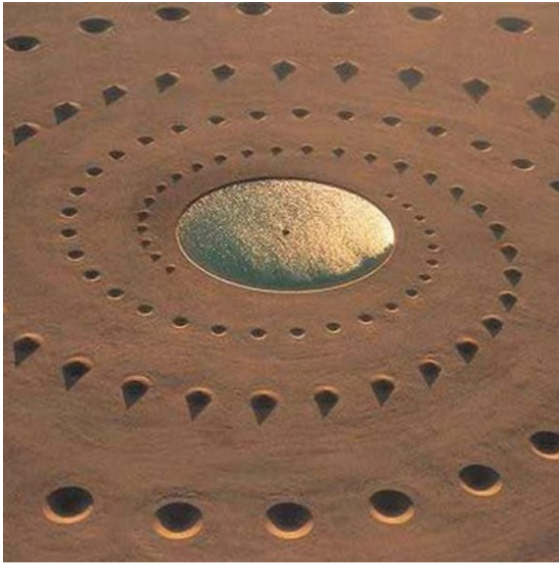


Figure 48. Danae Stratou, Alexandra Stratou and Dora Constantinides, *Desert Breath*, 1997. Land art, Hurghada, Red Sea coast, Egypt.

Figure 49. Danae Stratou, *Breathe and water section*, 2000. Sarantopoulos Flour Mill, Athens.

Figure 50. Danae Stratou, *Breathe Wall*, 2002. Permanent outdoor installation, Athens.

Figure 51. Danae Stratou, *The Breathing Circle*, 2008. Outdoor installation, Sani, Greece.

#### 4.2.6 Kimsooja: Diffracted lights, ethereal breaths

Invisibility takes a different turn in the work of the Korean artist Kimsooja,<sup>381</sup> she seeks to bring into focus things that are there but usually go unperceived. As Nicholas Bourriaud observes, she is “working with the ghosts of the objects, their aura, trying to turn the invisible into a shared experience”.<sup>382</sup> She creates lyric objects, installations and actions drawing inspiration from everyday activities, making bundles of cloths, sewing, standing within moving hordes of people or in plain solitude.

Through a multiplicity of images and artworks Kimsooja shows her affinity for Buddhist values that treat the world as a whole, her attachment to the philosophy of Zen and the concepts of Yin and Yang.<sup>383</sup> So, in her work, established dualisms such as mind/matter, space/time or self/other give way to a more unifying approach, where the interconnection between separate elements is highlighted. The simplicity of her visual language and her deep humanism have been described as “existential minimalism”.<sup>384</sup>

Her long quest into “being nothing/nothingness and making nothing/nothingness”<sup>385</sup> have resulted in installations where natural elements are combined with breathing sounds.

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<sup>381</sup> Website of the thesis *Art-Breath* [online] <<http://art-breath.com/danae-stratou>> (Accessed: February 6, 2013)

<sup>382</sup> Nicholas Bourriaud. “Interview”, in *Kimsooja: Conditions of Humanity* (exhibition catalogue), Lyon: Contemporary Art Museum, 2003 <<http://kimsooja.com/texts/bourriaud.html>> (Accessed July 30, 2012).

<sup>383</sup> María Rubio, “Interview with Kimsooja”, *Art And Context*, Summer 2006. <[http://kimsooja.com/texts/rubio\\_Interview.html](http://kimsooja.com/texts/rubio_Interview.html)> (Accessed August 15, 2012)

<sup>384</sup> Bourriaud 2003.

<sup>385</sup> Ibid.

*The Weaving Factory* (2004)<sup>386</sup> is a sound installation where the space is filled by a recording of the artist breathing at different speeds and depth and humming different notes through her nose. Kimsooja explores ways of breathing and producing noise with the air from the vocal cords: her breath alters from slow to intense, deep, before it turns into sounds of humming through the nose and opening and closing the mouth.<sup>387</sup>

Evidently the artist is aware of the power of controlled breathing to awaken a different sense of the Self: “Hearing my breathing and humming within the space might cause the audience to hold its breath, and they may become conscious of their own body and breathing”.<sup>388</sup> Subsequently, the visitors follow her mood, from calmness to anguish and from playfulness to introspection, as they become absorbed into her breathing sounds.

The audio track of the *Weaving Factory* formed part of two subsequent breath-related installations, where the visual element is just as striking as the audio part.

*To Breathe / Respirare (Invisible Mirror, Invisible Needle)* (2006)<sup>389</sup> was presented at the Fenice theatre in Venice and the Theatre du Chatelet in Paris. The breathing sounds were combined with a simultaneous projection of coloured fields on a screen onstage. Like Yves Klein,<sup>390</sup> Kimsooja’s quest into the void and into the realm of the abstract leads her into a series of monochromes. Except here those monochromes come from a projection of light, with the tonalities of colour ranging gradually as they succeed each other and diffuse into the entire space of the theatre. The artwork

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<sup>386</sup> The work was presented in the International Artists Museum, Lodz Biennale, Polonia, 2004.

<sup>387</sup> Francesca Pasini, “An Interview with Kimsooja”, *Tema Celeste*, Vol. 166, July/August, 2006.

<sup>388</sup> Rubio 2006.

<sup>389</sup> Presentations:

2006, January 26, The Bevilacqua La Masa Foundation, Teatro La Fenice, Venice

2006, October 6, Nuit Blanche, Théâtre du Châtelet de Paris

<sup>390</sup> See pp.128-130 of this thesis

introduces a dialectic quality in the space of the installation: The baroque exquisiteness of the Fenice theatre is balanced by the minimalism of the monochromes, whereas the breathing and humming sounds sound like a rehearsal of the opera plays that are staged in the same theatre. From this perspective, the artwork reminds us of the role of breath in performance, that will be analysed further in the next chapter; at the same time, it relates to the attempt of Nikos Navridis to capture the breathing sound of a performance in one of the works that we'll see later on.<sup>391</sup> [Figure 52]

The sound of breathing and the ambient created by the projection converts the architectural space of the theatre into the interior of a body. It is the body of the artist, that transmits some of its vital energy to the viewers.

The impression of a living body was dominant in the installation *To Breathe – A mirror woman* (2006)<sup>392</sup> as well. The artist reproduced the audio projection of *The Weaving Factory* in the Palacio de Cristal, a glass pavilion in the heart of the park Buen Retiro in Madrid.<sup>393</sup> The windows were all covered with diffraction grid film, which created the effect of the rainbow all over the surface and in the interior of the pavilion. In addition, the floor was covered with a mirror surface, which multiplied the effect of the diffraction of light. [Figure 53]

Through the glass structure and the mirror floor the architectural structure opens up entirely to the exterior of the pavilion, incorporating natural elements –such as light, trees, the changing skies- within the artwork. It is a work constructed out of light, colour, breathing –like the projection in the Fenice theatre. However, this time the artist has rendered control of the colour and light effects onto nature; the rainbow effects change according to the light on the exterior.

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<sup>391</sup> See pp.305-306 of the next chapter.

<sup>392</sup> Museo Nacional Centro de Arte Reina Sofia, Palacio de Cristal. Parque del Retiro, Madrid, 2006.

<sup>393</sup> See VVAA, *Kimsooja To Breathe-A Mirror Woman*, Madrid, 2006.

The mirror on the floor alters the interior completely: the doubling of the light structure of the pavilion and the vaults creates an interior of irregular shape –just like the interior of a body- where there is no floor, and the visitors are left to be hovering in a fluid space, constructed out of light and breathing. Resonating Greek and Eastern philosophy, breath becomes the element that unites the body of the artist with the others –the visitors of the installation, in this case- and the environment; it becomes the element that unites the body with the mind.

As the artist reveals,

From this project, I discovered 'Breathing', not only as a means of 'sewing' the moment of 'Life' and 'Death', but 'Mirroring' as a 'Breathing self' that bounces and questions in and out of our reality. Evolving the concept from my earlier 'sewing practice' into another perspective, 'Breathing' and 'Mirroring' as a continuous dialogue to my work was the most interesting achievement of a new possibility in experimenting with waves of light, sound, and mirror as a result of the space of emptiness.<sup>394</sup>

So, the idea of breathing is related to her earlier practices of sewing and wrapping and her research on the ideas of surface and reflection, with the mirror “uniting the self with the other self”,<sup>395</sup> the same way that a needle brings two fabrics together, bringing a unity of separate parts; past and present, mind and body, the self and the others.

Therefore, more than a simple illustration of the theories examined earlier in this chapter, one could say that Kimsooja develops her own theory of the relation of the human being with the world, of the mind and the body. Her viewpoint contains fragments of Eastern and Western thought, brought together under the prism of her visual creations; fluid environments, where immaterial elements, such as natural light and breathing, create an almost tangible world.

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<sup>394</sup> Rubio 2006.

<sup>395</sup> Ibid.

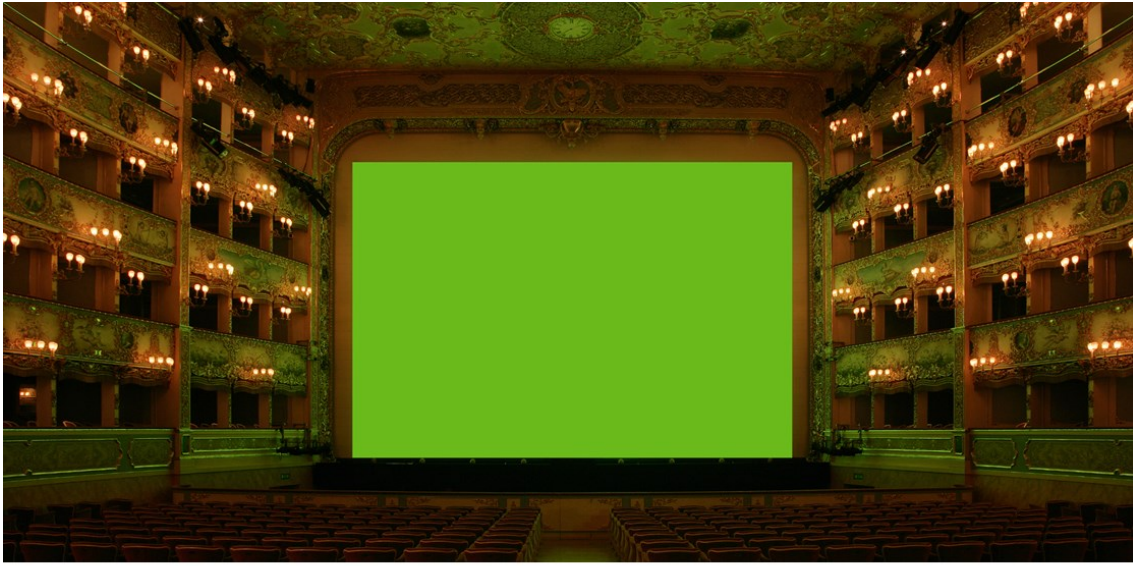


Figure 52. Kimsooja, *To Breathe/ Respirare, Invisible Mirror, Invisible Needle*, 2006. Video installation. Teatro Fenice de Venecia and Théâtre du Châtelet de Paris.

Figure 53. Kimsooja, *To Breathe – A mirror woman*, 2006. Installation of diffraction grid film and mirror, Parque del Buen Retiro, Madrid.

#### 4.2.7 Edith Kollath: Ephemeral objects of aerial imagination

Consecutive breaths, flashes of light, random forms, smoke and air: Edith Kollath<sup>396</sup> takes the thread of a fleeting moment and weaves it into an ethereal vision. Rather than creating works from solid materials, destined for eternity, she is drawn into the invisible and the ephemeral, incorporating them as elements of her delicate objects and installations. Through subtle movements and sounds her creations come to life, breathing in space. Nurtured by air, they seem to flow outwards, reaching the public and interacting with it.

As an artist, Edith Kollath is profoundly influenced by the breathing practice developed by Ilse Middendorf, often practicing it herself.<sup>397</sup> Middendorf's 'breathwork' is a method that helps the practicants become aware of the movement of breath within their bodies, by observing the subtle body movements that occur when they breathe calmly. This practice is considered to help them bring balance to their lives.<sup>398</sup> The Middendorf practice stands at the opposite end of the idea of breath control; the aim is awareness, rather than change in respirational rhythm. However, breath awareness is linked to the understanding of the connection of the body to the mind and the individual with the world, similarly to the breath control practices examined previously.

Perceiving Kollath's use of breath under this prism, it feels natural that breathing is always projected in a calm, balanced manner.

For example, in *BWI* (2006) respiration becomes the most significant act in the video, as stillness and simplicity prevails. In the video we see a frame of a bathtub

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<sup>396</sup> Website of the thesis *Art-Breath* [online] <<http://art-breath.com/edith-kollath>> (Access: February 6, 2013)

<sup>397</sup> Unpublished Interview with the artist, January 20, 2011.

<sup>398</sup> For more on Middendorf practice see Ilse Middendorf, *The Perceptible Breath*, Paderborn: Junfermann-Verlag, 1990.



with the surface slightly rippled by the air above and the breath of the person that lies inside –still largely invisible. As the water drains out, it reveals a female body, with only her torso and part of the limbs fitting within the frame. The sculptural quality of this fragmented vision is further enhanced by the intense light that illuminates the lowest part of the body, creating dramatic shadows onto the skin as it reveals a Courbetian “origin of the world”. However, the sense of calmness prevails, as the natural and conceptual centre of the composition overlap in the woman’s navel, that is moving up and down as she breathes. [Figure 54]

*In Between* (2007) is a video that focuses on breathing as a form of communication. In a dark background, we see a man and a woman in profile, staring at each other’s eyes and looking calm and happy. As they breathe, a gust of smoke appears, moving out of the mouth of the first one, into the mouth of the other one and vice versa. The two people seem to be in perfect harmony with each other, enjoying a certain intimacy and pleasure in each other’s presence. To feel the breath of someone is a sign of intimacy, experienced only among the people who are really close, as we’ve stressed previously.<sup>399</sup> The artwork helps visualize Luce Irigaray’s view of air as the place where the two sexes coexist in balance with each other.<sup>400</sup> It also highlights the significance of non-verbal communication, through the facial expressions, the corporeal movements and the rhythm of breath. [Figure 55]

As we move past the screen, into exhibition space, the same gust of air reaches the audience. *Again, Again* (2009)<sup>401</sup> is also built with gusts of air onto a black background, but in a more abstract context. The source of the smoke remains hidden; what is visible is only the movement of smoke, as it dissolves into the air. As the eyes of the viewers follow the rings of smoke, the changing formations stimulate the imagination, as another vision that could fit into Bachelard’s words: “Every

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<sup>399</sup> See the work *Mobile Feelings* by Sommerer y Mignonneau, pp.152-153.

<sup>400</sup> See pp.186-188 of this thesis.

<sup>401</sup> The work was presented in Collectiva Gallery, Berlin, 2009.

breath of air is brought to life. It is a scrap of air's flesh that had at one time been alive, an aerial fabric that will clothe a soul".<sup>402</sup> The artwork is a fragile, ephemeral construction that depends on chance and natural phenomena. [Figure 56]

Chance becomes the main point of focus in *Nothing will ever be the same again* (2009).<sup>403</sup> In this installation a translucent cloth is set in motion, getting lifted up in the air and then falling over and over again by means of an automatic mechanism. The repetitive, rhythmic action gives a different result every time. Therefore the cloth becomes a sculpture that changes and moves incessantly, taking random shapes by air and gravity. In a way, air, gravity, chance and time become creative agents, filling out the visual poem along with the artist. [Figure 57]

Through the work the air comes out as a full void, not an empty field. As the cloth falls and rises, the air sneaks into its folds, showing its invisible body –with an almost human-like corporeity. The cloth acquires thus a life of its own, like a dancer that leaps into the void, making a minimal impact against the hard surface of the floor. During the next fall the cloth will 'improvise' a new choreography, completing a different orbit through the air and landing in a different spot. Nothing will ever be the same again; but instead of lamenting the loss the passing moment, the artist reveals the prospect of a new beginning, embracing change as an integral part of life.

Smoother in motion and equally lyrical in tone, the textiles in *Disport* (2009) follow a less arbitrary movement, resembling a state of calm breathing. The installation is a construction of five sets of curtains that are placed symmetrically, creating a pentagonal cell which is constantly opening and closing, as the curtains sway

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<sup>402</sup> Bachelard uses these words to refer to Saint-Pol Roux's "The Mystery of the Wind". See Bachelard 1988, p.230.

<sup>403</sup> Christina Grammatikopoulou. "Edith Kollath: Nothing will ever be the same again", *Interartive*, #41, [online] <<http://interartive.org/2012/03/edith-kollath>> (Accessed: August 15, 2012).

imitating respirational movement. As they move the light shifts from a warmer darker tone to a brighter cooler white. Through this mesmerizing effect, the installation aims to propel the visitors to an introspective state with an enhanced awareness of their surroundings and themselves, as the artist implies: “You are invited to enter the cell. How do you perceive the room, how do you perceive yourself?”<sup>404</sup> [Figure 58]

In a different tone, Edith Kollath alludes to the question of technological evolution in *Thinking I'd last forever* (2008).<sup>405</sup> By installing microprocessors in antique editions of classical books by John Milton, Alexandre Dumas, Elizabeth Barrett Browning and Luisa McAlcott, among others, she manages to create the effect that the books are breathing, raising slowly the cover and opening up the pages as if someone was browsing through them.<sup>406</sup> Each of the books has its individual breathing rhythm, adding to its personal appearance and content. [Figure 59]

The artist implies that knowledge is as vital as breath. But as printed editions are being replaced by digital ones, the movement of the antique books could be considered as “not shallow breathing but perhaps the last gasps of the codex form”.<sup>407</sup> Edith Kollath manages to give a new life to these old books, by combining the classical format of the book with contemporary technology. These books, after having “absorbed” the breaths of the numerous readers that have browsed through

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<sup>404</sup> Edith Kollath, January 2011. Personal correspondence with the artist.

<sup>405</sup> The work was exhibited in DamStuhltrager Gallery, Williamsburg, New York, 2008.

<sup>406</sup> The books became the subject of a rather absurd incident, when they got held up by the authorities of Newark Airport, under the suspicion that they contained explosive mechanisms. The artist got questioned as a suspect of terrorism and after her release it took an extra three months for the objects to be returned to her. See Edith Kollath, “Breathing again after imprisonment at Newark Airport”, *Damstuhltrager*, 2008.

<[http://www.damstuhltrager.com/exhibit\\_years/For\\_Immediate\\_Release\\_Breathing\\_Agai\\_-3.pdf](http://www.damstuhltrager.com/exhibit_years/For_Immediate_Release_Breathing_Agai_-3.pdf)> (Accessed August 15, 2012).

<sup>407</sup> Garrett Stewart. *Bookwork: Medium to Object to Concept to Art*, Chicago: The University of Chicago Press, 2011, p.xvi.

them throughout their existence, now return those breaths to the visitors of the installation; with their gentle movement, they tempt a new generation of readers to discover the knowledge and imagination that is hidden within those pages, which is still relevant and open to discussion, despite the fact that it took its final form a long time ago.

Edith Kollath's work is dominated by fragile constructions with thin lines, paper, textiles, transparencies and smoke. Despite its transience, it manages to create a lasting effect onto the memory of the viewers, who are slowly led into a state of calmness, reconnecting with their breath and its benefits as a source of intellectual nourishment, communication and interior balance.

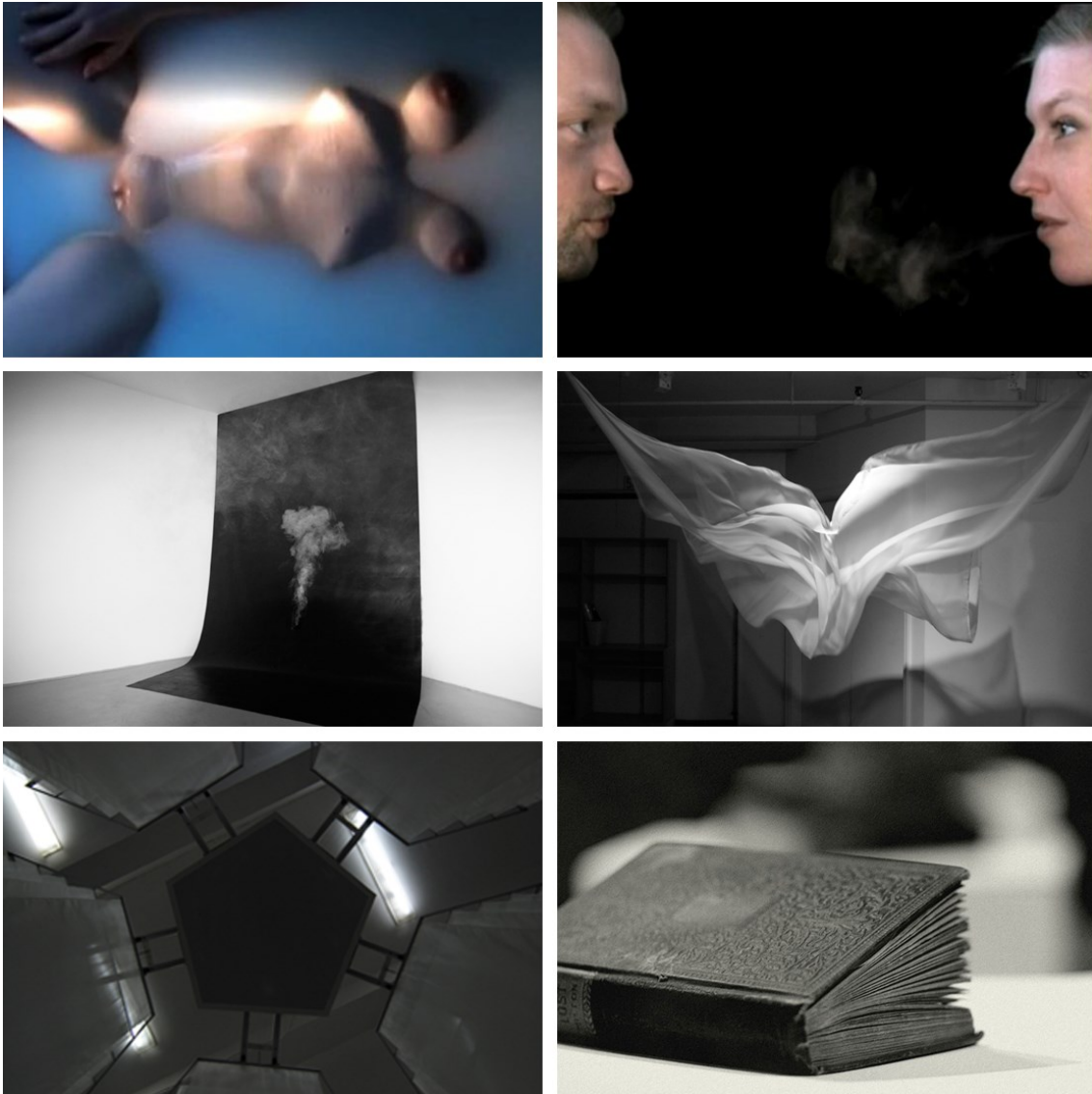


Figure 54. Edith Kollath, *BW1*, 2006. Video loop.

Figure 55. Edith Kollath, *In Between*, 2007. Video loop.

Figure 56. Edith Kollath, *Again, Again*, 2009. Mixed media installation.

Figure 57. Edith Kollath, *Nothing will ever be the same again*, 2009. Mixed media installation: textile, electronic mechanism.

Figure 58. Edith Kollath, *Disport*, 2009. Mixed media installation.

Figure 59. Edith Kollath, *Thinking I'd last forever*, 2008. Mixed media installation.

#### 4.2.8 Sabrina Raaf: The invisible life within air and breath

Long before the evolution of telecommunications, air was the main carrier of distant messages, transferring invisible chemical signals of desire or warnings; through inhalation these imperceptible smells reach humans and animals. The composition of air reveals a complex chemical structure, enhanced with the presence of microorganisms that are inhaled into the body or exhaled into the environment. As Monika Baake observes, “we live submerged in a crowded and busy air full of life and full of molecular messages being exchanged by nonhumans”.<sup>408</sup> When observing the air through the microscope, one sees hundreds of thousands of microbial cells. This invisible diversity becomes a point of focus for Sabrina Raaf<sup>409</sup> who analyses air and turns its invisible elements into highly visual imagery.

The work *Breath Cultures* (1999)<sup>410</sup> plays with the double sense of the word “culture”: its scientific meaning as a cultivation of bacteria for observation and its social meaning connected to the arts and any other intellectual achievement. This ambivalence is highlighted within the artwork, somehow echoing Luce Irigaray’s division between ‘natural’ and ‘cultural breath’, which denotes the corporeal and spiritual process involved in respiration.<sup>411</sup> [Figure 60]

Breath contains biological material that varies according to the person that exhales and the particular moment of exhalation. Putting this invisible dimension literally into the microscope, Sabina Raaf found a new way to portray individuals, through the content of the air they exhale.

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<sup>408</sup> Monika Bakke. “Introduction: The Multispecies Use of Air”, in: BAKKE, Monika (ed.), *The Life of Air, Dwelling, Communicating, Manipulating*, Open Humanities Press, 2011. [online] <<http://www.livingbooksaboutlife.org/books/Air/Introduction>> (Accessed August 2012)

<sup>409</sup> Website of the thesis *Art-Breath* [online] <<http://art-breath.com/sabrina-raaf>> (Accessed: February 6, 2013)

<sup>410</sup> The work was exhibited in Gallery 2, Chicago, Illinois, 1999.

<sup>411</sup> See p.187 of this thesis.

The artist invited people of diverse nationalities and cultural backgrounds to exhale onto petri dishes that are used for microbiological analyses.<sup>412</sup> After placing those dishes into a warm show case in the exhibition space, the bacteria contained in each participant's oral flora, that was stored individually into each dish, grew rapidly. The artist photographed the dishes under a microscope and enlarged the pictures;<sup>413</sup> thus emerged unique images for each participant, because the bacteria depicted differed from person to person and even from breath to breath.<sup>414</sup> The resulting images were accompanied by a video loop projecting the growth of the bacteria, accompanied by the sound of the participants' whispers.

Through this process, Sabrina Raaf diverts our attention towards the elements that we exchange as we speak; it is not only cultural information linked to the content of our speech, but also biological information with an uncanny visual aspect. Under the microscope, our breath reveals abstract images and vivid colours that change in shape and tone. On the other hand, the artist works with the momentariness of breath, by capturing one random breath and isolating it inside a laboratory tool, where it grows separated from the body that gave birth to it and isolated from the microorganisms in the air surrounding the dish.

The main visual elements of *Breath Cultures*, such as the circular dishes and the organic shapes within them resonate in the work *Breath I: Pleasure* (2000).<sup>415</sup> By blowing ink-saturated bubbles onto vellum, the artist created the impression of red blood cells undergoing mitosis. The organic references are further enhanced by the overlay of the dishes with stretched cow gut, with small veins protruding –bearing a

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<sup>412</sup> Lab 71, "180: An interview with Artist Sabrina Raaf", *Lab71*, Issue 3, 2002 [online] <<http://www.lab71.org/issue03/171section180/171section180.html>> (Accessed July 2007)

<sup>413</sup> Karla Loring, "But is it Art?", *Chicago Tribune Magazine*, February 25, 2001.

<sup>414</sup> Sabrina Raaf, "Breath cultures", in Monika Bakke (ed.), *Going aerial, air, art, architecture*, Maastricht: Jan van Eyck Academie, 2006, pp. 34-35.

<sup>415</sup> The work was presented in "Images Festival", Toronto, Canada, 2003 and the exhibition "Brides of Frankenstein", San Jose museum of Art, California, USA, 2004.

distant resemblance to lung cells- and droplets of cast resin that add a liquid appearance to the surface of the circular constructions. [Figure 61]

Overall, the circular parts of the artwork resemble cells of the body; back lit with neon light that dims and brightens following the rhythm of breathing, the artwork gives the impression of a living organism. The lights reproduce random breathing patterns: lengthy sighs, sudden gasps, apnoeic intervals, which are viewed not only as a necessity or a means of expression, but also as a pleasure for the body; according to the artist the work “is about the purely physical pleasure of breathing.”<sup>416</sup> Through the representation of breath and blood the artist manages to create a life-like structure; even though the details bear a resemblance to human anatomy, the gentle oscillation of light maintains a certain poetic hue.

*Grower* (2004)<sup>417</sup> also starts from a scientific basis to expand into space and explore the hidden facets of air, breath and human presence. *Grower* is a small rover vehicle that paints green blades of grass on the walls of the room where it is exhibited. Each blade has a different height, depending on the levels of carbon dioxide in the room at a particular moment. The robot senses the flux of air and after each reading it paints a vertical green line corresponding to the level of carbon dioxide in the air. Subsequently, when the room is empty, the blades are of minimal height, whereas when the room is full of visitors, that exhale carbon dioxide into the air of the exhibition space, the blades become increasingly taller. Therefore, the final aspect of the walls –that more and more resemble a painted field- depends on the presence of the visitors and their involuntary participation through their exhalation. [Figure 62]

The artwork reminds us of the fact that the plants feed on the carbon dioxide that is present in the air, accumulated by our breathing and our activities. It brings into

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<sup>416</sup> Video from the website of the artist, [online] <<http://raaf.org>> (Accessed: December 10, 2011)

<sup>417</sup> The artwork was presented in the exhibition “Electrohype” in Lunds Konsthall, Malmo, Sweden, 2004.



attention that each person has his/her own “carbon footprint” into the atmosphere; according to their activities and the amount of technological tools they use, people consume the resources of the air and become responsible for the emission of greenhouse gases into the atmosphere.

By bringing together artificial intelligence with human beings and elements from the natural environment with the architectural space, the artist highlights our interdependence from technological advances. As the artist explains:

My research as an artist focuses on making explicit the interdependent relationships of machine to human as vital entity to vital entity. Grower offers a model where both machines and humans affect each other by their interaction. It’s a model where human and machine behaviour interact in a mutually informative and dynamic manner.<sup>418</sup>

Therefore, the artwork could be viewed as an intersection of the corporeal with the technological through the immaterial dynamics of breath.

Sabrina Raaf underlines the numerous transformations that the air undergoes, so as to become a source of nourishment for the living organisms –echoing Aristotle’s viewing of breath as the air that nourishes the body.<sup>419</sup>At the same time, she expands her research towards the environment and contemporary technology, revealing a unifying vision towards the human being, its technological endeavours and the world.

The artworks examined so far in this thesis raise the question of the immaterial and the way it is experienced with the body via interactive, software-based environments, videos and installations; within these realms breath is a novel artistic

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<sup>418</sup> Sabrina Raaf, “Translator II: Grower”, Sabrina Raaf Website, 2004 [video] <<http://raaf.org/projects.php?pcat=2&proj=4&sec=video>> (Accessed: December 10, 2012).

<sup>419</sup> See p.175 of the thesis.

tool. However, there is a space in artistic creation where breath had always played an important role –invisible, yet fundamental. Performative arts are closely linked to breath, since they involve the elements of speech and bodily action. It is therefore relevant to deal with the question of breath in performance, keeping in mind the theoretical issues raised in this chapter and the previous one, about the concept of the immaterial and the role of breath control in reaching a different state of consciousness.

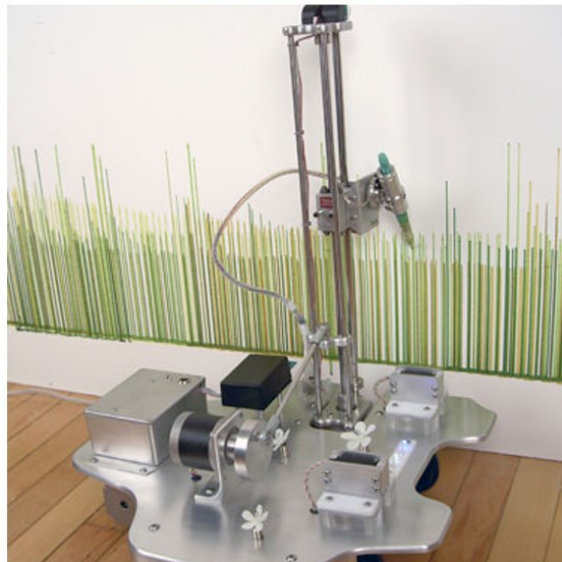
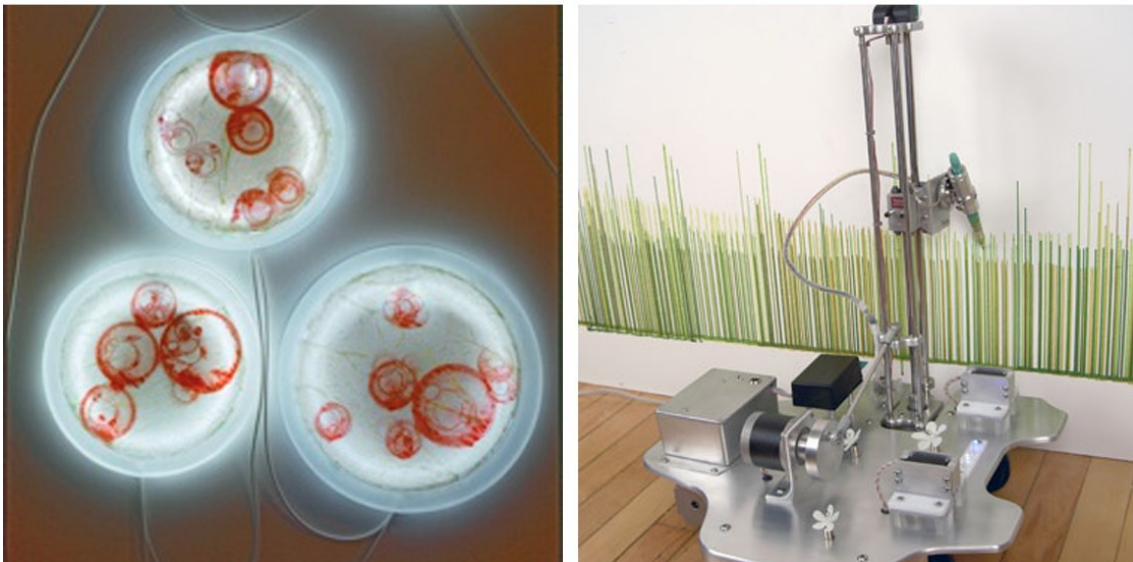
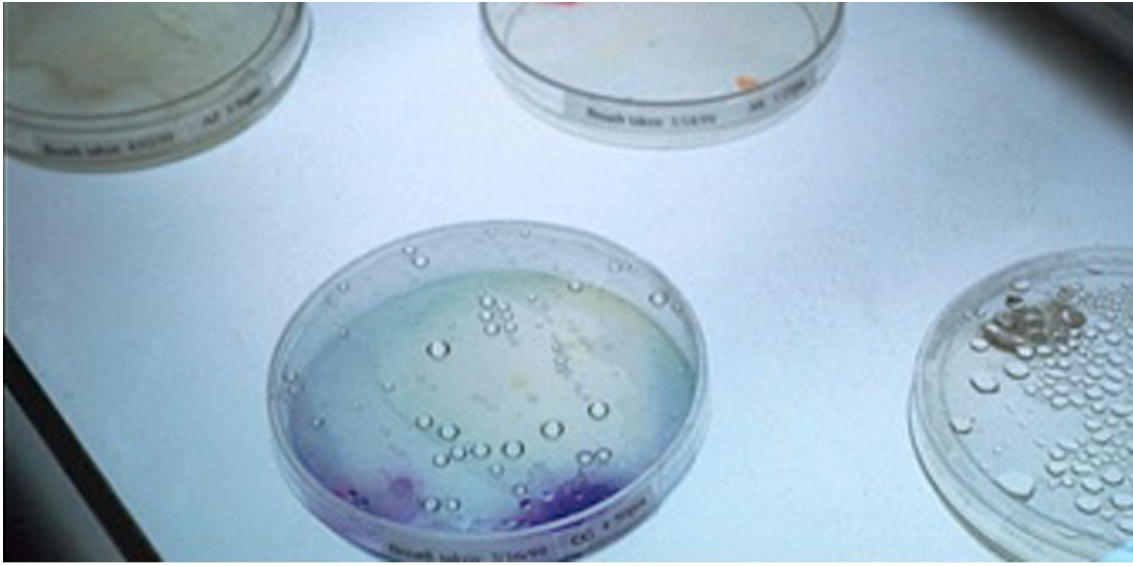


Figure 60. Sabrina Raaf, *Breath Cultures*, 1999. Petri dishes and video projections.

Figure 61. Sabrina Raaf, *Breath I: Pleasure*, 2000. Ink, cow gut, neon, plexiglass, bee's wax and electronic circuitry.

Figure 62. Sabrina Raaf, *Grower*, 2004. Custom robotics, sensors and ink.



**Breath in Action: Voice, Ritual and Performance**



*Poetry has its roots in human breath  
and what would become of us if this breath diminished?*  
Giorgos Seferis<sup>420</sup>

## 5.0 Breath in Performance: From Primitive Ritual to Postmodern Action

Through the philosophical theories and cultural practices examined in the previous chapter we saw how breath can alter bodily sensations and mind perception –and how these changes are used by visual artists as a prime matter in their work. Expanding this reflection onto the field of “action”, in this chapter we will see the role of breath in performance.

First we shall begin by making a brief reference to the origins of theatre and performance. There is a strong connection between theatre and rituals, present in different traditions about the origins of theatre. Due to that, a return to the logic of the ritual was projected as the ideal way to renew theatre by theorists and artists in late 19<sup>th</sup> century and early 20<sup>th</sup> century, who turned to the non-textual elements of the theatrical act for inspiration. This is particularly eminent in the first modernists who created happenings and performance art: the Dadaists, for example, tried to reconstruct primitive rituals, where language was reduced to a meaningless succession of syllables and music turned into noise.

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<sup>420</sup> Giorgos Seferis, “The language and the monster”, Banquet Speech. Swedish Academy, Nobel of Literature Ceremony, 1963 [online]  
<[http://www.nobelprize.org/nobel\\_prizes/literature/laureates/1963/seferis-speech.html](http://www.nobelprize.org/nobel_prizes/literature/laureates/1963/seferis-speech.html)> (Accessed: November 10, 2012).

As we try to define the non-textual elements in performance we will come across the concepts of theatricality and performativity, which are relevant to the perception of the performative act by the audience. Even though the reception of a work depends strongly on the sociocultural and psychological background of the viewers, it is also influenced by the actor or the performer. Therefore, it is useful to have a brief look into the tradition of actor training, in order to see what kind of tools the actors use so as to have an impact on the viewers. Breath is very important in this process; although in the West the actors' breathing is usually masked behind their words, in the Eastern theatre breath has a prominent role. The Eastern approach to breathing during actor training has had substantial impact on the West in the second half of the 20<sup>th</sup> century, as we shall see.

Under the influence of the East, Antonin Artaud develops his theory about the *Theatre of Cruelty*, as a way to reconnect with the essence of the theatrical act. Turning towards primitive rituals and breathing techniques, Artaud tried to sketch the basic lines of a new theatrical language, where text would only have a secondary role; the most important thing in Artaud's *Theatre of cruelty* is how the emotions are transmitted from actor to audience with the force of the actor's movements and breathing. Artaud's theory is very important here, since some of his ideas materialize in postmodern performance, as we shall see.

Before taking a further look into the question of postmodern performance, there is one more thing that needs to be considered: breath can influence performance not only through the actor's movements, but also through language.

Oral speech starts with an exhalation of breath, which passes through the vocal cords and is formulated into vowels and consonants in the mouth cavity. After seeing how voice is shaped within the body, we will look into the question of how language and breath are related, within a state of mutual interdependence: breath is



the primary element in the formulation of language and, on the other hand, the rhythm of language can have an impact on respiration.

After establishing the theoretical background for our analysis, in the second part of this chapter we will focus on how the performative elements we've analyzed - the connection to ancient rituals, the quest for a non-representational theatre and the non-textual elements in acting and actor training- have had an impact on visual arts.

In order to bridge the –anyhow small- distance between theatre and performance art, the seminal example of our analysis will be the work of Samuel Beckett, whose austere theatrical language is very close to performance art. By developing a theatrical language with strong non-textual elements –as strong as his word- Samuel Beckett has managed to create a new type of theatre, very close to visual arts. From the Beckettian legacy we will select the works that project the main issues tackled in this chapter, namely breath and voice, so as to provide a solid example about the connection between body, breath and voice in performance and visual arts.

As we expand our research into Beckett's impact on visual arts, we will see how some of the artists who have been influenced by his work and have adapted his plays in video, installation and performance art, commonly reflect upon the question of breath. The main axis of this analysis will be a comparative study between Beckett's *Breath* and contemporary adaptations of the play, as well as adaptations of the breath-related plays mentioned above.

The first examples seen here will be the works of Barbara Knezevic, who comments *Breath* in relation to the question of adaptation and language and Damien Hirst, who seeks to project the subjects of life, death and suffering, inherent in the play.

Subsequently we will have a more analytical look into the work of Andriano and Fernando Guimarães; the two artists and theatrical directors, standing in the middle

between theatre and performance art, have been dealing with Beckett's work for more than a decade, revisiting his plays through their own perspective, where breath, voice and fragmentary visions of the body are the most important aspects.

Then we will revisit Nikos Navridis' work –this time through the prism of Beckett's influence. Navridis often uses the playwright's work as a point of departure for his art, where breath is the primary element of creation, as we have seen in the previous chapter.

Although the works analyzed in relevance to Beckett are not strictly performance art, there is a strong performative element and a link to the questions of voice and breath that make the use of these examples relevant to the precedent theory. Looking further into the relation between breath and performance, we will subsequently have a look into the work of four prominent performance artists, in order to see how they tackle the issues we have dealt with in the first part of this chapter.

Starting with Bruce Nauman, who is largely influenced by Beckett, we will see how he uses breath in performances where repetitive movements and words contribute to the disembodiment of action and word in the performative act and create new nodes between word, action and body.

Vito Acconci also works largely with the question of repetition, which alters the initial action and transforms something familiar like breathing or walking into an artistic experience.

Then, we will have focus on the work of VALIE EXPORT, in relevance to breath, voice, language and text. VALIE EXPORT seeks the origin of breath in the body and tries to illustrate the path of language, from breath to voice to speech. In EXPORT's

work there is a very strong carnal element, which oddly creates a feeling of estrangement from the original meaning of the words she speaks out loud.

Lastly, Marina Abramović's work will become subject of a thorough analysis, due to the fact that it embraces the theoretical research of this chapter –and, partly, the previous one. Marina Abramović takes inspiration from Eastern philosophy and goes beyond her body limits, through painful ritualistic performances in the very beginning and subsequently via long still actions, where mind and breath control lead to a higher level of consciousness. In her teaching she includes detailed instructions on breathing, which relate her thinking to the philosophical theories analyzed in the previous chapter. Therefore, her work is very important in order to understand how voice and breath can have a mind altering effect and how the different issues concerning breath philosophies and cultural practices relate to each other.

To sum up, the main paths followed in this chapter will guide us through the ritualistic elements in performance, in order to see how non-textual elements shape the performer's action and the viewer's experience. The role of breath is very important in this sense, since it becomes a useful tool for the performer in order to control the body and the mind and to communicate different kind of feelings and thoughts to the viewer. In the artistic examples stated here, we see how the artists often use similar tools, like repetitive words and actions, in order to explore the potential of their bodies as prime matter of creation.

## 5.1 Theoretical Background

*Silence is a word which is not a word and breath is  
an object which is not an object*

Georges Bataille<sup>421</sup>

### 5.1.1 The origins of theatre and performance art: Ritual, Reality and Representation

The 20<sup>th</sup> century marked a dramatic change in the way performance was perceived and carried out; from a text-based representative act, it turned into an a self-sufficient reality, where emotions and ideas were transmitted through metatextual elements, like voice, body movements and breath. This change, that enabled the evolution of performance art as a form of visual art, independent of its theatrical progenitors, has its roots in the nostalgia for the origins of theatre and the interest in ancient and primitive rituals.

The interest for the ritual is a romantic idea, that started to become popular in the 19<sup>th</sup> century, evolving during the 20<sup>th</sup> century into an in depth research and an attempt to introduce some of its elements in contemporary artistic practices, as we shall see.

Theatre emerged in different societies worldwide from myth and ritual, storytelling, imitation and fantasy.<sup>422</sup> In the West, the origins of theatre are usually traced in the rituals and myths of Ancient Greece.

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<sup>421</sup> “Le silence est un mot qui n’est pas un mot et le souffle un objet qui n’est pas un objet” in Georges Bataille, “L’expérience Intérieure” en *Œuvres Complètes*, Paris : Gallimard, 1973, p.29.

According to Aristotle's *Poetics* theatre is rooted in the pagan rituals to honor god Dionysus in Greece. In these rituals there was no form of representation, apart from the chorus, that was dressed as satyrs,<sup>423</sup> that is, half men half goats. In one of these festivities, the leading man of the chorus –the *korifeos*– got out of the circle of the chorus and started a spontaneous dialogue with the satyrs. They replied by singing and that was the birth of the theatre; little by little, by adding up plot, stage set, costumes, characters, it evolved into its classical form.

Although the classical plays had very little in common with the original rituals, they were still performed during religious festivities; even today, the word *tragedy* (literally, in Greek: the song of the goats) stays as a remainder of the original chorus of satyrs.

This narration is largely a myth; even so, it reflects the idea that the non-textual elements, that constitute theatricality and performativity, preceded the evolution of theatrical text.

The nostalgia for the ancient rituals that lead to the genesis of theatre starts to emerge in the late 19<sup>th</sup> century, notably in Nietzsche's essay *The Birth of Tragedy Out of the Spirit of Music*.<sup>424</sup> In this essay, Nietzsche states that the theatre should regain some of its Dionysian force that was lost throughout the centuries, tamed by

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<sup>422</sup> Daniel Meyer-Dinkgräfe, *Approaches to Acting: Past and Present*, New York: International Publishing Group, 2001. p.4.

<sup>423</sup> According to Aristotle's *Poetics* theatre emerged from the festivities in honour of god Dionysus (the god of fertility), when Thespis stood in front of the chorus of satyrs (the companions of the god) and started a dialogue with them, thus adding narration to the singing and dancing. Although this is a legend, it had passed into the history of Western culture as a fact, hence, it was perceived by Artaud or Nietzsche as such. In any case, there seems to be a link between the theatre and ancient Greek mystical religious rituals. See Aristotle, *Poetics*, 1447<sup>a</sup>. Original text [online] <[http://www.hs-augsburg.de/~harsch/graeca/Chronologia/S\\_ante04/Aristoteles/ari\\_poi0.html](http://www.hs-augsburg.de/~harsch/graeca/Chronologia/S_ante04/Aristoteles/ari_poi0.html)> (Accessed September 6, 2011).

<sup>424</sup> Friedrich Nietzsche, *The Birth of Tragedy Out of the Spirit of Music*, first ed.: Basel, 1872. [online] <[http://records.viu.ca/~johnstoi/nietzsche/tragedy\\_all.htm](http://records.viu.ca/~johnstoi/nietzsche/tragedy_all.htm)> (Accessed: August 10, 2011)

the Apollonian spirit. According to him, the Dionysian stands for the primal force of creation, still formless and chaotic, until the Apollonian measure and harmony shape it, transforming it into a work of art.<sup>425</sup> For Nietzsche the original dramatic phenomenon of the chorus transforms the actor and the surrounding crowd.

These ideas have a profound impact on Antonin Artaud's theories about the renewal of theatre, as we shall see later on in this chapter. On the other hand, the quest for primitivism and ritualism lies at the roots of performance art.

Performance art started in the early 20<sup>th</sup> century, in pre-war Italy and Russia. The Italian Futurists sought new ways to propagate their ideas and their aesthetic, which praised the machines and provokingly supported war as a generative force, whereas they condemned ancient culture and the love of the past. During their futurist evenings they searched for new ways of interacting with the public, often turning to scandalous acts that outraged the spectators. Thus, the audience never remained neutral; it got involved in events organized and controlled by the artists.<sup>426</sup>

Similarly, the Russian Futurists resorted to scandals in order to get the public's attention, however, in contrast to Marinetti, who asked for the demolition of the Acropolis, they projected their influence from Russian icons, primitive painting, the lubok (illustrated traditional stories) and folklore poetry.<sup>427</sup>

Without any direct reference to the past or future, but driven by complete nihilism, the Dadaists organized their own performances in Cabaret Voltaire, a nightclub based in Zurich, the only 'island' of peace in World War II Europe. The Dadaists praised the absurd and abandoned any 'traditional' means of expression in art, music and poetry. Their poems consisted of babbling syllables with a meaningless

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<sup>425</sup> Antoon Van den Braembussche, *Thinking Art*, Brussels: Springer, 2009, p. 89.

<sup>426</sup> Claire Bishop; Boris Groys, "Bring the Noise", *Tate ETC.*, Issue 16 (Summer). [online] <http://www.tate.org.uk/tateetc/issue16/futurism1.htm> (Accessed: September 15, 2011)

<sup>427</sup> Bishop 2009, *Ibid.*

succession; their music was improvised noise; their shows combined elements from cabaret shows, the burlesque and primitive rituals.

During the 1960s and 1970s, performance art became widely known, through Allan Kaprow's happenings,<sup>428</sup> performances by Carolee Schneemann, Joseph Beuys, Yoko Ono, and the artists that will be investigated more analytically in this chapter, Bruce Nauman, Vito Acconci, VALIE EXPORT and Marina Abramović. These artists experimented with their own bodies and the interaction with the audience. In their actions, the limits between the private and the public, the personal and the collective, art and life, were often blurred. These performances helped the public shape a new way of perceiving art, through individual action and personal experience. This personal experience is linked to how the performer and the public feel their bodies; hence, these performances are relevant to the issues tackled in the previous chapters in regard to phenomenological perception and breath control.

Surpassing theatrical tradition and word, postmodern performance has broken the bonds with reality and representation; performance artists use their bodies as a vehicle to explore consciousness and to have a direct impact on the public with very little or no reference to text or action.

Postmodern performance is characterized by an "aesthetic of impermanence",<sup>429</sup> where the qualities of memory and heritage give way to immediacy and uniqueness. In performance art the artwork is not some text or image, but the happening or event and the way it is perceived by the audience.

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<sup>428</sup> Allan Kaprow stated that he's paying special attention to breathing and describes certain situations where breathing helps him communicate with groups of friends or his partner. In his writings, he includes thoughts about the relation of breathing to consciousness and makes proposals for happenings that are based on making the breath visible on a mirror or a piece of glass. His *Time Piece* was based on the idea of people recording sounds of their pulses and breathing, listening to them and exchanging them with partners over the telephone and face to face. See Kaprow 1993, pp.196-198.

<sup>429</sup> Steven Connor, *Postmodernist Culture: an Introduction to Theories of the Contemporary*, Oxford: Wiley-Blackwell, 1989, p.143.

What is interesting to see here is how visual arts had been fomented by rituals, not as a nostalgic tendency towards the origins of theatre, but in a much more substantial manner, through a differentiation in the perception of reality and representation.

*Imitatio dei* has been used throughout history as a way to get closer to the divine; certain words or acts were considered as a representation of archetypical acts –the repetition of an original.<sup>430</sup> Based on this notion, the platonic model of analysis considers everything as the repetition of an Idea. According to Plato, art is an imitation of the real world, which is mirroring the world of ideas; therefore, he rejects art as double representation. Aristotle does not reject representation, but still defines the theatre as *mimesis*, an imitation of a deed<sup>431</sup> -meaning that it represents the original deed and is not a real act. These views have shaped western thought, in a way that “it is very difficult to think outside the paradigm in which representation is conceived as a gap, an absence”.<sup>432</sup>

However, it is not uncommon in rituals preceding the genesis of theatre, which are still performed in certain cultures, that the performative act does not imitate reality, but produces reality:<sup>433</sup> for example, it can bring about rain or earth fertility. Likewise, performance art, as we’ve stressed above, does not imitate reality but is a real act. Generally, in performance art there was no representation of a character or

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<sup>430</sup> For more on Repetition and Difference see pp.289 and 310-311 of this chapter.

<sup>431</sup> Aristotle (*Poetics*, VI, 1449b) defines tragedy as follows: “Ἔστιν οὖν τραγωδία μίμησις πράξεωσ σπουδαίας καὶ τελείας, μέγεθος ἔχούσης, ἡδυσμένω λόγῳ, χωρὶς ἐκάστῳ τῶν εἰδῶν ἐν τοῖς μορίοις, δρώντων καὶ οὐ δι’ ἀπαγγελίας, δι’ ἐλέου καὶ φόβου περαίνουσα τὴν τῶν τοιοῦτων παθημάτων κάθαρσιν”. (A tragedy, then, is the imitation of an act that is significant and complete, of a certain magnitude, using a pleasing language with ornaments, each kind brought in separately in the parts of the work; using action and not a narrative form; managing through pity and fear to accomplish the catharsis of such emotions).

<sup>432</sup> Barbara Bolt, *Art Beyond Representation: The Performative Power of the Image*, New York: I.B. Tauris, 2004, p.171.

<sup>433</sup> Also see chapter three of this thesis.



event; the artists sought to blur the limits between art and life, creating a single event that was not restaged, not rehearsed and not taped –any photos or videos of the events were simply for documentation purposes.

The artists who create time-based art often share an aversion or a disinterest for leaving behind an “art object” with an aesthetic and commercial value. Marina Abramović has expressed her admiration for the immateriality of the Aboriginal culture, where the sacred objects, elaborate and beautiful, are destroyed after the ritual.<sup>434</sup> In both cases, there is no interest in creating objects that will live on after the ritual or the performance.

Therefore, it is easy to see why theorists and artists that sought to bring about a change in theatre and a distancing from the idea of representation evoked images from primitive rituals. As the influence from primitive arts in the early 20<sup>th</sup> century liberated the canvas from the Renaissance perspective and the obligation to be a mirror of the seen world, the inspiration from rituals would help performative arts discover a different way of communication between the performers and the audience, which went beyond the narrative potential of the text.

In performance art, the artist somehow acts like a modern day shaman that introduces the viewers into a mind altering experience. In order to come to a deeper understanding of this experience, we need to look into the subjects of theatricality and performativity.

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<sup>434</sup> Mary Richards, *Marina Abramović*, Routledge: New York, 2010, p.42.

### 5.1.2 Theatricality and Performativity: The Non-textual Elements of Performance

During the 20<sup>th</sup> century visual artists made a leap towards temporality, introducing elements that were up until then linked to scenic arts, like text, dialogue, performance. As a consequence, the solid and unchanging art object, subject to visual experience, gave way to an experience that is partly visual and partly corporeal, shared between the artist and the public within certain spatiotemporal limits.

We've already seen how the public can intervene in an artwork in interactive art;<sup>435</sup> but even when the artwork does not call for the public's participation, observation alone can be considered as significant. According to phenomenology the world exists through the self;<sup>436</sup> all events are defined by human perception and experience: "The 'events' are shapes cut out by a finite observer from the spatiotemporal totality of the objective world".<sup>437</sup>

The concept of *performativity* follows the phenomenological approach to the event, in the sense that it defines how a meaning is derived through its perception during the theatrical act.

This implies that performativity is a variable concept that differs according to the content of the performance and also the character of the audience. Factors like the cognitive level of the spectators, their cultural preconceptions and their emotional response can have an impact on performativity.<sup>438</sup> Just like "you cannot pass through

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<sup>435</sup> See chapter three of this thesis.

<sup>436</sup> Nair 2007, p.26. For a thorough analysis of the concepts of event, performativity and theatricality through different philosophical perspectives, in relevance to the subject of breath, see Chapter One: The Location of Breath, pp.11-47.

<sup>437</sup> Merleau-Ponty 2005, p.477.

<sup>438</sup> It is a theory based on phenomenology and the theory of reception as well, see chapter three of this thesis.

the same river twice<sup>439</sup>, because the water in it is constantly flowing and changing, you cannot have the same performance twice because the actor-audience (or artist-audience) dynamic will be different each time. Any attempt to capture the moment in photographs or videos is not the original work, but merely documentation, as we've already stressed.

The reception of the artwork by the viewers is particularly important in performance art, where they are often called to act or react to what they see; usually, the instructions or text accompanying each performance is just a few lines long, whereas the possible actions that can take place during the performance are many. This field of unwritten action can be defined as theatricality.

*Theatricality* is all the elements in a theatrical play that go beyond the written text. As Roland Barthes puts it:

What is theatricality? It is theater-minus-text, it is a density of signs and sensations built up on stage starting from the written argument; it is that ecumenical perception of sensuous artifice –gesture, tone, distance, substance, light- which submerges the text beneath the profusion of its external language.<sup>440</sup>

In other words, theatricality is the non-textual elements of a theatrical play, that often become more important than the external language –even more so in visual arts, where the text is not always present. Theatricality includes performativity, but goes beyond it.<sup>441</sup>

Even though Barthes sees theatricality as an element inherent in the text,<sup>442</sup> which somehow includes the non-theatrical elements, there is no doubt that the reception

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<sup>439</sup> Heraclitus quoted in Plutarch, *On the E at Delphi*, 392 B. Original text: [online] <[http://el.wikisource.org/wiki\\_Περί\\_του\\_ει\\_εν\\_τοις\\_Δελφοίς](http://el.wikisource.org/wiki_Περί_του_ει_εν_τοις_Δελφοίς)> (Accessed: February 10, 2010)

<sup>440</sup> Roland Barthes, *Critical Essays*, Evanston, Illinois: Northwestern University Press, 1972, p.26.

<sup>441</sup> Nair 2007, *ibid.*, p.14.

<sup>442</sup> Barthes 1972, *ibid.*, p.26

of the text by the actors –who will perform it according to how they perceive it- and the audience, creates an ever-changing dynamic.<sup>443</sup>

We've already covered the subject of the public as an agent that gives form and substance to the artwork in interactive art.<sup>444</sup> What interests us to see here is what kind of elements have migrated from the theatrical stage to the art space; moreover, what is the role of breath in this new aesthetic paradigm and how it enhances the lived experience of the artwork.

As the concepts of theatricality and performativity mainly concern corporeal phenomena –like the actor's voice, movements and breath- it is worth getting deeper into the analysis of the body by analyzing the link between voice, language and breath and how these elements are incorporated into actor training.

### 5.1.3 Breath on Stage: Actor Training and Performance

In scenic arts, breathing is a pivotal element, since it is directly related to the body movements, the diction of speech and also the emotional state of the actor or dancer, that is influenced by the breathing rhythm, as we have previously demonstrated. In other words, the movements of the dancer or the actor onstage are sustained and defined by the way he or she breathes; breath can bring an emotional charge in the performance and transfer emotions to the public. As for the theatrical text, the way of breathing can make speech flow or shatter meanings.

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<sup>443</sup> See p.112 for the thesis.

<sup>444</sup> See Chapter Three of this thesis.

According to Steven Connor, “Breath is the raw material of theatre, providing the fuel for all the words and action that transpire and are respired upon the stage”.<sup>445</sup> However, no matter how primordial the role of breath is, most of the actors seek to hide it: one of the basic parts of actor training is to learn how to mask their breathing –the air that their *own body* needs to be kept alive- and transform it into the words, sighs, whispers and grunts of the *character* they embody. Instead of focusing on their body, they seek to “get away” from it, in order to let it become the body of another character, with his or her particular movements and gestures.

On the contrary, in the East breathing plays a most important role in acting and actor training. Although in the West actor training developed only in the 20<sup>th</sup> century, in the East the tradition dates back to 15<sup>th</sup> century.

In India, the *Natyasastra*, the theatre manual about actor training and performance, contains detailed instructions about different types of breathing and nostril movements, which should be performed by the actors in order to represent different types of feelings. If every type of breath is linked to a different activity, as was explained in the previous chapter,<sup>446</sup> then reproducing it intentionally should communicate to the audience a different kind of feeling each time.

The *Kudiyattam*, the Sanskrit theatre of India is based on eye movement patterns. In order to be able to perform these movements, the actors should train on different types of breathing.

The objective of theatrical performance is *rasa*, the delight experienced by the audience as the result of a theatrical event.

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<sup>445</sup> Steven Connor, “Steam Radio: On Theatre’s Thin Air”, conferencia, London Theatre Seminar, 2003 [online] <<http://www.stevenconnor.com/mouthful>> (Accessed: August 20, 2010)

<sup>446</sup> See pp.179-180 of the thesis.

It is interesting here to compare *rasa* with *catharsis*, the ultimate goal of the ancient Greek theatre. The word *catharsis*,<sup>447</sup> literally ‘cleansing’, defines this feeling that overwhelms the audience, when they are delivered by the emotions of angst and emotional tensions, after the order of things is restored at the end of the tragedy. Even though both terms refer to the emotions communicated by the drama and the performance to the audience, *catharsis* is more linked to the end of the play, like the final emotional and mental state that the audience senses after a long path of positive and negative feelings experienced during the play.

On the contrary, there are different types of *rasa* linked to different emotions, Heroic, Comic, Pathetic, Fury, Heroic, Horrible, Disgusting, Marvelous and Peace/Tranquility<sup>448</sup>. Each of these is provoked via a different type of breathing –for example, upward breath, downward breath, with a different kind of force.<sup>449</sup>

Although, as we’ve analyzed on the previous chapter, different types of breaths are linked to different states of mind and emotions, Western actor training has not fully explored the role of breath as a means of transmitting these feelings. In the Western tradition breath training is only seen as part of the actor’s vocal training. For example, in Cicely Berry’s *Voice and the actor* breath is seen as the means by which the actors can relax their body and strengthen the vocal cords.<sup>450</sup> Other researchers developed their actor training theories influenced by Eastern practices, such as yoga. Stanislavski, for example, proposes a set of exercises so as to help the actors gain

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<sup>447</sup> See footnote n.431 of this thesis.

<sup>448</sup> Umberto Eco, “Rasa and Taste: A Difficult Synonymy”, Conferencia *Transcultural on Reciprocal Knowledge "Cultures of Knowledge*. Goa, Pondicherry, New Delhi, October 2005. [online] <http://www.umbertoeco.it/CV/Rasa%20and%20Taste.pdf> (Accessed: September 20, 2011).

<sup>449</sup> For an in-depth analysis of actor training in the East and West, see Nair 2007, Chapter Three, “Breath: Training and Performance”, pp. 122-153.

<sup>450</sup> Cicely Berry, *Voice and the Actor*, London: Harrap, 1974.

control of their bodies. Moreover, Grotowski adopted some yoga breathing practices as part of the actor's voice empowerment.<sup>451</sup>

In all those cases, however, breath is just an element that is subjected to the actor's movements and words; breath never stands out as an integral part of performance, as in the Indian theatre.

We will not analyze further the breathing techniques proposed by theatrical theorists, directors and writers, such as Stanislavsky, Brecht, or Strasberg, because their innovations remain within the frame of theatrical tradition –the theatrical production of a pre-written dramatic text<sup>452</sup>– and we are only interested in the theatre to the extent that it is related to performance art, happenings and visual art in general.

For this matter, it would be more fruitful to focus on the theory brought forth by Antonin Artaud, because his proposals might not have had a direct impact on the theatre, but they were to find their realisation in performance art, as we shall see.

#### **5.1.4 Towards a new theatrical language: Antonin Artaud**

In an effort to renew the theatrical language of the West, Antonin Artaud focused on the actor's body and breath. Instead of trying to frame it within the needs of the text, he sought to find ways to make it stand out and acquire a presence of its own.

Turning his research towards breathing practices related to religion and medicine, such as the Cabala and acupuncture, Artaud asserted that by using certain tempos of breathing patterns the actor can “make use of his emotions like a wrestler makes use

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<sup>451</sup> Ibid.

<sup>452</sup> Meyer-Dinkgräfe 2001, p.67.

of his muscles".<sup>453</sup> He also suggested that just like the acupuncture's needles, that release suffering by balancing *Yin* and *Yang* forces, breathing inwards could help the actors stimulate memories and feelings.<sup>454</sup>

Artaud's breathing instructions are not as detailed as in the Hindu tradition. He repeats some breathing patterns that originate from the Jewish tradition of the Cabala, without adapting them to the reality of the theatre.

However, his propositions are still significant because they direct the actors towards their interior. Artaud feels that by exploring their interior the actors can find an inexhaustible source of inspiration. The role of breath is vital in this process, since every kind of alteration in breathing has the ability to create memorable effects and arouse one's thought and emotion. That is to say, the focus on breath is presented as the first step to explore the unknown fields of consciousness.<sup>455</sup>

Artaud states that "every emotion has organic bases. It is by cultivating his emotion in his body that the actor recharges his voltage"<sup>456</sup> and that "It is certain that for every feeling, every mental action, every leap of human emotion there is a corresponding breath which is appropriate to it".<sup>457</sup> This means that every physical, mental and psychological vibration affects our breath. So, if the body movements and feelings all have their parallel breathing, the actors need to explore how these are interrelated.

That could lead to a new kind of theatre, where the actors can affect the public directly, only through controlling their body and breath, without the use of *logos*.

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<sup>453</sup> Richard Lee Gaffield-Knight, *Antonin Artaud in Theory Process and Praxis or For Fun and Prophet*, New York: State University of New York at Binghamton, 1993, p.35.

<sup>454</sup> Ibid.

<sup>455</sup> Nair 2007, p.40.

<sup>456</sup> Artaud 1994, p.140.

<sup>457</sup> Artaud 1994, p.134.



This idea was inspired to Artaud after watching Balinese actors perform. Similarly to the Sanskrit tradition of *Kudiyattam*, in the Balinese theatre the main concern revolves around the spectator's experience of *rasa* through gestures and signs. Influenced by the mysticism of the Balinese theatre, Artaud states: "through the hieroglyph of a breath I am able to recover an idea of the sacred theater".<sup>458</sup> There is certain nostalgia for the origins of theatre in this statement, reminding us of Nietzsche's approach to the ancient theatre.<sup>459</sup>

Following Nietzsche's line, Artaud believes that theatre should be rescued from its "servitude to psychology and human interest",<sup>460</sup> shifting the focus from the objective and descriptive external world to the internal world, the metaphysical aspect of man.<sup>461</sup> His vision for the theatre includes a resurrection of its mystical quality and a creation of a "naked language of the theater (not a virtual but a real language)" that would "permit, by its use of man's nervous magnetism, the transgression of the ordinary limits of art and speech, in order to realize actively, that is to say magically, in real terms, a kind of total creation in which man must reassume his place between dream and events."<sup>462</sup>

This transgression of the limits of art and speech involves using the body and its forces as a means of communication. In order to define this kind of theatre where the feelings and the meanings are transmitted not through words but through action, by the transferring of forces from actor to audience, Artaud introduced the term *Theatre of Cruelty*.<sup>463</sup> By the word "cruelty" he wasn't referring to violence,

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<sup>458</sup> Artaud 1994, p.141.

<sup>459</sup> See pp.261-262 of this thesis.

<sup>460</sup> Artaud 1994, p.89.

<sup>461</sup> Artaud 1994, p.91

<sup>462</sup> Artaud 1994, p.92

<sup>463</sup> Ibid.

but to “a kind of severe moral purity”<sup>464</sup> –in other words, he was talking about an inner truth in theatrical act.

Artaud believed that representation was not the only objective in theatre. According to him, there was a deeper, almost mystical force in theatre, which could lead the actors and the audience to their innermost *psyche*. He claimed that, by breaking the traditional bonds that keep theatre attached to representation, the theatrical stage could become a doorway leading the audience to the “known or unknown fields of consciousness”.<sup>465</sup>

According to Jacques Derrida’s reading of Artaud, the *theatre of cruelty* is not *representation*. “It is life itself, in the extent to which life is unrepresentable. Life is the nonrepresentable origin of representation”.<sup>466</sup> Derrida interprets Artaud’s theory as a proposal for a repetition without reference, a kind of performance that refers to itself and not to reality, the same way that life does not represent anything else but itself; this kind of performance evokes a higher level of consciousness.

Artaud’s ideas lack a concrete technique or method; therefore they are hard to carry out in a traditional theatrical context; hard indeed, but not impossible, as Jerzy Grotowski believed.<sup>467</sup> Artaud’s idea of a theatre without a theatre, without the traditional forms of representation, is present in the theatrical plays of Samuel Beckett, as well as the artworks of visual artists that use performance as expressive means.

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<sup>464</sup> Artaud 1994, p.122.

<sup>465</sup> Artaud 1994, p.30.

<sup>466</sup> Jacques Derrida, “The Theatre of Cruelty and the Closure of Representation”, in Philip Auslander (ed.), *Performance, Critical Concepts in Literary and Cultural Studies*, New York: Routledge, 2003, p.5.

<sup>467</sup> Meyer-Dinkgräfe 2001, p.71.

Therefore, performance art is what Artaud would call the “theatre of cruelty”; his suggestions to break the bonds with traditional theatrical performance and to seek inspiration in the body and the self sounds very up to date in contemporary art. Postmodern performance most of the times is not representation, but life itself.

### 5.1.5 Breath, Voice and Language

We have analyzed how breath control is a common practice among different cultures and religions in order to achieve what has been described as an “altering of consciousness”.<sup>468</sup>

However, the most common use of breath control usually goes unnoticed, as it is something that we learn to handle since our birth: it is the transformation of breath to voice –since the very beginning of human life, through cries and sighs– and eventually speech –after a few months. The uttering of voice has a message –basic, in the case of cries and elaborate when it comes to words– destined to a recipient, hence it is a basic means of communication.

Voice is a means of expression of needs, emotions and thoughts. As such, it plays a substantial role in performative and visual arts. Therefore, it is interesting to see how breath, voice and formulated thought are interconnected and affect each other, in order to understand how artists make use of it as they create their work.

According to Aristotle “Voice is a kind of sound characteristic of what has soul in it; nothing that is without soul utters voice”.<sup>469</sup> So, *phone* (voice) is the sounds

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<sup>468</sup> See chapter four of this thesis.

<sup>469</sup> Aristotle, *De Anima Books II and III*. Trans. David Hamlyn. Oxford: Clarendon Press, 1993, §2.8, 420b: “So the sound produced by the knocking of air we breathe onto the so called trachea artery is voice. Any noise produced by an animal is not a voice [...] what causes the knocking needs to have a soul and with some kind of imagination”. In the original text: «ὥστε ἡ πληγὴ τοῦ ἀναπνεομένου

produced both by animals and man. However, there's a differentiation between *phone semantike* (voice with meaning) and animal vociferations or unintentional bodily sounds, like cough, for example. In other words, voice is a controlled, intentional sound coming through the mouth.

As for the enigma of the formulation of voice in the body, two different views were put forth: one that paralleled the body to a string instrument, like an Apollonian lyre, and another that compared it to a wind instrument, that makes a noise as the air is directed out of it. In the end, it became evident that both strings and wind play a role in the formation of voice, as it is based on the flow of air through the vocal cords and its modulation in the larynx and the mouth.<sup>470</sup>

In addition to the widespread notion of the human body as a musical instrument – and voice as its music- there is the idea that voice somehow expresses the materiality of the body. For example Roland Barthes focuses on the more material aspects of the singing voice:

The singing voice is not the breath but indeed the materiality of the body emerging from the throat, a site where the phonic metal hardens and takes shape.<sup>471</sup>

Therefore, Barthes continues the Aristotelian quest of the voice in the purely physical impact of the air in the cavity of the interior body and the intellectual process of giving it meaning<sup>472</sup> –changing it into discourse.

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ἀέρος ὑπό τῆς ἐν τούτοις τοῖς μορίοις ψυχῆς πρὸς τὴν καλούμενην ἀρτηρίαν φωνὴ ἐστίν. οὐ γὰρ πᾶς ζῶου ψόφος φωνή [...] ἀλλὰ δεῖ ἔμψυχόν τε εἶναι τὸ τύπτον καὶ μετὰ φαντασίας τινός»

<sup>470</sup> Steven Connor, "Whisper Music", lecture, Symposium *Take a Deep Breath*. Tate Modern, London, 16 November 2007 [online] <<http://www.stevenconnor.com/whispermusic>> (Accessed: August 10, 2011)

<sup>471</sup> Barthes 1985, p.252.

<sup>472</sup> See footnote n.469 of the thesis.

Italo Calvino expands this vision by emphasizing on the role of the corporeal and non-corporeal elements in the formulation of voice:

A voice means this: there is a living person, throat, chest, feelings, who sends into the air this voice, different from all other voices. A voice involves the throat, saliva, infancy, the patina of experienced life, the mind's intentions, the pleasure of giving personal form to sound waves.<sup>473</sup>

So, for Italo Calvino the voice comes from the inside of the body as a mixture of exhaled breath, body, memories and thoughts that expresses the individuality of the person that releases it.

A voice starts its journey in the inner body as breath exhaled from the lungs, which is moderated in the larynx –in order to define musical tone and intensity- and subsequently halted in the cavity of the mouth, squeezed and stopped at intervals. It ends up as speech that expresses thoughts, with a volume and a tone that reveals the speaker's intention and emotion, and an accent and musicality that originates in the linguistic culture of the person speaking. The voice is a joint between body and speech.<sup>474</sup>

It is due to this interconnection between breath, voice and speech that the Ancient Greek tradition, before Plato, considered that thought was formulated in the *thymos*, which was located in the human chest. It is difficult to find a modern translation for the word *thymos*, but if we consider its origin from the verb *thyō* (to blow, to breathe) and its use in the literary tradition, we could accept Richard Broxton Onians' interpretation that "the *θυμός* itself is the breath, which may

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<sup>473</sup> Italo Calvino, "A King Listens" in *Under the Jaguar Sun*, New York: Harcourt Brace, pp.33-64, 1988.

<sup>474</sup> Cavareto 2005, p.15.

always be felt as vaporous and sometimes is visible”.<sup>475</sup> *Thymos* was located in *phrenes*, the centre of the emotional world located in the chest, the heart and the lungs.

*Thymos* was also used as a synonym for “soul” –which stresses the assertion that for ancient Greeks breath, soul and spirit were interconnected;<sup>476</sup> we’ve already highlighted that the etymology of words such as *psyche* (soul) and *pneuma* (spirit) – *psycho* and *pneo* respectively, both translated as “to blow”- links those concepts to breath.

Eventually thought became disassociated from breathing and voice; the Platonic tradition located the centre of thought in the head, a notion that has prevailed in Western tradition. The archaic notion that “to think is to speak and to speak is to breathe”,<sup>477</sup> that thinking derives from speech, has been abandoned for the scientifically proven view that speaking comes as a result of thinking.

However, the archaic idea that thought originated from the lungs, survives in the literature of the era, that has poetically seminanted Western culture; therefore it is interesting to mention briefly how it is manifested in epic and lyric poetry, before we see the impact of metric speech on breath and bodily rhythm.

In the Homeric poems, we find Odysseus beating his chest before speaking to the Phaeacians, as if he were trying to evoke memory and thought from his *phrenes*. Considering the fact that Homer’s poems date back to a period when written speech was not so common and ideas were mainly formulated by oral speech and disseminated via oral tradition, we can understand why, for the ancient Greeks of the archaic period, to think was to speak and speech came from the lungs.

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<sup>475</sup> Richard Broxton Onians, *The Origins of European Thought: About the Body, the Mind, the Soul, The World, Time and Fate*, Cambridge: Cambridge University Press, 2001 (1951) p.44.

<sup>476</sup> See pp.170-171 of the thesis.

<sup>477</sup> Cavarero 2005, p.66.

Likewise, the centre of perception lay in the lungs: in epic poetry the gods often give ideas and solutions to the heroes by “breathing” ideas into their *phrenes*;<sup>478</sup> in a similar manner, “mind, thoughts, knowledge are breath which can also be breathed out”.<sup>479</sup>

It is worthy here to make a short detour from the analysis of the connection of breath to thought in the ancient Greek tradition, in order to see the role of voice and breath in the Hebrew tradition. In the Hebrew religion god never speaks directly to people, but his word comes out of the mouth of the prophets, in a way that it can be understood by common people; it comes out as human voice and language. God’s breath, *ruah*, and voice, *qol*, manifest his power and will. To sum up, god is not speech, but voice and breath; it is the same breath that gives life to man. Walter Benjamin says about the relation between the sublime and the human being: “god breathes his breath into a man: this is at once life and mind and language”.<sup>480</sup>

Returning to the ancient Greek literary tradition, there’s a strong connection between “word” and “air”, highlighted in the commonly used phrase *epea pteroenta* (winged words), which comes up repeatedly in Homeric poetry –and is still being used in modern Greek.<sup>481</sup> Words have wings, because they fly up in the air. The

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<sup>478</sup> The idea of strength and courage breathed into a hero by a god recurs in Homer. See for example Homer, *Iliad*, X, 482: “Ὡς φάτο, τῷ δ' ἔμπνευσε μένος γλαυκῶπις Ἀθήνη” (So spake he, and into the other's heart flashing-eyed Athene breathed might). Also Homer, *Odyssey*, XXIV, 520: “ὦς φάτο, καὶ ῥ' ἔμπνευσε μένος μέγα Πάλλης Ἀθήνη” (So spoke Pallas Athena, and breathed into him great might.)

<sup>479</sup> Onians 2011, p.56.

<sup>480</sup> Walter Benjamin, *Selected Writings, Volume 1 1913-1926*, Cambridge, Mass. and London: The Belknap Press of Harvard University Press, 1996, p.67.

<sup>481</sup> For more details on the concept of “winged words” see Françoise Létoublon, “Epea Pteroenta (“Winged Words””, *Oral Tradition*, 1999, pp. 321-335. [online] <[journal.oraltradition.org/files/articles/14ii/4\\_letoublon.pdf](http://journal.oraltradition.org/files/articles/14ii/4_letoublon.pdf)> (Accessed: August 10, 2011).

same idea is present in the lyric poetry of Sappho, where words are made of air: “With words of air I begin, but for this reason they are words soft in hearing”.<sup>482</sup>

Sappho’s words are made of air, made of breath because they come through the lungs and the vocal chords, destined to be recited and not to be read.

This is true for poetry throughout the ages; poetry recitation is supposed to result in a musicality emerging from the metric of speech and the succession of vowels and consonants that constitute the words. Poets take into consideration the musicality of language and try to communicate their words in a metric and musical speech.

As Paul Valéry notes,

A poem is a continuity during which, reader, I breathe in accordance with a pre-established law. What I contribute is my breathing and the mechanics of my voice, or simply their potential, which can be reconciled with silence.<sup>483</sup>

So, for him, poetry is nothing but a period of breathing, with alterations of voice and silence.

In *Air and Dreams* Gaston Bachelard investigates the relation of breath to poetry extensively, noting that

Poetry is an exhalation of joy, the outward expression of the joy of breathing. Before it is ever expressed metaphorically, *poetic breath* is a reality that can be found in the life of a poem if we are willing to follow the lessons of the *aerial material imagination*.<sup>484</sup>

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<sup>482</sup> Elytis 1984, p.18: “Αερίων ἐπέων ἄρχομαι ἀλλ’ ὀνάτων”. This verse comes from a script in a red figured vase in the National Archeological Museum of Athens, which depicts Sappho. Elytis adopts the view that the verse belongs to Sappho, though it is disputed by other scholars (See: Yatromanolakis: Δημήτρης Γιατρομανωλάκης, «Ετερογλωσσικοί διάλογοι και ανα-σύνθεση στη Σαπφώ του Οδυσσεά Ελύτη», *Σύγκριση/Comparison*, v.13, 2002.

<sup>483</sup> Paul Valéry, “The Lover of Poems”, in *The Collected Works of Paul Valéry*, Princeton: Princeton University Press, 1971, p.3.



Bachelard observes the two-way relation between poetry and breath. On one hand, breath is the root of poetry, a vital element for the formulation of words and the rhythm of the body. In order to sense the correlation of breathing with words, the writer invents his own breathing exercises, where inhalation is combined with the pronunciation of the word *vie* (life) and exhalation with the word *âme* (soul): “Instead of breathing in undefined air, we fill our lungs with the word *vie*; *âme* is what we will quietly give back into the world”.<sup>485</sup> In other words, Bachelard believes that our breathing is charged with the concepts of life and soul and that through breath control we can reach a state of awareness about the connection of ourselves with the world. Thus, he links the current discourse about the relation of voice with breath with the breathing techniques analyzed previously,<sup>486</sup> stating that these breathing exercises can bring one in tune with the universe.

On the other hand, Bachelard stresses the importance of recitation in poetry, by noting that a reader could destroy a poem if he does not pay attention to the element of breath, the aerial matter that flows in poetry. Within a poem, “breath is worked, hammered, throttled, jarred, speeded up, caught up, and trapped in words”,<sup>487</sup> it constantly changes essence.

Moreover, poetry recitation, just like everyday speech, not only originates in breath –which is the first substance of voice, as we have said- but can also alter it. The impact of speaking –through the volume of voice and the rhythm of speech- on breath and the body is a fact that can be easily verified at times when an intense discourse leaves us out of breath. More analytically, medical research has provided us with detailed accounts on how different types of speech have different effects on the body.

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<sup>484</sup> Bachelard 1988, pp.239-246.

<sup>485</sup> Ibid.

<sup>486</sup> See chapter four of this thesis.

<sup>487</sup> Bachelard 1988, p.242.

According to the research "Oscillations of heart rate and respiration synchronize during poetry recitation", there's a connection between poetry recitation and cardiorespiratory synchronization.<sup>488</sup> It is reasonable to argue here that this kind of research has a certain distance from the main scope of this analysis. However, as we will see, there are artists that base their work on the visual transformations of bodily functions, such as heart rate and breath,<sup>489</sup> so dedicating a few lines on the findings of this research can help us understand the basis of the artworks analyzed, not to mention the fact that it adds further explanation to the phenomenological experience of such works by the public.

The research is based on comparative measurements of the synchronization between low frequency breathing patterns and *respiratory sinus arrhythmia*<sup>490</sup> - the variability of heart rate during respiration- in three different cases: the recitation of hexameter verse, controlled breathing and spontaneous breathing. In order to see if there's a difference in how breath and heart rate are synchronized in these cases, the heart rate variability was studied in healthy subjects during and after poetry recitation –hexameter and alliterative verse. Also the heart rate during normal conversation was measured.

According to the results of the research, the recitation of hexameter modulated heart rate, during the recitation and for a few minutes after that. During recitation of hexameter there was a prominent cardiorespiratory synchronization, in other

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<sup>488</sup> Dirk Cysarz; Dietrich Von Bonin; Helmut Lackner; Peter Heusser; Maximilian Moser; Henrik Bettermann, "Oscillations of heart rate and respiration synchronize during poetry recitation", *American Journal of Physiology, AJP – Heart*, August 2004 vol. 287 no. 2, H579-H587 [online] <<http://ajpheart.physiology.org/content/287/2/H579.full>> (Accessed: August 15, 2011)

<sup>489</sup> See George Khut's *Cardiomorphologies*, analyzed in chapter 3 of this thesis, for example

<sup>490</sup> Respiratory sinus arrhythmia (RSA) is a naturally occurring variation in heart rate that occurs during a breathing cycle. Heart rate increases during inhalation and decreases during exhalation. For more information, see F. Yasuma; J. Hayano, "Respiratory sinus arrhythmia: why does the heartbeat synchronize with respiratory rhythm?", *Chest* 125, 2004, p.683–690.

words heart rate and respiration synchronized. However, the recitation of other kind of poetry or normal conversation did not have the same results on heart rate and breathing.

It appears that the hexameter verse imposes on the person that recites it a breathing rhythm of six breaths per minute, which is also happening during certain religious practices, such as the recitation of the rosary or the “OHM” mantra. Such recitations have substantial influence not only on heart rate, but on the oscillations of the cerebral blood flow and the fluctuations of blood pressure as well.<sup>491</sup>

Therefore, it appears that the effects of these practices on human thought also have a strong physiological basis.

To sum up, breath is linked to voice and speech in multiple ways: breath is the “first matter” of voice, the air that passes through the vocal cords, turns to voice and with the movements of the mouth it can become uttered words. On the other hand, speech itself can influence our breathing rhythm: according to medicine, reciting different types of texts can affect breathing and through breathing it can also alter heart rate and the blood flow in the body and the brain.

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<sup>491</sup> See chapter four, the section about breath and religious practices.

## 5.2 Breath in Theatre and Performance

*With the end of my breath,  
which is the beginning of yours*

André Breton<sup>492</sup>

### 5.2.1 Beckett's Voice: *Breath* and other works

Breath affects performance in multiple ways; through the bodily movements and voice. In order to see how performative elements are introduced in performance art, installations and videos, it is useful to start with the example of Samuel Beckett's work,<sup>493</sup> since it combines elements from both theatre and visual arts and for this matter it has had a profound impact on visual arts.<sup>494</sup>

Beckett's plays are rooted in very strong images, sometimes inspired by paintings or random images that he had seen in real life, and in their turn come to form an immense source of inspiration for visual arts. Beckett had a striking visual memory,<sup>495</sup> remembering not only the paintings he had seen in museums during his travels, but also the impact each one had. Very often he would position actors and

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<sup>492</sup> André Breton, *Nadja*, New York: Grove Press, 1960 (1928), p.115.

<sup>493</sup> Website of the thesis *Art-Breath* [online] <<http://art-breath.com/samuel-beckett>> (Accessed: February 6, 2013)

<sup>494</sup> See Ricard Salvat, "Aportacions del teatre de Samuel Beckett", *Quan el temps es fa espai, La professió de mirar*, Barcelona: Institut del Teatre, 1999, pp.594-599.

<sup>495</sup> Anne Atik, *How It Was: A Memoir of Samuel Beckett*, London: Faber & Faber, 2001, p.2.

actresses according to specific paintings, creating his own visual works using the actors' bodies as elements of a pictorial composition.<sup>496</sup>

A mouth speaking in the darkness, a woman rocking in her chair, garbage on the stage floor, are all strong visual images, that are imprinted onto the viewer's memory. However, the visual element never overrides the importance of the spoken words; this is greatly achieved not only by means of the content of the theatrical word, but also, by the way that it is delivered onstage: somehow detached from the image, through a fragmented body, a faintly lit presence or a recorded voice.

Sarah West observes that:

In theatre, voice, the body, and physical space are all closely linked: the natural origin of the voice is the body, and the body from which the voice issues usually occupies stage space. In many of Beckett's plays, however, this relationship between speech, physical presence, and three-dimensional space, is interfered with.<sup>497</sup>

By breaking the traditional bonds between voice, body and space Beckett maximizes the theatrical and performative dynamic of the play, whereas at the same time he turns 'Voice' into a character in its own right.<sup>498</sup> Voice seems to be a fundamental element in Beckett's plays: first breathed out by the writer himself, who "never wrote a word without saying it out loud first",<sup>499</sup> it is worked out in every detail: the selection of words, the rhythm of speech, the lineage of vowels and consonants, the speed and tone of utterance, and the necessary pauses for inhalation.

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<sup>496</sup> Sarah West, *Say It: The Performative Voice in the Dramatic Works of Samuel Beckett*, PhD dissertation, Barcelona: Universitat Pompeu Fabra, 2008, p.145.

<sup>497</sup> West 2008, p.194.

<sup>498</sup> West 2008, p.11.

<sup>499</sup> Dougald McMillan; Martha Fehsenfeld, *Beckett in the Theater*, London: John Calder Ltd., 1988, p.16.

Beckett's wish to control not just the meaning of speech, but every aspect of voice, suggests that he also controlled the actor's physical reactions to the text; since, as we've previously mentioned, the rhythm of speech has different cardio-respiratory effects, a careful planning of the play means that the actor's body is also under the influence of the text. As we will see, the rhythm of his texts was enough to arouse feelings of stress and agony to the actors.

Samuel Beckett steers away from representation in its simple forms; in his works the meta-textual elements are just as important as the text. "Beckett embraced the volatility of performance as the theatrical art":<sup>500</sup> as opposed to the usual presence of the actor on stage, where he is subordinated to the plot<sup>501</sup> and supports the action, in Beckett the body is like a "raw material", that undergoes metamorphoses. Therefore, the actor's body could be immobilized, hidden, fragmented, or even completely absent, as is the case with *Breath*. [Figure 63]

Beckett's *Breath* was staged for the first time in New York, and shortly afterwards in London, in 1969. The text is so short, that it was originally written on a postcard:

CURTAIN. 1. Faint light on stage littered with miscellaneous rubbish. Hold about five seconds. 2. Faint brief cry and immediately inspiration and slow increase of light together reaching maximum together in about ten seconds. Silence and hold for about five seconds. 3. Expiration and slow decrease of light together reaching minimum together (light as in 1) in about ten seconds and immediately cry as before. Silence and hold about five seconds.  
CURTAIN.<sup>502</sup>

<sup>500</sup> S.E. Gontarski, "Reinventing Beckett", *Modern Drama*, Volume 49, Number 4, Winter 2006, p.431.

<sup>501</sup> Pierre Chabert, "The Body in Beckett's Theatre", *Journal of Beckett Studies*, no.8, Autumn 1982, pp.23-28, [online] <http://www.english.fsu.edu/jobs/num08/Num8Chabert.htm> (Accessed: September 20, 2011)

<sup>502</sup> The writer gives some additional information: "RUBBISH: No verticals, all scattered and lying. CRY: Instant of recorded vagitus. Important that two cries be identical, switching on and off strictly synchronized light and breath. BREATH: Amplified recording. MAXIMUM LIGHT: Not bright. If 0 =

With just a simple act, a breath, Beckett manages to talk about the entire human life in the most concise manner.

Bringing theatrical minimalism to its limits, he used one single breath as the unique content of his theatrical work. No theatricality, pretext or heroism.

Beckett's play is short and comprehensive: It takes place on a stage littered with rubbish; it begins with a cry, followed by a deep inhalation and exhalation while at the same time a light fades in and out accordingly; a second cry is heard and the play ends.

Walking on the fine line of minimalism, Beckett manages something that seems impossible: action, plot, logos are all synopsized into breath, light, crying.

A drama with no act, a tragedy with no words.

But still, we are within the realm of the Aristotelian definition of tragedy, to the extent that "Breath" is an "imitation of an important and perfect act" and that it manages "by evoking the sympathy and the fear of the viewer to deliver him of such emotions".<sup>503</sup> The important and perfect act here is life which is presented complete: it comes with a cry, it evolves breath after breath and it ends with another cry. The emotions of the viewers are stirred by the allusion to the most primordial agonies of the human being: life and death.

The light fading in and out stresses the basic act, breathing. The scattered rubbish reminds us of the physicality of our existence, which is doomed to decadence and death, just like material things that have been used up and thrown away.

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dark and 10 = bright, light should move from about 3 to 6 and back". See Samuel Beckett, *Collected Shorter Plays*, New York: Grove Press, 1994, pp.209-212.

<sup>503</sup> See footnote n.431 of this thesis.

The subject of breath is present in other works by Beckett, not in such a direct form, but still in an eminent way.

A recurrent theme in his works is people “asphyxiating” in an abstract space, with no references to the external world.

In other works, the rhythm of the spoken word is so fast and overwhelming, that the actors empty their lungs completely and stay without air, before launching the next strand of words. On the other hand, this overwhelming rhythm does not let the spectator focus on the text, only on the actor’s expression and breathing –something that brings to mind Artaud’s *Theatre of Cruelty*, where all communication is based on expression.

*Not I* is an example that illustrates the above. The stage is all black, apart from a light that focuses on the mouth of the actress. Just like in *Breath*, the presence of the protagonist is manifested in a very subtle manner; the body is absorbed in darkness, as the mouth unleashes words at an immense speed and intensity, like a tirade. Oddly enough, the disappearance of the body does not abolish movement altogether; in the staged version the mouth appears like a flickering light, whereas in the filmed version the mouth acquires a life of its own: the lips, teeth and tongue move in a seemingly exaggerated manner, as the mouth inhales air and exhales words. [Figure 65]

However, these words are so rapidly expelled from the mouth that one does not understand the text as a continuity with a beginning, middle and end. On the contrary, the text goes in circles. Words and phrases are repeated again, like irregular breathing. The viewers perceive just one fraction of what is being said. But little by little, by means of repetition, they receive more and more fractions until they form a complete image of the play.



The question of repetition in Beckett brings forth Deleuze's analysis on repetition and difference.<sup>504</sup> With regard to language, Deleuze states that all that can be articulated has already been articulated; therefore, speech is repetition, but with a difference. Through the repetition of phrases, in a different way and context, new meanings can be produced. Beckett rejects the linear order of narration for a cyclical use of language, as Sarah Gendron stresses:

Unlike classical collections of "books" that exhibit a logical, linear order from one book to the next, these texts –with their "intersecting orbits", "flat ellipses" and extremities converging at either end behave like the "purgatorial spiral" that is now a familiar Beckettian image.<sup>505</sup>

Beckett's initial inspiration for the play was visual: the vision of an Irish woman, from his time of youth, that the writer could "hear" speaking in his mind;<sup>506</sup> this vision was combined with the image of the disembodied head in Caravaggio's *Decollation of St John the Baptist*<sup>507</sup> to create the Mouth. The presence of the old woman in the painting, as well as a woman he had seen in Morocco inspired the Listener –present in the theatrical version, later omitted for the film version of the play.

In his instructions to director Alan Schneider, Samuel Beckett describes the play as a "bucchal phenomenon" and specifies that "the text must go very fast, no pause except for breath".<sup>508</sup> Thus the solidity of her body resolves into a breathing entity, a

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<sup>504</sup> Steven Connor, *Samuel Beckett: Repetition, Theory, and Text*, Aurora, Colorado: The Davies Group, 2006, pp.1-15.

<sup>505</sup> Sarah Gendron, *Repetition, difference, and knowledge in the work of Samuel Beckett, Jacques Derrida and Gilles Deleuze*, New York: Peter Lang Publishing, 2008, pp.73-74.

<sup>506</sup> James Knowlson, *Damned to fame, The Life of Samuel Beckett*, London: Bloomsbury Publishing, 1997, p.590.

<sup>507</sup> West 2008, p.143

<sup>508</sup> Letter of Samuel Beckett to Alan Schneider, 25.07.72, in: Harmon, Maurice (ed.), *No Author Better Served: The Correspondence of Samuel Beckett and Alan Schneider*, Cambridge MA: Harvard University Press, 1988, p.273.

reminder of the words of D. H. Lawrence: “Not I, not I, but the wind that blows through me!”<sup>509</sup>

The motivation behind this particular staging was that the audience “should in a sense *share her* bewilderment”,<sup>510</sup> as the writer explained –something that he wished to accomplish by means of the utterance of speech. At the same time, this speed of speech had an impact not only on the audience, but also on the actress herself, who becomes physically and psychically impacted by the immense rhythm: the actresses that had to perform the piece talk about a sense of panic and extreme physical and psychological duress.<sup>511</sup> Considering the previously mentioned research on how text recitation can have an impact on breath and heart rhythm, the feeling of dysphoria could have been partly due to the hindered breathing and the struggle to inhale.

The same pattern is followed in the text of *Rockaby*, where the same recorded phrases are repeated over and over again, while an old woman rocks in her chair. From time to time she joins her voice with the recording, or stops and asks for “more”. The text in *Rockaby* is patterned like the lyrics of a hypnotic song, with carefully planned pauses and its short lines.

The fragmentation of the body and the rapid rhythm of speech are elements that are also present in *Play*, where the bodies of the actors are immersed in jars, leaving only their heads visible. When the projector lights their faces, they start speaking in a hasty manner –as if they were being interrogated. Likewise, in *Happy days* the protagonist is slowly being buried in sand, nothing standing out in the end but the head. [Figures 64, 66]

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<sup>509</sup> D. H. Lawrence. “Song of a Man Who has Come Through” in *The Works of D. H. Lawrence*, Hertfordshire: Wordsworth, p.195.

<sup>510</sup> Letter of Samuel Beckett to Alan Schneider, 16.10.72, in: Harmon 1988, *ibid.*, p. 283.

<sup>511</sup> Knowlson 1997, *ibid.*, p.592.

The fragmentation of the body and the creation of an abstract space create a more direct theatrical language. What's important in Becket is not *representation*, that is, a meaningful narration aided by the actor's movements and gestures, but theatrical reality in itself, the body as a presence and the text as a sum of scattered thoughts that make a direct impact on the viewer, without the aid of a plot and narration in the traditional sense.



Figure 63. Samuel Beckett, *Breath*, 1969. Photograph from Kenneth Tynan's Production, Eden Theatre, New York.

Figure 64. Samuel Beckett, *Play*, 1963. Photograph from the first English production, Old Vic, London (1964).

Figure 65. Samuel Beckett, *Not I*, 1972. Video still from "BBC2, The Lively Arts: Shades, Three Plays by Samuel Beckett", filmed with Billie Whitelaw (1975).

Figure 66. Samuel Beckett, *Happy days*, 1961. Photograph from Alan Schneider's production with Billie Whitelaw, Cherry Lane Theatre, New York.

### 5.2.2 Beckett offstage: Visual Transformations

The way that Beckett's plays are staged, with a "loop" of repeated phrases, bodies almost immobile or "fragmented", objects strictly organized, precise lighting, recorded voices, has some inner relevance to visual arts, especially installations, video art and performances. In his work, the image outweighs the word.<sup>512</sup> This is one of the reasons why he has had such major impact on visual artists, who either readapted his works or got inspired by certain themes that reoccur in it.

In order to keep up with the main interest of this chapter, the role of breath in performance, we will focus on artworks that are relevant to the subject of breath. Therefore, we will present artworks inspired by Beckett, where body and breath are particularly eminent and make a comparative analysis of adaptations of the play *Breath* by visual artists.

These artworks manifest how an idea can undergo endless transformations; thus it illustrates, to a certain extent, Bourriaud's observations about the role of "remix" in contemporary art, presented previously.<sup>513</sup> At the same time, they form an interesting picture about the reception of Beckett's play by the art world.<sup>514</sup>

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<sup>512</sup> Lois Oppenheim, *The painted Word: Samuel Beckett's dialogue with art*, Michigan: University of Michigan Press, 2000, p.58.

<sup>513</sup> See pp.119-121 of this thesis and Bourriaud 2002.

<sup>514</sup> More about the theory of reception, see p.112 of this thesis

### 5.2.2.1 Barbara Knezevic: Original and reproduction

Barbara Knezevic<sup>515</sup> created an installation based on the text of *Breath*. Knezevic's work seems more like a comment on the first staging of *Breath* in 1969, within Kenneth Tynan's production *Oh! Calcutta!*. The installation is also making a certain reference to the 1971 edition of *Breath and other Shorts*. [Figures 67, 68, 69]

The artist creates a book, bound in red, entitled *Beckett: An Exercise in Omission* (2010).<sup>516</sup> Within that book we find multiple photocopies of an account of Tynan's production of *Breath*. As each page is the copy of the previous one, the text is slowly degraded, until it becomes skewed and unreadable.<sup>517</sup>

Knezevic makes us ponder on the relationship between written text and spoken word. The written text somehow seems to deform the meaning of the original play, which was pronounced out aloud by the writer,<sup>518</sup> before being put down on paper. A play includes vocality, breathing, a live interaction and sensations that cannot be reproduced in written form.

Moreover, through the mechanical reproduction of the original text, we come to think about the relationship between original and copy, as explored by Walter Benjamin in his essay "The work of art in the age of mechanical reproduction".<sup>519</sup> The mechanical reproduction of the original text creates endless copies that become more and more unreadable as the "aura" of the original wears out. What we have is

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<sup>515</sup> Website of the thesis *Art-Breath* [online] <<http://art-breath.com/barbara-knezevic>> (Accessed: February 6, 2013)

<sup>516</sup> The work was presented in the art space The Joinery, Dublin, 2010.

<sup>517</sup> Derval Tubridy, "Beckett's Spectral Silence: *Breath* and the Sublime", *Limit(e) Beckett* 1, 2010, p.102-122, [online] <<http://www.limitebeckett.paris-sorbonne.fr/one/tubridy.html>> (Accessed: July 10, 2012)

<sup>518</sup> See p.285 of this thesis.

<sup>519</sup> See chapter three of this thesis.

an endless repetition, but a repetition with a difference, which alters the form of the original, creating new images and concepts.

At the same time, taking into account that Tynan's production, that included naked bodies among the trash onstage, infuriated Beckett, the work could be perceived as a comment on the work's transformations from staging to staging<sup>520</sup> and from artwork to artwork, that eventually transform the original play.

Therefore, Knezevic's work somehow acts as a foreword to the adaptations of *Breath* and other works by Beckett, that we shall see below, by Damien Hirst, Adriano and Fernando Guimãraes and Nikos Navridis.

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<sup>520</sup> Ciara Moloney, "Barbara Knezevic: Breath and other shorts, The Joinery, 2-11 June, 2010", *Paper Visual Art Journal*, 26 July 2010 [online] <<http://papervisualart.com/?p=2851>> (Accessed: June 10, 2011).

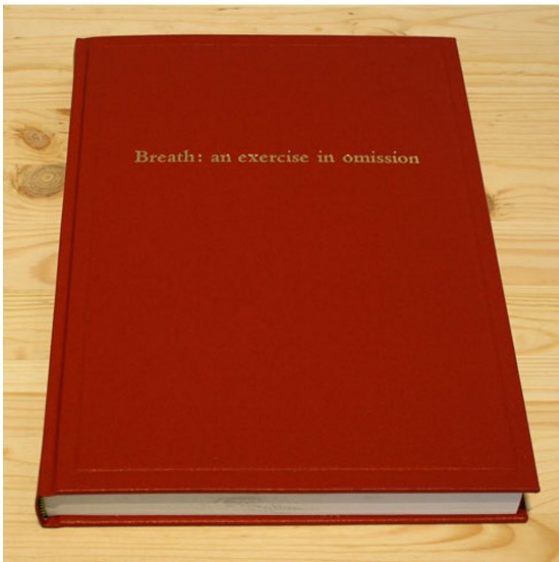


Figure 67. Barbara Knezevic, *Beckett, An exercise in omission*, 2010.

Figure 68. Barbara Knezevic, *Beckett, An exercise in omission*, 2010.

Figure 69. Barbara Knezevic, *Beckett, An exercise in omission*, 2010.



### 5.2.2.2 Damien Hirst: Memory and suffering

Damien Hirst's *Breath* (2000)<sup>521</sup> was filmed as part of the project *Beckett on Film*. His adaptation follows Beckett's guidelines, but also introduces elements that allude to Hirst's own volume of work. [Figure 70]

Hirst gives us a bird's eye view of a nowhere land; the camera is hovering above it and moving accordingly to the sound of the one and only breath. The cry is missing; all we have is the sound of a forced inhalation and exhalation that propel us onto the piles of medical litter, which fill the stage, evoking images of a suffering body.

Hirst's choice to use this kind of garbage connects the video to a significant part of his work that –just like the play– is centered upon life and death: In *Pharmacy* (1992)<sup>522</sup> he made an installation with medicine properly arranged; a few years later, in *Waste* (1994)<sup>523</sup> he filled large vitrines with medical waste –just like the stage setting of his version of *Breath*, where all medicine and pharmaceutical equipment has been used up and thrown away. [Figures 71, 72]

Among the trash we see an ashtray with a swastika, which reminds us of Hirst's *Crematorium* (1995),<sup>524</sup> where he presented four oversized ashtrays full of cigarette butts and packets. Cigarette butts are often used in cinematographic language as a measure of time; they're the remnants of some "dangerous" breaths: inhaling substances that are harmful for the body and at the same time are culturally associated with diverse notions like thinking, relaxing or partying. At the same time,

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<sup>521</sup> Website of the thesis *Art-Breath* [online] <<http://art-breath.com/damien-hirst>> (Accessed: February 6, 2013)

<sup>522</sup> The work was presented in 1992, in Cohen Gallery, New York and in 1996, in Tate Britain, London.

<sup>523</sup> The work was presented in 1996, in Städtisches Museum Leverkusen Schloß Morsbroich, Leverkusen, Alemania.

<sup>524</sup> The four ashtrays of the series "Crematorium" were: 'Horror at Home', 'Crematorium', 'Necropolis', and 'Party Time'. The series was exhibited in 1996 in Tate Modern, London.

the swastika is a reminder of the misfortunes of the past, and a remote reference to the much cited statement of Adorno, about the impossibility of writing poetry after Auschwitz.<sup>525</sup> [Figure 73]

In Hirst's formalin tanks the bisected animals exhibit the functions of the living organism, except that they are no longer living; here the interior of the body is vaguely portrayed by the sound of one of its functions -breath- that marks the passage from life to death.

Whereas Beckett's *Breath* is intentionally set in a stage with no reference to time and place, becoming thus universal, Hirst's *Breath* makes strong references to the present by using garbage that alludes to today's culture, such as a computer terminal and a keyboard. So, apart from a metaphor for the decadent body, for Hirst garbage is also seen as a symbol of culture –the archeological remains of our century.

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<sup>525</sup> Turbidy, p.17.



Figure 70. Damien Hirst, *Breath*, 2000. Video.

Figure 71. Damien Hirst, *Pharmacy*, 1992. Mixed media installation. Tate Modern Gallery, London.

Figure 72. Damien Hirst, *Waste*, 1994. Mixed media installation.

Figure 73. Damien Hirst, *Crematorium*, 1996. Mixed media installation.

### 5.2.2.3 Adriano and Fernando Guimarães: New stagings

The diverse work of Adriano and Fernando Guimarães<sup>526</sup> defies strict categorization; it combines theatrical elements with performance and installation. Their approach to Beckett's work is more like an open dialogue that has been ongoing for more than twelve years. Despite the fact that they don't follow the playwright's instructions closely, they still manage to stay true to the spirit of his works by creating "a hybrid art, sweeping Beckett along with them, moving theatre to where he always thought it belonged, among the plastic arts, and accomplishing yet another reinvention of Beckett".<sup>527</sup>

In *Breath +* (Respiração Mais) the action revolves around two tanks filled with water, where two actors submerge. Their submersions and resurfacings –and hence their breathing– are controlled by an arbitrary bell. When they get their heads out, they are not allowed to breathe freely, as they start reciting technical texts about breath – something that also recalls violent interrogation methods. Logos, the one thing that's missing from Beckett's text, is present here, except that it's not a poetic one, but the cold word of science – a forced testimony:

Breathing is an obligatory but involuntary and unconscious act, that one does not take notice. The breath has the following functions: one, to bring oxygen to the blood in order to nourish every cell in the body. The second is to expel carbon dioxide. Gas dioxide cannot stay in the body. If this happens, there will be poisoning (...)<sup>528</sup>

The text is never recited to the end, because every time the bell rings the performer has to submerge again. Little by little the performers become exhausted. The impulsive speech is an element that we often find in Beckett, as we saw in *Not I*.

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<sup>526</sup> Website of the thesis *Art-Breath* [online] <<http://art-breath.com/guimaraes>> (Accessed: February 6, 2013)

<sup>527</sup> Gontarski 2006, p.448.

<sup>528</sup> Eduardo Ferreira, "...respiração mais...", *Digerindo Arte*. Blog entry 2008, [online] <<http://digerindoarte.blogspot.com/2008/10/respirao-mais.html>> (Accessed: August 20, 2011)

The bell that rings is an allusion to the theatrical acts, that are sometimes defined by curtain call or bells; at the same time, it is a reminder of the repetitive bell sounds in *Act without words* and *Happy Days*. [Figure 74]

Fernando and Adriano Guimarães recognize that Beckett's play "is a visual work". What Adriano Guimarães sees in it is "life in 35 seconds, and what you have is rubbish, organic material, what the human being is made of".<sup>529</sup> So, rubbish is seen as a metaphor for the human body, which is finite and disposable, an idea also present in Hirst's focus on medicine as a reflection of the human organism.<sup>530</sup>

The two tanks have been interpreted as representations of the lungs and the actors who are controlled by the bell rather than their will could be seen as a metaphor for the brain, which has no control on the body, when it comes to its basic functions;<sup>531</sup> at the same time, they have an affinity with Hirst's tanks of dissected animals – except here we see actors that struggle for breath.

In *Breath* – (Respiração Menos) all action has been limited to a Plexiglas box, that can hardly accommodate the performer's body; as he stays in the box, the transparent walls of the box become opaque with the steam of his breath. As the box is shut, little by little the lack of oxygen alters the performance. Contrary to *Breath* +, where voice imposed itself on breathing and made it hard, here speech gives way to the struggle for breath and voice slowly wears out. [Figure 75]

The performative challenge of holding one's breath is repeated in other stagings of Beckett's work by the brothers Guimarães.

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<sup>529</sup> Juliana Monachesi, "Luz sem luz", *Canal Contemporâneo*, June 21, 2004 [online] <<http://www.canalcontemporaneo.art.br/quebra/archives/000133.html>> (Accessed: August 10, 2011)

<sup>530</sup> Juliana Monachesi, "Hiper>Beckettianas", *Canal Contemporâneo*, June 21, 2004 [online] <http://www.canalcontemporaneo.art.br/quebra/archives/000134.html> (Accessed: August 10, 2011)

<sup>531</sup> Ferreira 2008.

*Respiração Embolada*<sup>532</sup> begins with four actors putting their heads in water buckets. After a while, the curtain opens and reveals actors aligned onstage with their heads trapped in buckets. It seems like a choreography based on the movement of the actors, who submerge their heads in the water only to get up again and take a deep breath, accompanied by a happy music of percussion on the plastic containers, with repeated lyrics. As they submerge their heads in the water the actors test the limits of breath. When they take their heads off the buckets they recite texts about respiration. Their movements, as repetitive as breath, are a counterpart to Beckett's word, which is often repetitive, going in circles. [Figure 76]

Their staging of *Act without words II* also reworks the same ideas of repetition, breath and oppression: here the two rivaling characters are asphyxiating inside plastic bags. Each day they complete the very same routine of carrying each other. They seem like two fetuses that get out of the womb to take a few breaths, carry out a difficult task and get back inside.

In their adaptation of *Not I* Adriano and Fernando Guimarães multiplied the talking mouths, through the simultaneous projections in a row of ten televisions of different colour. The projections act like multiple echoes of the original words, uttered by the actress sitting on a high chair with her head immobilized, looking at the camera that records her moving mouth; somehow they manage to upstage her, as the light from the screens captures the viewers' attention. In all, the mouth becomes an entity of its own, breathing and talking, pausing and resuming speech, overwhelming the viewer through the multiple images. [Figure 77]

In the work by Adriano and Fernando Guimarães breath, voice and speech become competitive forces, revealing the tensions between them within the body; eventually, they find balance in silence. The artists believe that the dramatic form in

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<sup>532</sup> Embolada is a type of Brazilian music. The title of the work probably makes an allusion to the sound of percussion on the buckets, that gives a happy tone to the play.

Beckett can find more eloquence in silence than in word.<sup>533</sup> Silence gives the tempo in Beckett's work, like pauses in music, and helps Adriano and Fernando Guimarães orchestrate their visual adaptations like a symphony.<sup>534</sup>

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<sup>533</sup> Maria Eugênia De Menezes, "O eloquente silêncio de Samuel Beckett", *Estadão*, January 7, 2011, [online] <<http://www.estadao.com.br/noticias/artelazer,o-eloquente-silencio-de-samuel-beckett-662943,0.htm>> (Accessed: August 20, 2011)

<sup>534</sup> Also see Adrienne Samos, "Desmontando a Beckett", *Art & Co*, No.1, Invierno 2008, pp.53-55.



Figure 74. Adriano and Fernando Guimarães, *Respiração Mais*, 2004. Photograph from Teatro Funarte Plínio Marcos, Brasília (2011).

Figure 75. Adriano and Fernando Guimarães, *Respiração Menos*, 2004. Photograph from Teatro Funarte Plínio Marcos, Brasília (2011).

Figure 76. Adriano and Fernando Guimarães, *Respiração Embolada*, 2004. Photograph from Teatro Funarte Plínio Marcos, Brasília (2011).

Figure 77. Adriano and Fernando Guimarães, *Balanço*, 2011. Photograph from Teatro Funarte Plínio Marcos, Brasília.



#### 5.2.2.4 Nikos Navridis: The public as a protagonist of the performative act

Silence is also a major component in the works of Nikos Navridis.<sup>535</sup> We've already explored how he has managed to create a corpus of work at the limits of the immaterial, by means of the force of breath;<sup>536</sup> here we will see how he often starts with Beckett and transforms his theatrical plays into visual poetry.

Like Beckett, Navridis is also interested in revealing how people get trapped into roles. Whereas in Beckett people are trapped in repetitive actions or a confined space, in Navridis's work they get trapped within their own breaths.<sup>537</sup>

In his installation *First love, a song and the yogi* (2007)<sup>538</sup> Navridis captured the breaths from a reading of *First Love* by Samuel Beckett, of the singer Eleftheria Arvanitaki as she performs one of her songs and the breathing of a yoga master (yogi) as he purifies his body with his breath. Those breaths are underlined through the projection of colored lights. [Figure 78]

In a way, what Navridis does here echoes the game played by the narrator of *First Love* as he leaves Anna's house, when he stops walking in order to hear her cries:

As long as I kept walking I didn't hear them, because of the footsteps. But as soon as I halted I heard them again, a little fainter each time, admittedly, but what does it matter, faint or loud, cry is cry, all that matters is that it should cease.<sup>539</sup>

Similarly, Navridis extracts every movement, every sound that could cover up the sound of breathing, in order to perceive and help the audience perceive the breaths

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<sup>535</sup> Website of the thesis *Art-Breath* [online] <<http://art-breath.com/nikos-navridis>> (Accessed: February 6, 2013)

<sup>536</sup> See pp.209-220 of this thesis.

<sup>537</sup> Ibid.

<sup>538</sup> The work was presented in Tate Modern, London, during the Symposium "Take a Deep Breath" (November 2007).

<sup>539</sup> Samuel Beckett, *First Love and Other Shorts*, New York: Grove Press, 1974, p.35.

that lie beneath every text, song and body movement, that are usually covered up by the sound of voice and the surrounding noises.

The visitors entering the East Room at Tate Modern, where the work was installed, encountered a mystical space, a timeless reality where the only time measurement was the rhythm of breathing. They could participate in the artwork by playing with their shadows on the walls, socializing, walking across the space, or just standing silently dazzled by the lights; after all, they were a part of the installation to the extent that their breaths –subtle but present nevertheless- became incorporated into the work.

By capturing the performer's breath Nikos Navridis tries to capture what is invisible in scenic arts, yet remains the most basic thing that shapes performance. If Beckett focuses on the talking mouth and the power of word, Navridis projects the breathing mouth and the force of breath.

The text of *Rockaby*, was the prime inspiration for *Tomorrow will be a wonderful day II*, an installation at the building of the Old Parliament in Athens (2010). The rocking chair is transformed into a giant light projector that runs the building and its surroundings like a surveillance projector in a prison. The inspecting light projects a loop video of a man holding his breath until it becomes impossible to hold. Then he exhales and takes another deep breath. The repetitive words of Beckett's text are thus transformed into a repetitive loop. The woman's claim for "more" is transformed into the actor's forced breath. As the light of the projector reveals details of the Old Parliament of Greece and the surrounding streets, the city becomes a gigantic prison that holds all its inhabitants inside, trapped into a meaningless oscillation between high and low, like Beckett's woman. It is a strong comment on the ever-dehumanized city centres of the decadent metropolises and

the current sociopolitical situation, that brings the civilians to the limits of asphyxiation. [Figure 79]

Towards a more poetic route, his “staging” of *Breath* (2005)<sup>540</sup> for the Venice Biennale verges on the immaterial. The installation space is articulated by video projections on the floor and haunted by intense breathing sounds. The video projections of garbage run through the stage, like fleeting colors that temporarily stain every visitor that walks upon it. The visitors’ bodies thus become a living projection screen, distorting the images of the projection but adding a strong corporeal element to it. [Figure 80]

When facing the challenge to make an installation based on Beckett’s play, Navridis came up with a series of questions:

How to transfer a theatrical language in a visual space? How to transfer one language to another context? When you have to make this breath last for 6 months, to present it at the Venice Biennale, the context changes. Therefore the text works in a very different way – more so in the case of *Breath*, where there is no text.<sup>541</sup>

In order to “translate” Beckett in a visual installation successfully, Navridis took into consideration the space and the interaction of the work with the public. In contrast to theatre and performance, where the audience passively observes what is going on onstage, the people who walk on Navridis’ installation have the power to become the actors in a short theatrical play that has no text or plot. So, they are left with the freedom to improvise on their words or actions, as they do in real life. But, as in real

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<sup>540</sup> Expositions:

2005, "Always a little further", 51st Venice Biennial, Arsenale, Venice

2006, "18:Beckett", Blackwood Gallery, University of Toronto, Canada

2007, Walter Philips Gallery, The Banff Center, Banff, Canada

2006, "Venice Istanbul", Istanbul Modern, Istanbul

<sup>541</sup> Unpublished Interview with Nikos Navridis. August 2010.

life, they have to “pay a price” for their freedom, and that price is the garbage that they have to carry on their shoulders:

The work was installed in the last room and you had to cross it in order to get out. I wanted to make the viewers participate actively, to suffer somehow. I wanted them to get inside these breaths and to carry on their shoulders what was above them, all Beckett’s garbage, like a price they’d have to pay, like a ticket. On the other hand, it projects the concept of time - one of Beckett’s obsessions - as a constant swing, which leads you to death. If we counted our life by breaths, we would have to cross it again; to cross the room and all the garbage that comes over you like a river of past breaths.<sup>542</sup>

The idea of garbage is significant for the artist; he says that his work consists in collecting the exhalations of people, the invisible ‘garbage’ that their body leaves behind all the time. In Navridis’ work the air our body rejects becomes a prime matter for creation. Whereas Hirst used garbage as a symbol of culture and the brothers Guimarães saw it as a metaphor for the human body that is disposable, in Navridis the exhaled air equals experience, memory and time. The artist is a ‘collector’ of exhalations and these elements that they carry along.

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<sup>542</sup> Ibid.



Figure 78. Nikos Navridis, *First love, a song and the yogi*, 2007. Installation, East Room, Tate Modern Gallery.

Figure 79. Nikos Navridis, *Tomorrow will be a wonderful day II*, 2010. Installation, Old Parliament, Athens.

Figure 80. Nikos Navridis, *Breath*, 2005. Installation, Arsenale, LI Bienale de Venecia.

### 5.2.3 Bruce Nauman: Repetitive actions, mumbled whispers

Bruce Nauman's work<sup>543</sup> brings to life uncanny visions of fragmentation and stillness, repetition and obsession. The de-contextualization of simple actions through a loop of words and movements introduces an irregular oscillation from the intimate to the inhuman, bringing his work in line with primitive rituals and postmodern theatre.

Bruce Nauman is one of the numerous artists who are inspired by Beckett and produce artworks based on voice, breath and repetition. The link between Beckett and Nauman has been extensively commented, both in exhibitions<sup>544</sup> and art research. Without making a direct translation of Beckett's plays into visual art, Naumann uses elements from the atmosphere and the essence of the Beckettian legacy, in order to construct his own visual and performative works.

Despite the fact that the elements composing Nauman's works, visions of the human body and soft whispers, are not particularly threatening *per se*, the intentional vagueness of the images and sounds arouse a feeling of unease and distress. In his videos we often see a fragment of a body, repeating the same gestures and sounds; space is almost inexistent: the camera is zoomed to a detail, leaving no sight of the background space; language evolves into new meanings, as the repeated words are fragmented in syllables which form new words –like for example, the repetition of the word “ok” that ends up sounding like “chaos”.<sup>545</sup>

This could be a lesson learnt from Samuel Beckett; commenting on the subject of repetition in Beckett's plays, Deleuze notes that the repetition of gestures leads to a

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<sup>543</sup> Websites of the thesis *Art-Breath* [online] <<http://art-breath.com/bruce-nauman>> (Accessed: February 6, 2013)

<sup>544</sup> See for example, the exhibitions *Samuel Beckett / Bruce Nauman* in Kunsthalle, Vienna (2000) and *I not I* in the Royal Hibernian Academy, Dublin (2006).

<sup>545</sup> See Bruce Nauman, *Ok ok ok – Raw Material* (1990). Video Installation.

form of automation and lack of meaning; similarly, the repetition of a sound or a proposal leads to a dissolution of meaning.<sup>546</sup> This observation could be also used in regard to Nauman, so as to explain how the feeling of *unheimlich* culminates within his work.

Geraldine Sfez highlights the effects of repetition in the perception of time:

Repetition, as it dissolves our relation to time, implies something like a suspension of time, a blocked memory, a waiting in vain.<sup>547</sup>

Indeed, repetition blocks the linear evolution of things in time, by creating a loop of actions or words, which does not lead to a succession of something else. But when talking about “dissolution of meaning”, it should not be considered that it leads to a complete absence of meaning. It is suggested that an action or word is stripped of its usual meaning and becomes something different; Nauman’s work illustrates how repetition can form new meanings and new ways of perceiving reality.

In *Slow Angle Walk*, also known as *Beckett Walk* (1968), Nauman tries to reproduce the way Beckett’s *Watt* and *Molloy* walk,<sup>548</sup> in an unbalanced manner, slowly, lifting the legs in the air. Filmed with the camera on its side, the image gives the impression that the artist is walking on the wall –reminding us of Beckett’s characters, who seem to be floating in darkness in the dimly lit stage. [Figure 81]

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<sup>546</sup> Gilles Deleuze, “L’Épuisé”, in S. Beckett, *Quad et autres pièces pour la télévision*, Paris: Éditions de Minuit, 1992 ; Geraldine Sfez, “ Bruce Nauman, Samuel Beckett : Le Corps mis à l’épreuve de la répétition”, *Limit(e) Beckett* n° 0, printemps 2010, p. 82-103.

<sup>547</sup> Sfez 2010, *ibid.*

<sup>548</sup> Samuel Beckett, *Watt*, New York: Grove Press, 2009 (1953), p.23: “Watt’s way of advancing due east, for example, was to turn his bust as far as possible towards the north and at the same time to fling out his right leg as far as possible towards the south, and then to turn his bust as far as possible towards the south and at the same time to fling out his left leg as far as possible towards the north, and then again to turn his bust as far as possible towards the north and to fling out his right leg as far as possible towards the south”.

What is more, repeating an everyday movement in an exaggerating manner and on a predetermined path, marked by the line on the floor, has a certain ritualistic aspect. As we have previously commented,<sup>549</sup> when repeating an action or a phrase over and over again, the action loses its initial meaning and turns into something different, like a ritual or a mantra.

The connection of Bruce Nauman to Samuel Beckett sometimes goes beyond simple inspiration; at times, it could be described as an inner connection. Interestingly enough, his *Lip Sync* (1969) video, showing a mouth upside down repeating the words *lip sync*, preceded Beckett's *Not I* by three years. The man in Nauman's video repeats the words in a minimum volume of voice, in a whistling breath that reveals a somehow obsessive mood. [Figure 82]

The whispering tone makes the words seem unwordly, bringing to mind Steven Connor's observation that "the whisper is not the complement of speech [...] it is its fetch, phantom or facsimile".<sup>550</sup> Therefore, one could claim that the whisper is alienated from *logos*; it has a strongly corporeal aspect, as it projects the path of breath from the lungs to the vocal cords and the mouth cavity.

Indeed, as the man speaks, the movements of his lips, chin and tongue mesmerize the viewer.

In Nauman's works we often see the *leitmotiv* of the whisper; in his video installations the sound of only one video could predominate over the rest of the projections, that retrocede in silence, like in *Clown Torture* (1987). Sometimes the visual aspect is missing altogether, as in the sound installation in Tate's Turbine Hall (2004).

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<sup>549</sup> See chapters four and five of this thesis.

<sup>550</sup> Connor 2007.



The disembodied voice is an element that we also see in Samuel Beckett, in plays where the voice comes out from a mechanical device or is lowered down to a light whisper, as in *Ghost Trio*.<sup>551</sup>

But apart from creating a strange effect –corporeal and ethereal at a time–whispering can make the public more alert than clearly articulated speech, because they need to pay attention in order to understand what is being said; Nauman, just like Beckett, puts the senses of the audience to the test, challenging them to stay alert, so as to understand the action.

Still, there is a lot that is missed within this atmosphere of vagueness and uncertainty. Robert C. Morgan observes that “We are lost in a quandary, left with the urge to decipher something that has no context”.<sup>552</sup>

However, the lack of “context” releases different forces within his body of work. The repetition of the same words can actually help the person pronouncing them to regulate their breath and heart rate, clear their thoughts and change their state of mind.

The videos *Elke Allowing the Floor to Rise Up over Her, Face Up* (1973) and *Tony Sinking into the Floor, Face Up and Face Down* (1973)<sup>553</sup> show how stillness, repetitiveness and meditation can bring the performer to an extreme mental and physical state. For both works, the performers follow Nauman’s instructions to lie motionless on the floor; from time to time, they bend their knees and change position, sometimes lying on their stomach and sometimes on their backs. [Figures 83, 84]

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<sup>551</sup> Sfez 2010, p.82-103.

<sup>552</sup> Robert C. Morgan, *Bruce Nauman*, Baltimore, Maryland: The Johns University Press, 2002, p.7.

<sup>553</sup> The two works are at the Georges Pompidou Collection, in Paris.

Nauman instructed Elke to think that the molecules of her body were slowly mixing with the molecules of the floor and that she would become part of it. Although she had practiced the performance the day before, Nauman's instructions had a powerful effect on her: she became frightened that she was filling up with the molecules of the floor and that she couldn't breathe. After forty minutes she panicked and had to stop.

Similarly, in the second tape, Tony started to choke after sixty minutes; he felt that he could not breathe and that he was sinking through the floor too fast and wouldn't be able to get out.<sup>554</sup> It is interesting to see that the two performers had the exact same reaction to the performance, an extreme attack of stress that affected their breathing. This shows how focusing on one thought –negative, in this case- can have corporeal effect and thus become potentially dangerous.

Moreover, these two works manifest that some performances go beyond what the viewer sees; they are about what the performer is thinking in the moment of the action. Through the simplest instructions and suggestions Nauman imposes an extreme action on the performers –similar to the feeling of anguish experienced by some of the actors that performed Beckett's plays.<sup>555</sup> In addition, as we will also see in the case of Abramović, stillness can have a much stronger impact on the two parties interacting –artist and viewers- than intense action.

In the work of Bruce Nauman, stillness becomes a torture greater than physical violence, whispering turns into a hardly constrained menace and repetition evolves into an impossible task.

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<sup>554</sup> Bruce Nauman; Janet Kraynak, *Please pay attention please: Bruce Nauman's words, Writings and Interviews*, Cambridge, Massachusetts: MIT Press, 2005, p.177.

<sup>555</sup> Knowlson 1997, p.592.

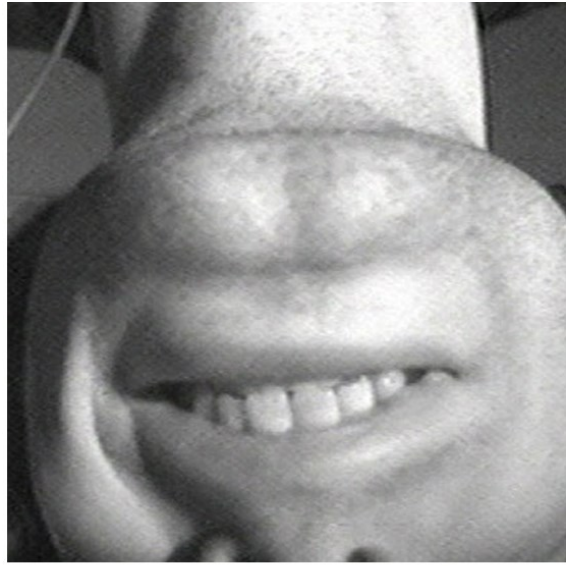


Figure 81. Bruce Nauman, *Slow Angled Walk (Beckett Walk)*, 1968. Black and white video.

Figure 82. Bruce Nauman, *Lip Sync*, 1969. Video.

Figure 83. Bruce Nauman, *Elke Allowing the Floor to Rise Up over Her, Face Up*, 1973. Video.

Figure 84. Bruce Nauman, *Tony Sinking into the Floor, Face Up and Face Down*, 1973. Video.

### 5.2.4 Vito Acconci: Repetitive breaths, dark whispers

During the past five decades Vito Acconci<sup>556</sup> has experimented with different types of art and style, starting from poetry and moving forward with performance, video, architecture and landscape design. The diversity of his interests and capabilities is manifested in his works of the late 1960s and early 1970s, where word and action are balancing in repetitive videos and performances.

Acconci's use of breath as a means of expression is inscribed in his particular interest in everyday actions. Following the tradition that grew particularly strong during the 1960s –under the influence of pop art- Acconci focuses on the mundane, trying to extract and project an aesthetic value that is hidden in it.

In the sound piece *Running Tape* (1969) Acconci runs through New York's Central park, counting every single step and recording his voice as he runs. His heavy breathing illustrates his effort. [Figure 85]

Cassette recorder on my belt, microphone in my hand. Running, and counting each step as a I run. (When I have to -- when my words get jumbled, when I'm out of breath - I stop and breathe into the microphone, catching my breath, until I can continue my run, continue my count.)<sup>557</sup>

As he counts and records every leap, his action acquires a different significance. Running is an everyday act, but counting each step gives it another meaning; it stresses the element of repetition in everyday life and reflects the problematic brought forward by Deleuze, in regard to repetition, everyday life and art:

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<sup>556</sup> Website of the thesis *Art-Breath* [online] <<http://art-breath.com/vito-acconci>> (Accessed: February 6, 2013)

<sup>557</sup> Electronic Arts Intermix, [online] <<http://www.eai.org/title.htm?id=1481>> (Accessed September 6, 2011)

...there is no other aesthetic problem than that of the insertion of art into everyday life. The more our daily life appears standardised, stereotyped and subject to an accelerated reproduction of objects of consumption, the more art must be injected into it in order to extract from it that little difference which plays simultaneously between other levels of repetition [...]<sup>558</sup>

By extracting everyday actions, like running or breathing, from their context Acconci manages to give them an aesthetic value. Taking this principle to a more abstract level, he created the video *Breath In (To) / Out (Of)* (1971), where little else is visible but the artist's stomach; as he breathes in and out, his stomach moves in and out of the frame. Breath is projected like a separate entity that gives life to the image. [Figure 86]

In the video *Flour/Breath Piece* (1970) breath takes a more ritualistic character. The artist covers himself up in flour and tries to blow it off his skin. Breathing becomes a form of cleansing the skin –evoking images from cultural practices we explained earlier, where blowing onto someone's body is linked to driving the “evil” away.<sup>559</sup> [Figure 87]

In most of Acconci's work during the 1970s voice and language have a particularly strong presence. The artist often tries to implicate the viewers in the performance through his words; they somehow become accomplices to his psychotic ramblings – as in *Claim Excerpts* (1971), where he sat in a basement, blindfolded and armed with a metal pipe, inducing himself into a state of paranoia by mumbling continuous threats towards the viewers- or his sexual fantasies –as in his notorious *Seedbed* (1972), where he lay hidden underneath the gallery floor, masturbating and whispering his fantasies with the people who stepped on the floor.

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<sup>558</sup> Gilles Deleuze, *Difference and Repetition*, London: Continuum International Publishing Group, 2004 (1968), p.365.

<sup>559</sup> See chapter four of this thesis.

The video *Open Book* (1974) somehow oscillates between these two extremes – threat and desire. The artist’s lower face fills the screen, leaving nothing left in sight but his moving mouth. Acconci tries to talk to the viewer without closing his mouth, only using the vocal cords with slight movements of the mouth, instead of using the teeth and the tongue. By cancelling one of the basic steps in the formulation of speech, the artist projects the origin of voice: his effort results in a particularly airy way of speaking, a whisper with strikingly audible breathing. [Figure 88]

The phrases he pronounces are somehow mysterious and disturbing; the artist invites the viewer to do as they please with this mouth:

I'm not closed, I'm open. Come in... You can do anything with me. Come in. I won't stop you. I can't close you off. I won't close you in, I won't trap you. It's not a trap.

The artist asks to be dominated; however, there is an underlying threat in the way the mouth speaks, as if it were seeking to trap the viewers. Just to reassure them, when it shuts at some point, it begs for forgiveness:

That was a mistake. I won't close. I won't close you off. I won't close you in. I'm open to everything.

This passiveness and complete surrender to the viewer is in contrast to the works produced by other male artists of body and performance art in the 1970s, who emphasized their active role in the performance. Still, Acconci does not give up his active role altogether, since he is *asking* to be dominated, instead of waiting for the viewer to take initiative; moreover, he places a barrier of space and time between him and the fulfillment of the viewers’ wishes, by creating a recorded action –

whereas female artists like Marina Abramović, not only faced the viewers, but also took responsibility for their actions.<sup>560</sup>

Just like in Beckett's *Not I*, Acconci's Mouth is an entity of its own. However, in Beckett, the Mouth persistently denies the first person, when the auditor seems to suggest that the story *She* narrates is her own: "what?... who?... no!... she!"<sup>561</sup> On the contrary, Acconci not only talks in the first person, but also uses the first person to talk as a Mouth; the artist becomes a talking Mouth.

In Acconci's work voice and breath become entities in their own right; breath can give motion to the body, purify it or transform into a profane whisper. Language and narration in Acconci are subject to a very strong corporeality, that is either linked to physical activity or to sexual drive.

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<sup>560</sup> In her performance *Rhythm 0* (1974) Abramović introduced the public with a note which read "There are 72 objects on the table that one can use on me as desired. I am the object. During this period I take full responsibility." See Richards 2010, *ibid.*, pp.87-88.

<sup>561</sup> Samuel Beckett, *Not I*, London: Faber & Faber, 1973. The phrase is repeated several times within the text.

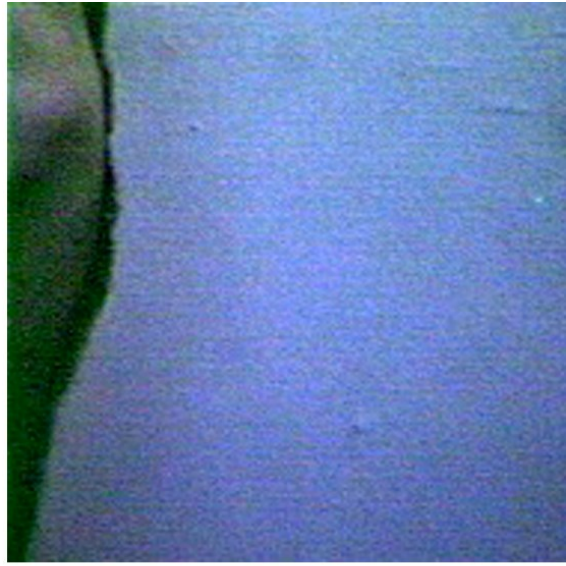


Figure 85. Vito Acconci, *Running Tape*, 1969. Performance recorded in audio.

Figure 86. Vito Acconci, *Breath In (To) / Out (Of)*, 1971. Video.

Figure 87. Vito Acconci, *Flour/Breath Piece*, 1970. Film.

Figure 88. Vito Acconci, *Open Book*, 1974. Video.



### 5.2.5 VALIE EXPORT: Visualizing the formation of voice

In a similar manner to Acconci's visual language, voice and breath come forth as projections of the body in the creations of VALIE EXPORT.<sup>562</sup>

The relation of word to its corresponding meaning, of body language to verbal language is a recurring theme in VALIE EXPORT's work.<sup>563</sup> In her performance *Breath Text: Love Poem* (1970, 1973) she writes a text onto a glass by breathing compulsively on it. As the glass's opacity clears, her words disappear after a while; like an echo of Sappho's spoken words, EXPORT's written words are also "made of air".<sup>564</sup> Even though they're written, the artist's words come to life by force of breath, just like voiced language, and fly away as quickly as oral speech, as if they were "winged words"<sup>565</sup>. [Figure 89]

EXPORT had once said that her body and glass are "the same material, but in another context; both [are] glass".<sup>566</sup> So the glass that brings her words to life along with her breath could be considered as an extension of the inside of her body, that gives birth to her words.

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<sup>562</sup> Website of the thesis *Art-Breath* [online] <<http://art-breath.com/valie-export>> (Accessed: February 6, 2013)

<sup>563</sup> VALIE EXPORT's research in the field of language can be seen in performances such as "Body Text" (1970) and "Visual Text: Finger Poem" (1968-1973), "Poems" (1968-1980) as well as her recent installations "The power of speech" (2002) and "The voice as performance, act and the body, ...turbulences of breath score the banks of my vocal cord" (2007).

<sup>564</sup> The artist's name is always spelled in capital letters. For more information on VALIE EXPORT see artist's website: <http://www.valieexport.org/>

<sup>565</sup> See p.292 of the thesis.

<sup>566</sup> Kristine Stiles, "Corpora Vilia: VALIE EXPORT's Body", in VALIE EXPORT, Robert Fleck, *Valie Export's Visual Syntagmatics*, catálogo de exposición, Philadelphia: Goldie Paley Gallery, 2000, pp. 23-24. VALIE EXPORT says about her "Eros/ion" performance of 1971, where she rolled naked onto broken glass, "The action was "really silent, calm," and the audience could hear "only my breath, and the rolling on the plate, and, with this, I meant: It [is the] same material, but in another context, both [are] glass".

VALIE EXPORT explores the origin of speech in a series of works; *Der Schrei* (The Scream, 1994) is a complex installation focused on the subject of language and speech. It includes recordings of text chronicles written by Tibetan Buddhist monks, projected on a metal pool containing black waste oil, sound frequencies visualizations of glossolalic speech and a video of the artist's glottis taken with a laryngoscope as she speaks. The diverse visual means do not illustrate what is being said in the audio recordings, but they somehow try to capture the genesis of *logos*. [Figure 91]

The same idea of the projection of the artist's glottis is repeated in the performance *The voice as performance, act and body* (2007), the video installation *Glottis* (2007) and the video *I turn over the pictures of my voice in my head* (2008).<sup>567</sup> The inside of the artist's larynx vibrates as breath comes out, after being modulated in the vocal cords that close and open, moistened by saliva. Oddly enough, as she tries to make us focus on speech, EXPORT takes our attention away from what is actually being said; the image from the interior of the body is too compelling, fascinating and repellant at the same time. Thus this series of works illustrate the origin of voice and the theories analyzed above about the connection of breath, to voice and language in a most vivid way. [Figures 90, 92]

Sharing these theories, the artist describes the vocal cords as the organ where breath meets voice:

The glottis, the vocals, are symbols of the voice  
they divide two phenomena  
the voice inside, the breath  
and the voice outside

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<sup>567</sup> The three works were presented in the LII Biennale di Venezia, Esposizione Internazionale d'Arte / 52nd International Art Exhibition. *Pensa con i sensi - sensi con la mente. L'arte al presente / Think with the Senses - Feel with the Mind. Art in the Present Tense*, Arsenale, Venezia 2007.

the phenomenon of vocalization  
of speech formation.

The echo of the hidden vocals  
speaks through the visible lips of the mouth.

Turbulences of breath  
formulate the expulsion of air  
that opens the glottis  
tears it apart  
bursts through it

Turbulences that cut into the vocal s  
that score the banks of the vocal orifice<sup>568</sup>

Just like Barthes' view of the voice, for EXPORT the voice resounds the materiality of the human body, it is a sign of identity and sensuality, coming from breath: "The breath of life is its source".<sup>569</sup>

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<sup>568</sup> VALIE EXPORT "Glottis", 2007 [online]

<[http://www.valieexport.at/en/werke/werke/?tx\\_ttnews\[tt\\_news\]=2237&tx\\_ttnews\[backPid\]=51&cHash=c4887f3409](http://www.valieexport.at/en/werke/werke/?tx_ttnews[tt_news]=2237&tx_ttnews[backPid]=51&cHash=c4887f3409)> (Accessed: August 5, 2011).

<sup>569</sup> VALIE EXPORT, "The voice as performance, act and body", 2007 [online]

<[http://www.valieexport.at/en/werke/werke/?tx\\_ttnews\[tt\\_news\]=2018&tx\\_ttnews\[backPid\]=4&cHash=5a8ab1f1c4](http://www.valieexport.at/en/werke/werke/?tx_ttnews[tt_news]=2018&tx_ttnews[backPid]=4&cHash=5a8ab1f1c4)> (Accessed: August 5, 2011).

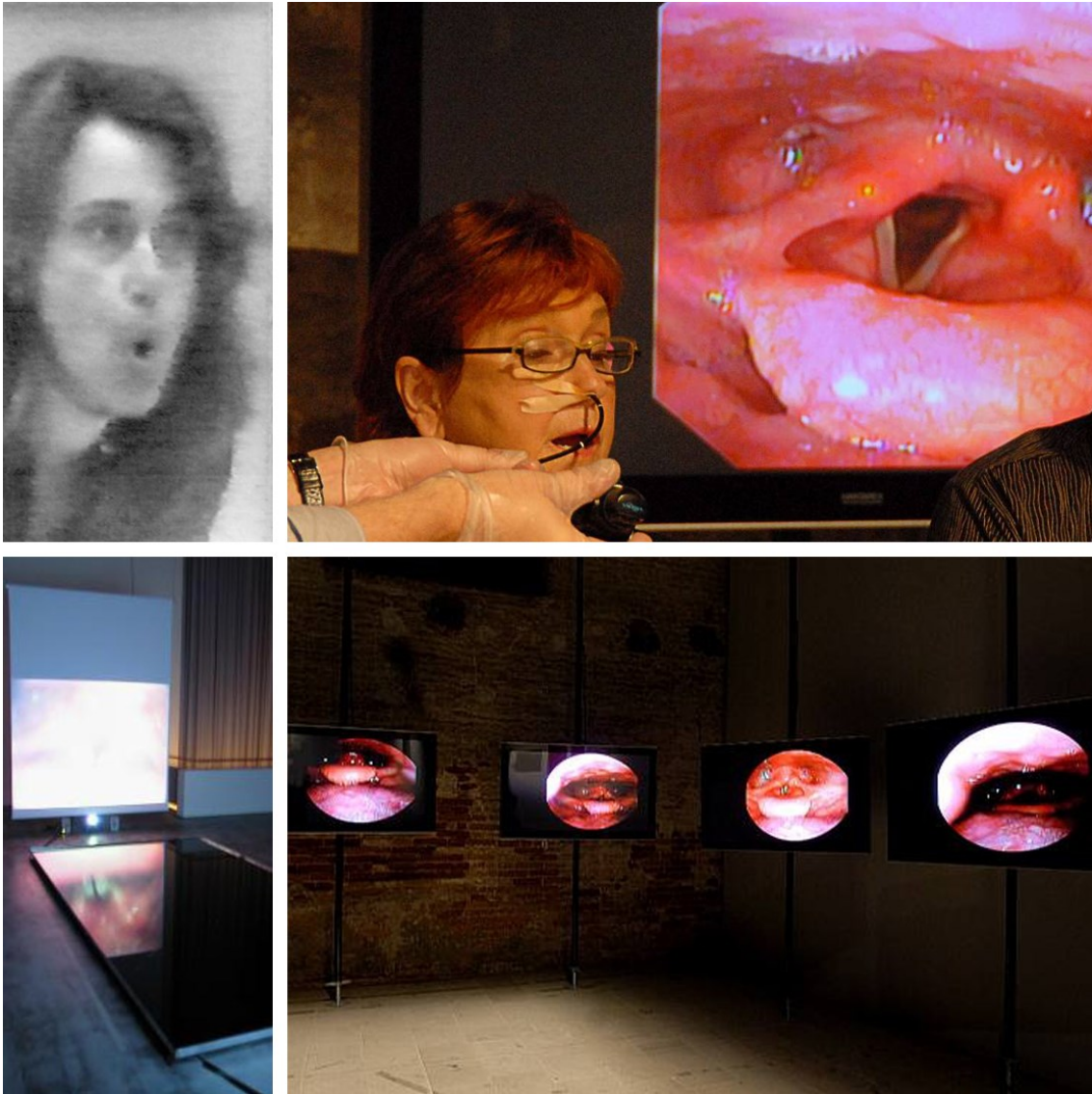


Figure 89. VALIE EXPORT, *Breath Text: Love Poem*, 1970, 1973. Performance.

Figure 90. VALIE EXPORT, *The voice as performance, act and body*, 2007. Performance.

Figure 91. VALIE EXPORT, *Der Schrei*, 1994. Installation.

Figure 92. VALIE EXPORT, *Glottis*, 2007. Video installation, LII Biennale di Venezia. Video installation.

### 5.2.6 Marina Abramović: The real and the extreme as forms of exploring the body

From Eastern philosophy to western culture, from primitive rituals to stage performance and from agonizing actions to silent and still contemplation, Marina Abramović<sup>570</sup> has explored every inch of the performative act and has embodied it in her art.<sup>571</sup> Her art spans for more than four decades, during which she has produced an impressive body of work, where voice, breath and body have turned into elements of expression.

Since her first performances the ritualistic element has been very strong. In *Rhythm 5* she created a star from wood chips that she set on fire; first she cut her hair and nails and threw them in the fire and then she lay inside the star, with fire burning around her; a few minutes later, she passed out from lack of oxygen and had to be rescued. The process of the performance brings to memory rituals of cleansing the spirit through fire and smoke<sup>572</sup>.

The idea of purification is prominent in her *Freeing the Body* (1976) performances, three different acts that sought to empty the memory, the body and the voice. In *Freeing the Memory* she spoke out words aloud, until, after an hour and a half, her mind went completely blank; in *Freeing the Body* she danced for eight hours to the rhythm of an African drum, until collapsing; in *Freeing the voice*<sup>573</sup> she screamed until –three hours later– she lost her voice completely. [Figures 93, 94]

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<sup>570</sup> Website of the thesis *Art-Breath* [online] <<http://art-breath.com/marina-abramovic>> (Accessed: February 6, 2013)

<sup>571</sup> For more details about Abramović's work see VVAA. *Marina Abramović, Objects, Performance, Video, Sound*, Oxford/Stuttgart: Museum of Modern Art / Hansjörg Mayer, 1995 (exhibition catalogue) and VVAA. *Marina Abramović, Artist Body, Performances 1969-1998*, Milano: Charta, 1998 (exhibition catalogue).

<sup>572</sup> See chapter four of this thesis.

<sup>573</sup> The performance took place in Budapest.

In *Freeing the voice* we see the artist lying on her back, with her head hanging low, and her mouth wide open. She takes deep but abrupt breaths and then lets them out through screams. Her screams start from monotonous, repetitive voices, like a mantra, and escalate to cries of agony, desperation. Her body stretches throughout the screams and for a moment, when each scream dies and before she takes the next breath, it deflates completely with a slight spasm. It is an agonizing process, that “frees” not just her voice, but also her mind and her body. Because it is not just the voice that is under strain, but the entire body that struggles to produce it, the vocal cords that are being damaged and her mind that is emptied completely, as her thoughts get covered by her screams. As her voice drains her body and her mind, it becomes the real sound of her body, without any thought or intention behind it. In the end, the voice becomes the artist.

What Abramović succeeds by these exhaustive performances is to empty her body out of any form of energy –mental or bodily, until there’s nothing else but void.

But for Abramović this is a positive emptiness:

The Tibetans have a nice word for emptiness: when they speak of “full emptiness” There is a void but it’s a positive void.<sup>574</sup>

Emptying the body and the mind is a concept that is often repeated in Abramović’s work, but as time goes by, it acquires a different character: Whereas in the early 1970s she tried to reach this void through extreme actions, with self-inflicted pain, humiliation and trauma, little by little her performances take a more esoteric turn, dominated by repetitiveness, silence and meditation. The catalyst for this change was meeting fellow artist Ulay in 1975 and embarking on a long term relationship and collaboration with him.

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<sup>574</sup> Bernard Goy, “Interview with Marina Abramović”, *Journal of Contemporary Art*, June 1990.. [online] <http://www.jca-online.com/Abramovic.html> (Accessed: September 6, 2011)

During their first years, they performed together a work based on *Freeing the voice*, facing each other and screaming. The dynamic, though, in *AAA-AAA* (1978)<sup>575</sup> is very different. First they start in a calm manner, as if they were saying out loud a prayer, with synchronized voices and breaths; however, as they start to increase the intensity of their screams, the two performers express a competitive mood, trying to outdo each other in tone and persistence. They open their mouths wide open, like two animals that try to scare each other away. In the end, Ulay gives up, leaving Abramović alone before her voice wears out. [Figure 96]

More than a battle for predominance, the two performers seem to act out a form of dialogue, where words have been obliterated, leaving only voice to express their thoughts and take out their bodily vital energy. The process of the transformation of breath into voice becomes apparent as they stop to take breath and release it as raw screams. These screams become more and more uncontrolled, turning out into animal growls. As the tone of their screams escalates, their faces get closer and closer, creating an ambiguous feeling of underlying erotic passion and aggression.

It is the same feeling that pervades *Breathing In, Breathing Out*, which was performed twice, in Belgrade (1977) and Amsterdam (1978). For this performance the two artists blocked their nostrils with cigarette filters and pressed their mouths together, so that one couldn't inhale anything else but the exhalation of the other. As the carbon dioxide filled their lungs, they began to sweat, move vehemently and wear themselves out; the viewers could sense their agony through the projected sound of breathing, which was augmented via microphones attached to their chests. It took them nineteen minutes in the first performance and fifteen in the second to consume all the oxygen in that one breath and reach the verge of passing out. [Figure 95]

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<sup>575</sup> The performance took place in Liège.

Something tender and violent at the same time emerges from the performance: the couple are decided to stick together despite the effort, the danger, the damage; but this kind of interdependence can harm the two parties involved, so it cannot last for very long.

However, even for just a few minutes they came to a remarkable achievement: they became one Being, like the mythical creature described by Aristophanes in Plato's *Symposium*, an omnipotent Androgynous creature with round shape and four hands and legs. However, these Androgynous (literally meaning, man and woman) creatures felt so confident of their power, that they committed the sin of *hybris* – arrogance towards the gods- so Zeus punished them by splitting them in two halves, condemned to keep looking for their other half for eternity:

This is the reason, our human nature used to be one and we were a whole; and the desire and pursuit of the whole is called love. There was a time, I say, when we were one, but now because of the wickedness of mankind God has dispersed us.<sup>576</sup>

By sharing the same breath Abramović and Ulay step on the fine line dividing *eros* and *thanatos*, love and death. At the same time, they remind us that we all breathe through the same air and share each other's breath; “air is the place of all presence and absence”,<sup>577</sup> the place where we live and die.

As the two artists moved on with their relationship and their collaboration, they started to act as one –like that mythical Androgynous creature- naming their unified egos *the other*.<sup>578</sup> They began to explore non-European cultures, mostly Tibetan,

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<sup>576</sup> Plato: Πλάτων, *Συμπόσιον*, 192e-193a: “τοῦτο γὰρ ἐστὶ τὸ αἴτιον, ὅτι ἡ ἀρχαία φύσις ἡμῶν ἦν αὕτη καὶ ἡμεῖν ὅλοι· τοῦ ὅλου οὖν τῆ ἐπιθυμία καὶ διώξει ἔρωσ ὄνομα. καὶ πρὸ τοῦ, ὥσπερ λέγω, ἐν ἡμεῖν, νυνὶ δὲ διὰ τὴν ἀδικίαν διωκίσθημεν ὑπὸ τοῦ θεοῦ”.

<sup>577</sup> Irigaray 1999.

<sup>578</sup> For more on Abramović and Ulay's relationship and work see Thomas Mceville, *Art, Love, Friendship, Marina Abramovic and Ulay, Together & Apart*, New York: Documentext, McPherson & Company, 2010.



Indian and Aboriginal, and incorporated their philosophies into their artworks; this is where the concepts of stillness, the void, the zero, which come up over and over again in their work, originate from.

A zero with a positive charge.

In *Positive Zero* (1983), for example, Abramović and Ulay staged a sound-performance bringing together Tibetan lamas and Australian aborigines –perhaps for the very first time in the history of these cultures. The tableaux vivants presented on stage, that represented the four stages of life, were livened up through the chanting of the Tibetan lamas and the didgeridoos of the Aborigines.

*Positive Zero* would remain their only attempt to conquer the theatrical stage. In an interview with Laurie Anderson, years later, Abramović expressed her desire to direct Beckett's *Ill Seen, Ill Said*, with Acconci's voice heard onstage –a statement that proves the inner connection between those artists.<sup>579</sup> However, this would never materialize; throughout her path, all experience in her art remained real, distant from any theatrical elements.

In the same period, from 1981 to 1987, the two performers presented their *Nightsea Crossing* performances, where they sat still looking at each other for seven hours a day, for many days in a row. During this experience Abramović's senses were so heightened, that her consciousness and her way of perceiving reality became altered:

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<sup>579</sup> Laurie Anderson, "Interview with Marina Abramović", *Bomb*, issue 84, Summer 2003. [online] <<http://bombsite.com/issues/84/articles/2561>>(Accessed: September 10, 2011)

I was looking at Ulay directly in front of my eyes and he completely disappeared –there was a shell of light and absolutely no body. [...] For a long period of time, he absolutely didn't exist except in the form of a light shell.<sup>580</sup>

This kind of experience brings to mind the breathing and meditation techniques analysed in the previous chapter,<sup>581</sup> that often lead the practicant to see what was described as a “divine light”. These types of performances required a high level of concentration, in order to overcome the physical fatigue and pain. But the artists knew that if they went beyond this limit, they could reach a higher mental state<sup>582</sup>: ‘It’s like a gate to me, when the body gives up’, Abramović said.<sup>583</sup> [Figure 97]

Inspired by Eastern meditation techniques and religious practices, Abramović found new ways of exploring consciousness through performance art. Breathing plays an important part in the way that she reaches that state of mind, or the feelings that she wants to transmit to the viewers.

For Abramović it was important that the artwork provokes a response from the audience. In the video installation *In Between* (1995) each person entering the space had to sign an agreement to stay for the entire 40 minutes that the video lasted. Blindfolded in the beginning, the audience only listens to the voice of the artist that advises them to breathe and relax. From this state of breath-induced relaxation, they are suddenly forced to face an intense image of the artist approaching a needle to her eyes and skin, when they are told to remove their blindfolds. However, they are still instructed to breathe, and compelled to watch the strong images until the piece ends. [Figure 98]

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<sup>580</sup> Marina Abramović; Dobrila Denegri, *Performing Body*, Milan: Charta, 1998, p.402.

<sup>581</sup> See chapter four of this thesis.

<sup>582</sup> Richards 2010, p.99.

<sup>583</sup> Cynthia Carr, ‘Marina Abramović seeks the higher self through the body in extremis’, *Village Voice*, New York, 1997, 25 November, p.69.

Although we are within the realm of performance art, there is a strong sense of theatricality, manifested in the feeling of *catharsis* that comes in the end, both for the performer and the audience.

Seeing Marina Abramović's work through the prism of Eastern influence and in relevance to breathing and meditation techniques is a valid approach, if we examine the artist's teachings in her workshops. In these, she tries to initiate the students into a different way of experiencing the world. Firstly, she encourages them to follow an ascetic lifestyle throughout the workshop; this prepares them for the next step, which is a set of exercises that aim to enhance their perception: these include meditation, new ways of viewing familiar surroundings, methods to heighten their senses, repetitive actions and breathing techniques<sup>584</sup>.

The exercises, detailed in Abramović's books *Unfinished Business* (1999) and *The Student Body* and synopsized by Mary Richards, show how traditional breathing practices are being adapted for the use of performance art:

You can stand or sit to try this exercise. If you choose to sit, make sure that the upper body is upright and that your torso feels open and free.

Breathe through your nose and feel the breath reaching down into the abdomen and your upper body gently rising – but do not force it to do so.

Exhale gently through the mouth through soft lips.

Repeat until you feel comfortable, relaxed and more alert.

Now add a hum to the exhaled breath – start gently and continue to be aware of how the body is responding. Take your time and do not rush this transition.[...] <sup>585</sup>

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<sup>584</sup> Richards 2010, See chapter "Practical explorations and their origins", pp.114-133.

<sup>585</sup> Richards 2010, pp.120-121

By combining controlled breathing with repetitive voice sounds, Abramović seeks to change the level of energy in her body and her surroundings. A number of Abramović's exercises concentrate on breath and sound. This comes as an influence of her experience in the Tushita monastery, where she was set the task of repeating a phrase for up to 6,000 times a day; as her entire body and breath became synchronized with the tone of the chant, she started to experience a sense of equilibrium with the body.<sup>586</sup> Therefore, in these cultural and religious practices, as well as the work of the artists examined in this section, repetition produces difference.

Ultimately, Abramović's work is not about suffering, pain and agony, but about 'opening the doors to perception' and 'surfing different mental states'.<sup>587</sup> Having immersed herself into the cultures of the East, mostly during her repetitive stays in Tibet and Australia, she tries to give this energy to the public and create a link between those cultures: "As an artist I want to be a bridge",<sup>588</sup> she says.

As a conclusion, the subject of voice and breath in relation to language and performance highlights a different path of interaction between the performer and the audience; at the same time, it reveals the communicative potential that lies behind the everyday acts like talking or breathing, that usually remain unnoticed.

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<sup>586</sup> Abramović 1998, p.40

<sup>587</sup> Abramović 1998, p.410.

<sup>588</sup> Goy 1990.

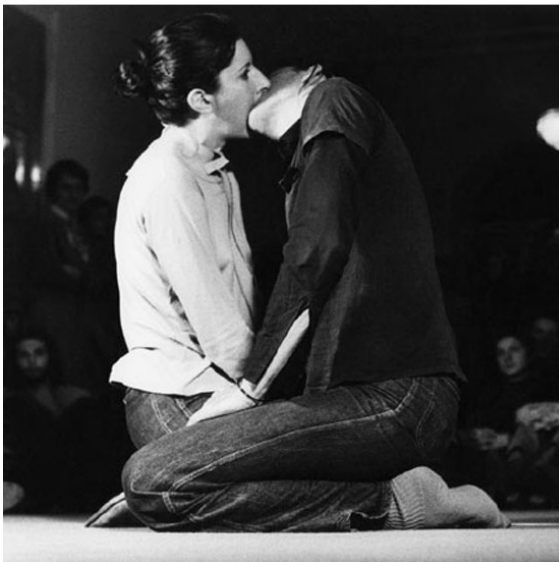


Figure 93. Marina Abramović, *Freeing the voice*, 1975. Performance.

Figure 94. Marina Abramović, *Freeing the body*, 1976. Performance.

Figure 95. Marina Abramović, *Breathing In, Breathing Out*, 1977-1978. Performance.

Figure 96. Marina Abramović, *AAA-AAA*, 1978. Performance.

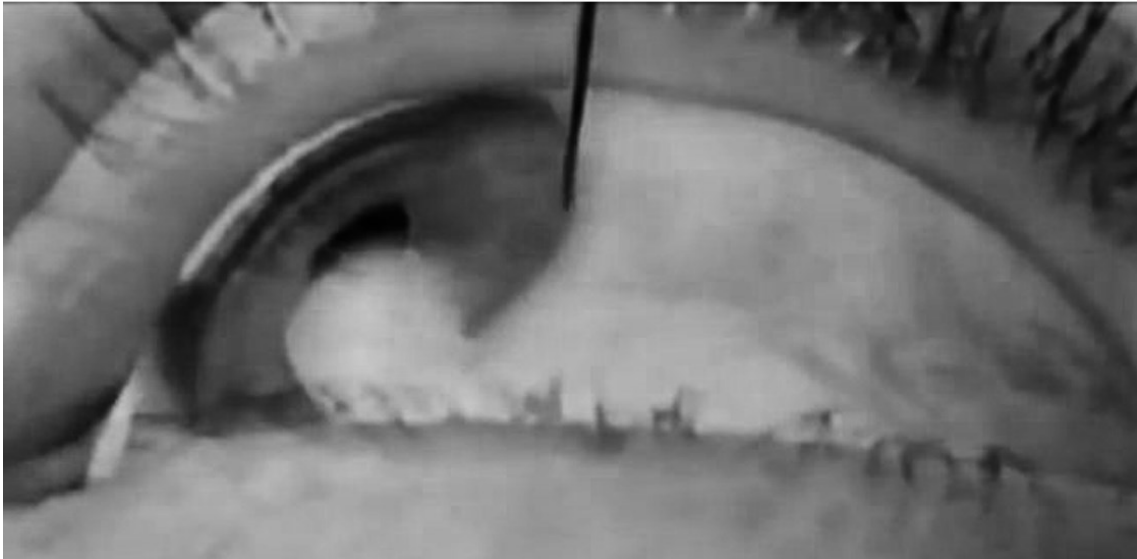
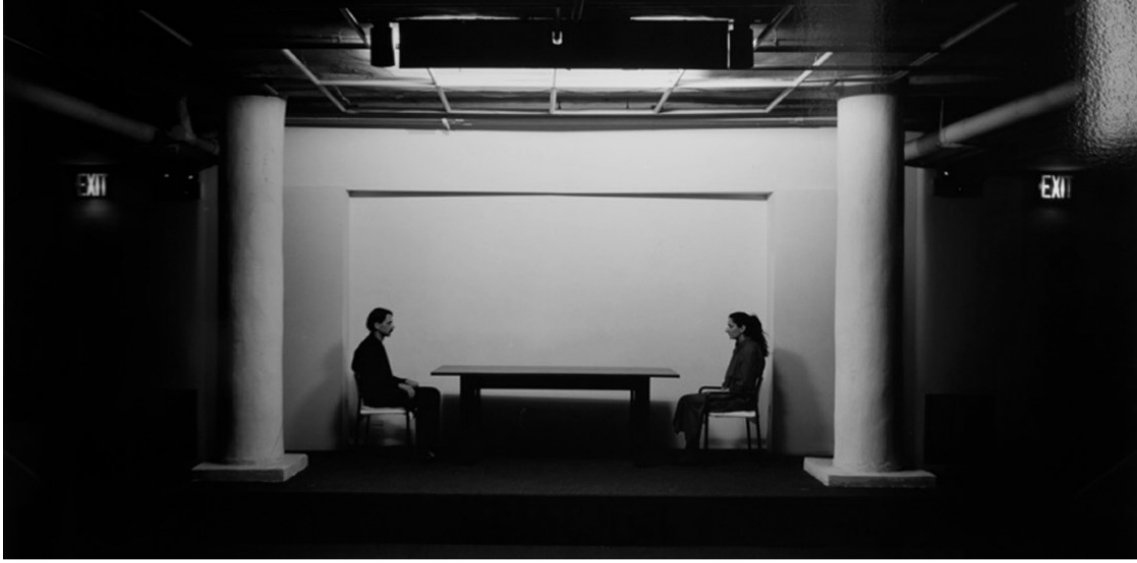


Figure 97. Marina Abramović and Ulay, *Nightsea Crossing*, 1981-1987. Performance.

Figure 98. Marina Abramović, *In Between*, 1995. Video.

Chapter Six

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**Conclusions**





*One moment more. One last.*

*Grace to breathe that void.*

*Know happiness*

Samuel Beckett<sup>589</sup>

## 6.0 General and specific conclusions

A border: not an end, but a point where presence begins.

Viewing the elusive borders of the immaterial in visual culture through a Heideggerian prism<sup>590</sup> reveals multiple paths that expand the expressive potential of artistic creation and enrich the discourse about the role of the body and technology in the formation of experience. That is to say, this state of minimal matter that is often identified as the Immaterial, is a field where the traditional hierarchies within the cultural sphere are being questioned and transformed, in favour of a heightened collectivism and body awareness. It is the fertile soil where new ideas emerge, re-defining the role of the individual in the production of culture and meaning.

These changes have been mainly commented in regard to the role of the body and technology in experience, with a particular focus on breath. Although to a certain extent, the main conclusions of this research are incorporated within the discourse,

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<sup>589</sup> Samuel Beckett, *Ill seen Ill Said*, London: Calder, 1982, p.59.

<sup>590</sup> See p.218 of this thesis: “A boundary is not that at which something stops but, as the Greeks recognized, the boundary is that from which something begins its presencing”, Heidegger 2000, p.156.

it would be meaningful here to distinguish the most significant ones, in regard to the following issues:

- a. The change of the role of the public in contemporary culture
- b. The importance of the body in digital environments and software-based art.
- c. The role of breath as a thread unifying separate discourses about digital culture, visual arts and performance, as well as different cultures
- d. The culture of remix and transformation of cultural forms
- e. The significance of artistic practice as a form of scientific and philosophical research

The shift of focus from form to concept and from the object to experience has opened up a new path in contemporary artistic creation, where the importance of matter subsides as the immaterial dimension of the artwork dominates the creative process.

Driven by the curiosity to uncover the facets of the *non-object* in contemporary visual culture, we have uncovered an ever-expanding field of minimal matter with maximal load of information, which becomes increasingly important in the context of digital culture. In today's reality the cultural object becomes disassociated from materiality, becoming electrodes that turn into strings of code and eventually into a visual experience, through the mediation of multiple layers of technology and programming.

This has expanded the communicative potential of artistic creation by turning art into an open process, where the public can participate as well.

In a theoretical level, these changes are connected to a significant discourse about perception, experience and the formulation of knowledge, that has been unraveled from the 20<sup>th</sup> century and on; the artworks that follow these lines could sometimes

be viewed as a reflection of the presented ideas and sometimes as their materialization and expansion.

Moreover, the changes in the way the public perceives an artwork and relates to it are not only relevant to information technologies, but also to an evolution in artistic practices from the late 1960s to our time. So, technology and everyday culture can change artistic practices, but also artistic practices can often bring about changes in the way we think about technology and the way we act in everyday life.

For example, when thinking about interactive art, one should not overlook the vital importance of new approaches in art history and philosophy, which elevated the role of the public as an agent of the creative process and highlighted the role of the body as an element of perceiving the world, undistinguishable from the mind. Following a phenomenological approach, with an eye to cultural practices that are related to breath, we have discovered that interaction can become a learning process, that changes the way the participants see themselves and the world.

The fact that nowadays we are more and more referring to the art public not as “viewers” but as “participants” –even as “immersants” in certain cases- highlights the importance of interaction. The public, which is accustomed to taking initiative on an everyday level, by creating content online or playing video games, expects to be given options and to participate actively. Therefore, apart from granting the artwork with endless transformational possibilities, the evolution of technology has introduced a new role for the participants, who share and shape content through interaction.

Rather than a ‘finished product’ the artwork in interactive art is defined as an on-going process, “a frame or context which provides an environment for new experiences of exchange and learning”.<sup>591</sup> This presupposes that the museum or art

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<sup>591</sup> Lovejoy 2005, p.168.

space evolves into an 'art laboratory', a place where artists and visitors meet and create together. Often enough, this art laboratory extends beyond the museum walls, into the streets, into real or virtual space. Within this context, the established limits between the artist and the public, the art space and the urban space, are abolished, allowing the visitors to become engaged in the artistic action.

As the artwork becomes the product of collective action, with the intermediation of practices based on computation, it can represent multiple ideas and technologies that have different origins, such as hacking –rooted in programming- information age ideologies –based on pre-Internet conflicts and new political tensions- and biofeedback technologies –normally used in medical practice. As a result, the intersection of technology with contemporary art becomes a multi-dimensional experience, which brings the public in contact with techno-culture, politics and their own bodies. It is an immaterial revolution, that is changing the face of everyday life, with a significant impact in the cultural and political field.

One of the most important remarks that is often echoed during the analysis of this thesis, is the fact that our material body has a very significant role to play within this *(im)material reality*. So, it should be pointed that, contrary to the assumptions of the early visionaries of Cyberspace, who dreamt of an 'escape' from the confines of the material body, the evolution of information technologies was accompanied by an increased focus on the body. For this matter, it became evident early in this research that phenomenology would offer an ideal frame for the understanding of the connection of immateriality to body, technology and visual culture. In a way, the developments of the past few years concerning information technologies have materialized certain phenomenological ideas about the body and the way we experience the world –through all of our senses and not strictly with the mind.

From the examples analysed here, one sees that, when interaction requires the participation of the entire body, the participants are inspired to understand their

corporeal functions and to communicate through their bodies. By gaining a better understanding of their body and its connection to the world, the ‘immersants’ can enter a meditative state during the interactive experience.

Within interactive environments that use biofeedback technology, the participants find a way into a world built upon their heart beat, and their breath; the music of their body.

So, as our everyday world is becoming increasingly dematerialized, built on bits and pixels, our body becomes the main focus around which digital platforms are being created –from our personal computer to smartphones, tablets and interactive environments. In a way, this evolution brings to mind the Protagorean doctrine that “man is the measure of all things”.

In a reality where the human being is the measure of all things, the vital force that sustains it to life, breath, becomes a focus of theoretical discourse and a junction where the material intersects with the immaterial and bodily experience becomes one with the mind. The research on respiration started with a selection of interactive artworks that are materialized through the breath of the participant and continued with the analysis of installation art, video art and performance that is based on breath.

Through the dynamics of breath, immateriality becomes linked to the way we experience our body and the mind, connecting us to our social and natural environment. This notion is found in diverse philosophical schemas and cultural traditions. Each theory or tradition gives emphasis to a different aspect of the issue, creating thus a flux of ideas and practices, which are open to movement and expansion.

In the ancient Greek world, breath became a subject of observation in regard to its movement within the body and its role as a life sustaining force. For Greek

philosophers, breath was the element that united the body with the mind and the human being to its environment. Eastern philosophy expands this viewpoint further: through an integral combination of philosophical ideas and practices that came from the medical tradition, it showcases how conscious breathing can become the first step towards reaching a higher state of consciousness, where one finds a perfect balance of body and spirit. These philosophical notions are not closed systems of thought, but expand into other strata of culture. In fact, one can find similar breath control practices in diverse traditional and religious rituals.

Traces of these ideas are present in contemporary western philosophy. Luce Irigaray viewed air as the place of all existence, that unites and separates people. Drawing inspiration and arguments from multiple systems of thought, such as feminism, eastern philosophy and western tradition, she constructed an “ontology of breath”.

During the analysis of breath-related theories, it is often highlighted that any changes in the respirational rhythm can bring changes to one’s body and mind. This can either be conscious, through controlled breathing, or forced, through a state of breathlessness. The idea of breathlessness brings the analysis back to Phenomenology and provides useful hints in the work of the artists who deal with this idea, bringing the viewers closer to a different sense of their body and an understanding of its physicality.

Expanding the research in performance art, we find multiple links between breath, voice, language and the performative act.

Performance is connected to the concept of the immaterial in different ways: firstly, through breath, that influences bodily movements and speech and secondly through the concept of the ephemeral, being a kind of art that usually leaves no ‘material’ traces behind, apart from the documentation of the action. In this sense, the focus on performance reveals a different aspect of the immaterial; after exploring the

connection of the immaterial with digital culture and making an extensive analysis of its presence within the body through breathing, we see its relevance to the field of theatrical action.

The disassociation of the art of the 20<sup>th</sup> century –especially from the 1960s and on– from the artistic object passed through the introduction of certain performative elements in visual arts, which until then belonged in traditional rituals and the theatrical scene. One of the arguments highlighted here is that performance art, in a certain way, has materialized the visions of 20<sup>th</sup> century theorists about the return to a ‘pure’ theater, where the action would not necessarily represent reality, but would be life itself.

The birth of performance art and its evolution was based on theatricality and performativity, in other words, the elements that go beyond the written text and include the performers’ gestures and interaction with the public. As the body became increasingly important, so did elements like voice and breath. The air that enters the body undergoes endless transformations, turning into voice, words and poetry. So, breath can become a basic element of verbal and non-verbal expression within performative action. This is reflected in the connection between actors’ training and the methods of the Eastern theatre, which are largely based on breathing techniques.

Therefore, breath becomes a ‘thread of Ariadne’ that guides us through the mesh of the immaterial. At the same time, it becomes a unifying thread between cultures that are chronically and spatially distant.

In distant times and places, breath is seen as the link between the body and the mind, a symbol of life that undergoes transformations within the body and in the environment, becoming voice, words, communication and eventually culture. One of the most significant points of this analysis is that there are common lines of ideas

among different cultures, making an intercultural approach meaningful. One should not consider, however, that these lines constitute a homogenous whole, but, on the contrary, they should be seen as a dynamic interconnection of ideas and practices, expanding into different fields of knowledge and cultural activity. The exploration of the subject revealed how the basic functions of our body, like our respirational rhythm and our pulse are connected to perception. To change breathing rhythm is to alter one's state of mind.

The artworks analysed in this thesis are all relevant to breath –whether it is a subtle approach or a prevalent notion. This selection was made so as to highlight the connection between the different ideas presented. This way, the discourse about the immaterial, the body and technology unrolls with a greater coherence.

In the context of digital culture, the focus on breath revealed new ways of feeling the body and experiencing the world, through virtual reality and software-based environments. Within this realm, the work of Yves Klein provides the “wings” for the flight into the immaterial, which expands in the virtual reality art of Char Davies, the biofeedback art of George Khut, the wearable devices of Thecla Schiphorst and the breath mobiles of Christa Sommerer and Laurent Mignonneau.

The link between the immaterial and the corporeal is further substantiated through the examples of artists who employ breathing as a means of expression. Although there is a great diversity among the artists selected, there are certain axes that are taken into consideration: First, there is a historical basis formed by the first generation of artists who have dealt with breath as a means of realizing an artwork, like Piero Manzoni, Francesc Torres, Giuseppe Penone and Lygia Clark. Subsequently, the focus shifts onto the work of Nikos Navridis, who developed a highly individual artistic language that uses breath in all its manifestations. The ideas presented in his works, like the relation of breathing to the notions life and death, the environment and the individual, are also reflected in the work of the



artists that follow in the analysis, who link breathing to water, earth and light –Bill Viola, Danae Stratou and Kimsooja. Breath is also linked to the concept of time, in the fleeting images of Edith Kollath and biology, in the work of Sabina Raaf.

In regard to the presence of breath in theatre and the performative arts, the work of Samuel Beckett is presented as the seminal example that underlines the interrelation of theatre and performance and projects the significance of breath in this context. Beckett managed to renew the palette of expressive means of theatrical actors and at the same time to create visually stimulating works that inspired artists. By viewing his work through the prism of respiration, we see how breathing and immateriality can constitute the meeting point of different forms of artistic expression and ideas.

The innovative character of Beckett's work inspired numerous artists, who either took elements from his expressive language or sought to transfer his plays into the field of visual arts.

Another significant conclusion in regard to Beckett and his influence on visual arts is the role of *remix* in contemporary artistic practice. In this sense, the focus on Beckett becomes the materialization of the theory about postproduction that is analyzed in the third chapter. According to this theory, artists nowadays, instead of starting with an empty canvas, begin with an artwork and remix it into something new. The transformations of Beckett's *Breath* by visual artists accentuate processes that are present in all the artworks analyzed throughout this thesis. The comparative study realized here, against the original theatrical play, reveals how vast the spectrum of reception of an artwork can be, whereas at the same time it proves that transforming an established work into something new, does not mitigate the expressive potential of the *remix*.

In a sense, “transformation” is a keyword for the understanding of this thesis. Transformations of the immaterial, of the technological, the corporeal, the cultural come to the spotlight as we observe the flow of air into the body.

This becomes evident through the analysis of the work of significant performance artists, such as Bruce Nauman, Vito Acconci, VALIE EXPORT and Marina Abramovic. There are a lot of internal connections between the work of the performance artists selected here; for example, Bruce Nauman and Vito Acconci project voices and breaths in loops, as they use repetition in order to break the limits of narrative and representation. Both these artists and VALIE EXPORT emphasize the corporeal aspect of voice, by projecting its origin within the body. Lastly, the work of Marina Abramović is presented as a crossroads where the questions of ritual and reality, repetition and representation, meditation and philosophy intersect.

The artists and the theories presented here manifest that breath can constitute a system of thought to explore primordial ideas of existence, artistic creation, collective communication and experience.

As these artists reveal new ways of experiencing the body through breath, they create a body of work that is not only an outlet of creativity, but also a means of research. In the third chapter we saw how artistic research can become the extension –or even the predecessor– of scientific developments; in the fourth and fifth chapter it becomes evident that, in a certain way, the artists mentioned create a very interesting theoretical discourse, by employing visual means. It is a philosophical quest on the human condition, revealing different aspects of being, of creating and feeling.

So, the purpose of these artistic examples is not simply to “illustrate” the theories examined. It is to complement theory through artistic practice, in order to enable a thorough understanding. Most of the artists mentioned here have studied and

incorporated into their work some of the theories cited in the current thesis. Interestingly enough, they manage to expand those theories using their visual vocabulary.

In other words, these artists study the “immaterial” and incorporate the questions that arise into their work; their work is not only as a medium of expression, but also a means of inquiry. Hence, they illustrate the point that “the imaginative and intellectual work undertaken by artists is a form of research”.<sup>592</sup>

In short, art can become a method of scientific or philosophical research.

In all, the journey into the realm of the immaterial has given us unexpected visions of contemporary art and a foretaste of future developments in the realm of culture. At the same time, it has provided us with a deep insight into the human condition, revealing how experience is being formed in regard to the body and the environment, creating a densely knit mesh of interconnections within different cultural expressions and philosophical viewpoints.

## 6.1 Future lines of research

A “leap into the void”, a journey into the unknown: this is what setting out on a doctoral research initially seems like. And as the journey into the land of the immaterial comes to a closure, it becomes clear that, despite the experiences gained and the knowledge acquired, there might still be things to be explored.

The questions posed initially about the role of the immaterial in regard to digital space, the human body, visual arts, performance and participation have been answered thoroughly through an interdisciplinary research that highlighted the

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<sup>592</sup> Graeme Sullivan. *Art practice as research: Inquiry in the visual arts*. Thousand Oaks, CA: SAGE, 2005, p.88.

underlying connections between theories and artistic actions concerning the main subjects. However, as these issues were being solved, new questions would arise and new fields of knowledge would appear on the horizon.

So, the journey doesn't end here; this is just the point where one research is concluded and new lines for future investigation will be drawn.

It was a research that started right at the limits of the immaterial, at this point where matter either loses its significance or subsides under the weight of information and experience.

During this research, different questions have sprung, that could not be presented thoroughly in the current thesis. This was a conscious choice, so as to maintain the coherence of the main subject and to respect certain limits of time and space, while avoiding a detour into questions that do not relate so closely to the issues explored here. However, my curiosity as a researcher lead me to take these questions a step further, exploring them in separate texts and publications<sup>593</sup> that have not been included in the body of this thesis. Here I would like to draw those lines of potential research, which would be worth following in a post doctorate investigation or an academic publication. The main lines are the following:

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<sup>593</sup> See for example:

Christina Grammatikopoulou, "Hacking: A New Political and Cultural Practice", en Lanfranco Aceti; Richard Rinehart; Ozden Sahin (eds.) *Not Here Not There, Leonardo Electronic Almanac*, Vol.18, Issue 6, 2013.

Christina Grammatikopoulou, "New media, new perceptions: Art as an encompassing and participatory experience", Chiel van den Akker; Susan Lêgene (eds.), *Museum Transfigurations. Curation and Co-creation of Collections in the Digital Age*, Berghan Books, 2013 (forthcoming).

Christina Grammatikopoulou, "Stepping towards the immaterial: Digital technology revolutionizing art", in Agnes Aljas, et.al. (Ed.), *Transforming Culture in the Digital Age*, Tartu: Estonian National Museum, Estonian Literary Museum, University of Tartu, 2010.

Christina Grammatikopoulou, "Ciber-respiración: Encuentros de cuerpo y tecnología" en Arte, Arquitectura Y Sociedad Digital (eds.), *Universos y Metaversos: Aplicaciones Artísticas de los Nuevos Medios*, Barcelona: Grupo de Investigación Arte, Arquitectura y Sociedad Digital, 2010.

- a. Information technologies and academic research: New ways of expanding knowledge.
- b. *Cultural Hacking* and collectivism in the digital, artistic and urban space.
- c. The perception of body and space in augmented reality environments.
- d. Breathlessness as a metaphor of *corpus dolens* in performance and video art.
- e. The visual aspect of Beckett and his influence in contemporary art.

The generalization of the use of information technologies has revolutionized everyday life, visual culture and academic research, as was mentioned earlier. The research on information technologies brings us to the realm of digital humanities, a new field of knowledge that explores the intersection of computing and humanities, favouring the combination of theoretical research with multimedia and dynamic environments, so as to add new methods to the “toolbox” of the academics.

This perspective can prove to be very useful when approaching the subject of Cultural Hacking, which was introduced in the third chapter. In a future research, it would be interesting to explore further how the idea of hacking changes the existing dynamic within the virtual and urban space, calling for a public that is more active. Within this context, hacking needs to be viewed in all its expressions, from Street Art interventions, to political actions.

Another important issue in the ever-changing scene of information technologies is how augmented reality becomes implemented in everyday life through mobile devices and how this evolution influences the perception of the urban space and the human body. In this regard, the answers given in this thesis –about how cultural experiences can change perception- should be a helpful guide; even though here the main focus was breath, similar observations can be made in relevance to artworks that approach the human body through different perspectives.

The issue of breath in visual culture has been explored in a very thorough way, even if eventually I had to leave out a great number of artists and artworks, so as to keep a stronger focus and to make a more in-depth analysis on the ones selected. Among the topics that were only hinted here, the question of breathlessness is a significant topic for a future investigation, in relevance to the representation of suffering and pain in visual arts and performance.

As my research on the role of breath in performance unrolled, I developed a strong interest in the work of Samuel Beckett, from the perspective of art history. After making a thorough study of the subject, it became clear that although Beckett studies is a very popular line of research within the context of theatrical and literary disciplines, there are very few art theorists who have dealt with his influence in visual culture. So, it will be a very interesting topic of research to go deeper into the connection of Beckett to visual arts, so as to see how his creative imagination was stimulated by certain artworks and how, in turn, Beckett's work became a source of inspiration for contemporary artists. In this direction, one could follow the relevant connections presented in contemporary art exhibitions about artists who are influenced by Beckett and to go deeper into contemporary artistic practice, so as to develop a thorough academic analysis on the subject.

Just like the end of each breath signifies the beginning of the next one, the end of this thesis signifies a beginning, an exploration of new paths of research that are being opened up.

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## List of figures



## List of figures

Figure 1. Kazimir Malevich, <i>Black Square</i> , 1915. Oil on Canvas, The State Tretyakov Gallery, Moscow. ....	131
Figure 2. Kazimir Malevich, <i>White on White</i> , 1918. Oil on Canvas, Museum of Modern Art, New York.....	131
Figure 3. Marcel Duchamp, <i>The Bride Stripped Bare by Her Bachelors, Even (The Large Glass)</i> , 1915-23. Oil, varnish, lead foil, lead wire, and dust on two glass panels, Philadelphia Museum of Art, Philadelphia. ....	131
Figure 4. Marcel Duchamp, <i>50 cc of Paris Air</i> , 1919. Glass ampoule (broken and later restored), Philadelphia Museum of Art, Philadelphia. ....	131
Figure 5. Yves Klein, <i>Le Saut dans le vide</i> , 1960. Photomontage by Shunk Kender of a performance by Yves Klein at Rue Gentil-Bernard, Fontenay-aux-Roses.....	132
Figure 6. Yves Klein, <i>La spécialisation de la sensibilité à l'état matière première en sensibilité picturale stabilisée, Le Vide</i> , 1958. Galería Iris Clert, Paris, France.....	132
Figure 7. Yves Klein, <i>Zone de Sensibilité Picturale Immatérielle</i> , 1959-1962. Artist's book and performance. ....	132
Figure 8. Char Davis, <i>Osmosis</i> , 1995. Interactive virtual reality environment. ....	139
Figure 9. Char Davis, <i>Osmosis</i> , 1995. Interactive virtual reality environment. ....	139
Figure 10. Char Davis, <i>Ephémère</i> , 1998. Interactive virtual reality environment. ....	139
Figure 11. Char Davis, <i>Ephémère</i> , 1998. Interactive virtual reality environment. ....	139
Figure 12. George Khut, <i>Cardiomorphologies v.2</i> , 2004-2005. Interactive installation.....	145
Figure 13. George Khut, <i>Drawing Breath</i> , 2004. Interactive installation. ....	145
Figure 14. George Khut, <i>The Heart Library Project</i> , Interactive installation.....	145
Figure 15. Christa Sommerer and Laurent Mignonneau, <i>PICO_SCAN</i> , 2000. Interactive Installation.....	151
Figure 16. Christa Sommerer and Laurent Mignonneau, <i>PICO_SCAN</i> , 2000. Interactive Installation.....	151
Figure 17. Christa Sommerer and Laurent Mignonneau, <i>Mobile Feelings II</i> , 2003. Interactive Installation.....	151
Figure 18. Christa Sommerer and Laurent Mignonneau, <i>Mobile Feelings II</i> , 2003. Interactive Installation.....	151
Figure 19. Tecla Schiphorst, <i>Whisper[s]</i> , 2003. Interactive Installation.....	156
Figure 20. Tecla Schiphorst, <i>Whisper[s]</i> , 2003. Interactive Installation.....	156
Figure 21. Tecla Schiphorst, <i>Exhale</i> , 2007. Wearable interface and performance. ....	156
Figure 22. Tecla Schiphorst, <i>Exhale</i> , 2007. Wearable interface and performance. ....	156
Figure 23. Julian Oliver, <i>Artvertiser</i> , 2008. Augmented reality intervention in the public space.....	162
Figure 24. Public Ad Campaign and the Heavy Projects, <i>Augmented Reality Advertising Takeover</i> , 2011. Augmented reality intervention in the public space.....	162

Figure 25. Jan Torpus, <i>lifeClipper 3</i> , 2009-2010. Augmented reality intervention in the public space. ....	162
Figure 26. Piero Manzoni, <i>Fiato d'artista</i> , 1956. Balloon, rope, lead seals and bronze plaque on wooden base, Tate Modern Gallery, London. ....	201
Figure 27. Francesc Torres, <i>Ocupació d'un espai donat a través d'una acció humana</i> , 1973. Photograph. ....	201
Figure 28. Giuseppe Penone, <i>Soffio</i> , 1978. Clay sculpture.....	201
Figure 29. Giuseppe Penone, <i>Soffio di foglie</i> , 1979-1991. Installation of heap on leaves and performance.....	201
Figure 30. Lygia Clark, <i>Ar e Pedra</i> , 1966. 'Relational Object'. ....	208
Figure 31. Lygia Clark, <i>Respire Comigo</i> , 1966. 'Relational Object'.....	208
Figure 32. Lygia Clark, <i>Máscaras sensoriais</i> , 1967. 'Relational Object'. ....	208
Figure 33. Lygia Clark, <i>Máscara Abismo</i> , 1967. 'Relational Object'.....	208
Figure 34. Nikos Navridis, <i>Untitled</i> , 1995. Vices, plaster, balloons.....	219
Figure 35. Nikos Navridis, <i>The Question of the Age of the Void</i> , 1996. Video and photography installation.....	219
Figure 36. Nikos Navridis, <i>Traps</i> , 1998. Double video projection. ....	219
Figure 37. Nikos Navridis, <i>On life, beauty, translation and other difficulties</i> , 1997 and 2010. Video installation, Vicenza.....	219
Figure 38. Nikos Navridis, <i>Snow balloons or Trapping their own breaths</i> , 2003. Installation. ....	219
Figure 39. Nikos Navridis, <i>With no hands or When She Leans on her Own Breath</i> , 2000-2003. Video.....	219
Figure 40. Nikos Navridis, <i>Looking for a Place</i> , 1999-2000. Video installation. ....	220
Figure 41. Nikos Navridis, <i>Difficult Breaths</i> , 2004. Photograph. ....	220
Figure 42. Nikos Navridis, <i>Tomorrow will be a wonderful day</i> , 2008. Installation. ....	220
Figure 43. Bill Viola, <i>The Passing</i> , 1991. Video.....	227
Figure 44. Bill Viola, <i>Heaven and Earth</i> , 1992. Video installation.....	227
Figure 45. Bill Viola, <i>Nantes Triptych</i> , 1992. Video installation.....	227
Figure 46. Bill Viola, <i>The Messenger</i> , 1996. Video installation.....	228
Figure 47. Bill Viola, <i>Nine Attempts to Achieve Immortality</i> , 1996. Video installation. ....	228
Figure 48. Danae Stratou, Alexandra Stratou and Dora Constantinides, <i>Desert Breath</i> , 1997. Land art, Hurghada, Red Sea coast, Egypt. ....	234
Figure 49. Danae Stratou, <i>Breathe and water section</i> , 2000. Sarantopoulos Flour Mill, Athens.....	234
Figure 50. Danae Stratou, <i>Breathe Wall</i> , 2002. Permanent outdoor installation, Athens. ..	234
Figure 51. Danae Stratou, <i>The Breathing Circle</i> , 2008. Outdoor installation, Sani, Greece.	234
Figure 52. Kimsooja, <i>To Breathe/ Respirare, Invisible Mirror, Invisible Needle</i> , 2006. Video installation. Teatro Fenice de Venecia and Théâtre du Châtelet de Paris. ....	239



Figure 53. Kimsooja, <i>To Breathe – A mirror woman</i> , 2006. Installation of diffraction grid film and mirror, Parque del Buen Retiro, Madrid.....	239
Figure 54. Edith Kollath, <i>BW1</i> , 2006. Video loop.....	245
Figure 55. Edith Kollath, <i>In Between</i> , 2007. Video loop.....	245
Figure 56. Edith Kollath, <i>Again, Again</i> , 2009. Mixed media installation.....	245
Figure 57. Edith Kollath, <i>Nothing will ever be the same again</i> , 2009. Mixed media installation: textile, electronic mechanism.....	245
Figure 58. Edith Kollath, <i>Disport</i> , 2009. Mixed media installation.....	245
Figure 59. Edith Kollath, <i>Thinking I'd last forever</i> , 2008. Mixed media installation.....	245
Figure 60. Sabrina Raaf, <i>Breath Cultures</i> , 1999. Petri dishes and video projections.....	251
Figure 61. Sabrina Raaf, <i>Breath I: Pleasure</i> , 2000. Ink, cow gut, neon, plexiglass, bee's wax and electronic circuitry.....	251
Figure 62. Sabrina Raaf, <i>Grower</i> , 2004. Custom robotics, sensors and ink.....	251
Figure 63. Samuel Beckett, <i>Breath</i> , 1969. Photograph from Kenneth Tynan's Production, Eden Theatre, New York.....	292
Figure 64. Samuel Beckett, <i>Play</i> , 1963. Photograph from the first English production, Old Vic, London (1964).....	292
Figure 65. Samuel Beckett, <i>Not I</i> , 1972. Video still from "BBC2, The Lively Arts: Shades, Three Plays by Samuel Beckett", filmed with Billie Whitelaw (1975). ....	292
Figure 66. Samuel Beckett, <i>Happy days</i> , 1961. Photograph from Alan Schneider's production with Billie Whitelaw, Cherry Lane Theatre, New York.....	292
Figure 67. Barbara Knezevic, <i>Beckett, An exercise in omission</i> , 2010.....	296
Figure 68. Barbara Knezevic, <i>Beckett, An exercise in omission</i> , 2010.....	296
Figure 69. Barbara Knezevic, <i>Beckett, An exercise in omission</i> , 2010.....	296
Figure 70. Damien Hirst, <i>Breath</i> , 2000. Video.....	299
Figure 71. Damien Hirst, <i>Pharmacy</i> , 1992. Mixed media installation. Tate Modern Gallery, London.....	299
Figure 72. Damien Hirst, <i>Waste</i> , 1994. Mixed media installation.....	299
Figure 73. Damien Hirst, <i>Crematorium</i> , 1996. Mixed media installation.....	299
Figure 74. Adriano and Fernando Guimarães, <i>Respiração Mais</i> , 2004. Photograph from Teatro Funarte Plínio Marcos, Brasilia (2011).....	304
Figure 75. Adriano and Fernando Guimarães, <i>Respiração Menos</i> , 2004. Photograph from Teatro Funarte Plínio Marcos, Brasilia (2011).....	304
Figure 76. Adriano and Fernando Guimarães, <i>Respiração Embolada</i> , 2004. Photograph from Teatro Funarte Plínio Marcos, Brasilia (2011).....	304
Figure 77. Adriano and Fernando Guimarães, <i>Balanço</i> , 2011. Photograph from Teatro Funarte Plínio Marcos, Brasilia.....	304
Figure 78. Nikos Navridis, <i>First love, a song and the yogi</i> , 2007. Installation, East Room, Tate Modern Gallery.....	309

Figure 79. Nikos Navridis, <i>Tomorrow will be a wonderful day II</i> , 2010. Installation, Old Parliament, Athens. ....	309
Figure 80. Nikos Navridis, <i>Breath</i> , 2005. Installation, Arsenale, LI Bienale de Venecia.....	309
Figure 81. Bruce Nauman, <i>Slow Angled Walk (Beckett Walk)</i> , 1968. Black and white video. ....	315
Figure 82. Bruce Nauman, <i>Lip Sync</i> , 1969. Video. ....	315
Figure 83. Bruce Nauman, <i>Elke Allowing the Floor to Rise Up over Her, Face Up</i> , 1973. Video.....	315
Figure 84. Bruce Nauman, <i>Tony Sinking into the Floor, Face Up and Face Down</i> , 1973. Video.....	315
Figure 85. Vito Acconci, <i>Running Tape</i> , 1969. Performance recorded in audio.....	320
Figure 86. Vito Acconci, <i>Breath In (To) / Out (Of)</i> , 1971. Video.....	320
Figure 87. Vito Acconci, <i>Flour/Breath Piece</i> , 1970. Film. ....	320
Figure 88. Vito Acconci, <i>Open Book</i> , 1974. Video.....	320
Figure 89. VALIE EXPORT, <i>Breath Text: Love Poem</i> , 1970, 1973. Performance.....	324
Figure 90. VALIE EXPORT, <i>The voice as performance, act and body</i> , 2007. Performance.....	324
Figure 91. VALIE EXPORT, <i>Der Schrei</i> , 1994. Installation.....	324
Figure 92. VALIE EXPORT, <i>Glottis</i> , 2007. Video installation, LII Biennale di Venezia. Video installation. ....	324
Figure 93. Marina Abramović, <i>Freeing the voice</i> , 1975. Performance. ....	333
Figure 94. Marina Abramović, <i>Freeing the body</i> , 1976. Performance.....	333
Figure 95. Marina Abramović, <i>Breathing In, Breathing Out</i> , 1977-1978. Performance.....	333
Figure 96. Marina Abramović, <i>AAA-AAA</i> , 1978. Performance.....	333
Figure 97. Marina Abramović and Ulay, <i>Nightsea Crossing</i> , 1981-1987. Performance.....	334
Figure 98. Marina Abramović, <i>In Between</i> , 1995. Video. ....	334

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**Index**



## Index

### A

Abramović, Marina, 5, 28, 29, 182, 228, 232, 234, 276, 279, 282, 284, 286, 287, 288, 289, 292, 304, 326, 330, 331, 333, 335

Acconci, Vito, 5, 28, 227, 232, 276, 277, 278, 279, 280, 287, 292, 304

Adorno, Theodor 95, 101, 104, 263

aesthetics, 17, 97, 122, 290, 331, 332

air, 4, 9, 20, 23, 26, 37, 39, 72, 116, 125, 139, 147, 148, 151, 152, 153, 154, 155, 156, 157, 158, 159, 161, 163, 166, 168, 169, 170, 171, 172, 178, 179, 180, 182, 183, 184, 190, 191, 193, 201, 203, 204, 206, 209, 210, 211, 213, 214, 215, 216, 217, 218, 219, 220, 238, 245, 246, 248, 249, 250, 252, 257, 270, 272, 273, 280, 282, 286, 300, 301, 304, 338

analogical, 76

*anapnoe*, 151

Anaximenes, 19, 152, 153, 159, 202, 217, 332

*apana*, 158

archaeology, 36, 42, 43, 317

Aristophanes, 285

Aristotelian, 156, 220, 256

Aristotle, 4, 37, 42, 44, 58, 151, 154, 156, 171, 172, 187, 217, 218, 230, 233, 239, 245, 267, 311, 326

Artaud, Antonin 5, 12, 25, 38, 46, 225, 230, 231, 240, 241, 242, 243, 244, 257, 290, 323

*asphyxia*, 21, 27, 173

Atharvaveda, 159

*Atman*, 158

augmented reality, 4, 18, 58, 78, 112, 114, 115, 139, 140, 141, 142, 143, 307

Avant Garde, 12, 73, 107

### B

Bachelard, Gaston, 26, 38, 39, 62, 116, 117, 120, 185, 211, 249, 250

Barthes, Roland 26, 38, 82, 83, 236, 237, 245, 246, 282

Baumgarten, Alexander, 86, 134, 184

Beckett, Samuel, 5, 22, 26, 27, 28, 46, 56, 57, 191, 198, 226, 227, 244, 253, 254, 255, 256, 257, 258, 259, 260, 261, 262, 263, 264, 265, 266, 267, 268,

269, 270, 271, 272, 273, 274, 275, 279, 287, 291, 292, 295, 303, 307, 311, 317, 318, 319, 322, 324, 325, 329, 333, 334, 335, 337, 343, 346, 348, 349, 351

Benjamin, Walter 80, 98, 101, 102, 248, 262

Beuys, Joseph, 111, 232

binary, 72, 73, 77

biofeedback, 3, 18, 40, 64, 89, 91, 124, 125, 128, 137, 144, 146, 298, 299, 302

blow, 151, 153, 178, 180, 188, 189, 247, 277

blowing, 165, 189, 190, 194, 215, 218, 277

bodily, 16, 17, 34, 47, 88, 91, 124, 136, 137, 155, 161, 163, 183, 218, 222, 224, 245, 246, 247, 251, 253, 282, 284, 299, 300

body, 3, 4, 5, 9, 10, 11, 14, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 31, 34, 35, 36, 37, 38, 41, 42, 43, 45, 47, 56, 57, 63, 64, 72, 77, 78, 79, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 95, 104, 106, 115, 118, 119, 121, 122, 124, 125, 126, 127, 128, 129, 130, 131, 132, 134, 135, 136, 137, 138, 142, 143, 144, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 158, 160, 161, 163, 164, 165, 166, 167, 168, 169, 172, 173, 174, 175, 176, 178, 179, 180, 181, 182, 183, 184, 186, 187, 188, 191, 192, 193, 194, 195, 196, 198, 199, 200, 201, 203, 206, 207, 208, 209, 210, 211, 213, 215, 217, 218, 219, 220, 221, 225, 226, 227, 228, 229, 237, 238, 240, 241, 242, 243, 244, 245, 246, 250, 251, 252, 254, 255, 257, 259, 260, 262, 263, 264, 265, 266, 267, 268, 270, 271, 274, 275, 277, 279, 280, 281, 282, 283, 284, 287, 289, 290, 291, 292, 295, 296, 297, 298, 299, 300, 301, 302, 304, 305, 306, 307, 332, 333, 341, 346

Bourriaud, Nicolas, 11, 36, 96, 97, 107, 108, 205, 206, 260, 261

*Brahman*, 158, 160

breath, 4, 10, 11, 12, 13, 14, 16, 17, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 31, 32, 37, 38, 39, 40, 41, 45, 46, 47, 49, 52, 53, 55, 56, 57, 89, 90, 91, 111, 114, 119, 120, 121, 124, 125, 126, 133, 134, 137, 138, 144, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172,

173, 174, 176, 177, 178, 179, 180, 181, 182, 184, 186, 187, 188, 189, 190, 191, 192, 193, 194, 195, 197, 198, 199, 200, 201, 202, 203, 204, 205, 206, 207, 208, 210, 211, 213, 214, 215, 216, 217, 218, 219, 220, 221, 224, 225, 226, 227, 228, 229, 232, 235, 237, 238, 239, 240, 241, 242, 244, 245, 246, 247, 248, 249, 250, 251, 252, 253, 256, 257, 259, 260, 262, 263, 264, 265, 266, 267, 268, 269, 271, 273, 274, 276, 277, 279, 280, 281, 282, 283, 285, 286, 288, 289, 290, 291, 292, 295, 296, 297, 299, 300, 301, 302, 303, 304, 307, 308, 332, 335, 338, 341

breathe, 55, 56, 60, 183, 184, 203, 204, 207, 208, 289, 330, 345

breathing, 12, 18, 19, 20, 21, 22, 23, 24, 28, 29, 38, 39, 41, 53, 55, 56, 63, 64, 90, 94, 95, 121, 122, 125, 126, 127, 128, 133, 134, 135, 136, 138, 140, 147, 152, 154, 156, 157, 159, 161, 162, 163, 164, 165, 167, 168, 169, 170, 171, 173, 174, 176, 177, 178, 179, 180, 181, 183, 184, 188, 189, 191, 192, 193, 194, 197, 199, 200, 201, 203, 204, 206, 207, 208, 209, 210, 212, 213, 215, 216, 218, 219, 220, 225, 227, 228, 232, 237, 238, 239, 240, 241, 242, 247, 248, 249, 250, 251, 252, 257, 259, 261, 264, 265, 266, 267, 268, 269, 275, 276, 277, 278, 280, 285, 287, 288, 289, 290, 291, 292, 300, 301, 302, 303

breathlessness, 20, 22, 27, 29, 46, 129, 148, 149, 172, 173, 174, 175, 176, 199, 219, 300, 307, 332, 342

Bush, Vannevar, 80, 81

## C

Cage, John, 17, 115, 117

Calvino, Italo, 26, 246

Caravaggio, Michelangelo Merisi da, 258

Cartesian, 18, 47, 64, 85, 92, 95, 119, 167, 175

Cartesianism, 85, 86, 87, 89, 96, 153

Casanovas, Anna, 45, 59

Cavarero, Adriana, 38, 246, 247, 315

Certeau, Michel de, 81, 82

Clark, Lygia, 4, 21, 129, 149, 150, 181, 182, 183, 184, 186, 220, 302, 314, 332, 342

*Co-creation*, 337

code, 3, 23, 72, 77, 78, 108, 111, 118, 120, 121, 130, 131, 132, 140, 142, 165, 296

communication, 4, 18, 21, 22, 46, 48, 52, 59, 64, 67, 70, 106, 107, 110, 127, 128, 129, 132, 133, 134,

136, 137, 138, 181, 210, 213, 234, 243, 244, 257, 291, 302, 304, 341

computational, 119

computer, 13, 47, 62, 63, 67, 70, 74, 76, 77, 78, 79, 80, 81, 84, 92, 93, 94, 104, 106, 120, 130, 132, 142, 263, 299

corporeal, 9, 11, 12, 13, 14, 19, 20, 24, 26, 32, 37, 47, 55, 66, 78, 88, 95, 106, 134, 138, 144, 146, 156, 161, 166, 172, 196, 197, 211, 214, 217, 220, 221, 235, 237, 246, 269, 273, 274, 275, 292, 302, 304

Cruelty, Theatre of, 25, 225, 243, 257

cyberspace, 34, 92, 102, 111

## D

Dadaism, 102

Dadaist, 112

data, 64, 76, 77, 83, 91, 92, 109, 110, 111, 112, 124, 125, 127, 130, 131, 135, 136, 138, 139, 140, 341

Davies, Char, 4, 18, 39, 106, 118, 119, 122, 123, 124, 125, 258, 302, 317, 324, 339, 341

death, 4, 21, 22, 138, 149, 150, 154, 164, 168, 172, 173, 174, 175, 176, 179, 184, 197, 198, 199, 219, 220, 226, 256, 257, 263, 270, 286, 291, 303

Deleuze, Gilles, 258, 271, 277, 318, 323

dematerialization, 16, 33, 47, 51, 54, 66, 68, 72, 84, 116

dematerialized, 299

Democritus, 19, 153, 154, 217

Descartes, René, 85, 86, 104

device, 77, 79, 95, 106, 126, 133, 137, 139, 140, 141, 274

digital, 3, 4, 10, 11, 13, 14, 16, 17, 18, 23, 24, 29, 33, 34, 35, 36, 40, 41, 47, 50, 51, 52, 57, 58, 59, 62, 63, 66, 72, 76, 77, 78, 84, 91, 95, 99, 101, 103, 105, 109, 114, 130, 141, 142, 213, 296, 299, 301, 302, 306, 311, 315, 316, 336

dualism, 64, 90, 95, 167

Duchamp, Marcel, 17, 100, 107, 114, 178, 314, 324

## E

East, 4, 19, 38, 85, 89, 166, 167, 172, 225, 238, 239, 268, 290, 321

Eastern, 3, 17, 20, 22, 23, 25, 28, 37, 39, 64, 89, 121, 147, 153, 164, 166, 194, 208, 209, 218, 219, 220, 225, 228, 240, 282, 288, 290, 300, 301

emptiness, 70, 114, 208, 284

*episteme*, 74

*eros*, 286

ethereal, 4, 14, 37, 205, 209, 274

exhalation, 122, 125, 155, 163, 164, 214, 216, 225,  
250, 251, 256, 262, 285

exhale, 136, 158, 180, 183, 191, 201, 213, 214, 246,  
257, 269, 270, 289

EXPORT, VALIE, 5, 28, 39, 227, 232, 280, 281, 282,  
292, 304, 330, 334, 350

## F

feminism, 218, 300

## G

Gibson, William, 92, 318, 335

Grau, Oliver, 36, 95, 104, 105, 120, 121

Greece, 59, 149, 164, 167, 191, 203, 229, 230, 269,  
338

Greek, 4, 11, 19, 22, 26, 37, 39, 44, 45, 50, 73, 74,  
85, 147, 151, 152, 156, 157, 158, 168, 172, 177,  
186, 188, 192, 193, 204, 208, 217, 220, 230, 239,  
246, 248, 300

Greeks, 26, 152, 195, 247, 248

Guimarães, Adriano and Fernando, 5, 27, 227, 264,  
265, 266, 270, 292, 337

## H

hacker, 110, 111, 112

Hackers, 112

hacking, 17, 47, 64, 111, 112, 298, 307

hacktivism, 111

Heidegger, Martin, 16, 34, 39, 74, 75, 92, 93, 120,  
169, 170, 171, 172, 174, 175, 176, 186, 195, 198,  
219, 286, 295, 314, 320, 321

Hippocrates, 154, 155, 218

Hirst, Damien, 5, 27, 226, 262, 263, 265, 270, 291,  
337

Homer, 26, 152, 247, 248

Homeric, 152, 247, 249

Husserl, Edmund, 16, 34, 86, 87, 104, 332, 345

hypermaterial, 71, 72

hypermateriality, 16, 33, 34, 66, 72

hypertext, 16, 48, 51, 63, 79, 80, 81, 82, 99, 120, 336

## I

ideologies, 110, 298

Ihde, Don, 11, 17, 34, 93, 94, 96, 320

*Illusion*, 36, 104, 123, 318, 319

immaterial, 3, 4, 9, 10, 11, 13, 14, 16, 17, 18, 19, 21,  
23, 24, 29, 31, 32, 33, 34, 35, 37, 39, 43, 45, 46,  
47, 51, 54, 58, 62, 63, 64, 66, 67, 68, 70, 71, 72,  
73, 77, 79, 81, 88, 91, 92, 96, 102, 109, 114, 115,  
116, 121, 139, 142, 143, 146, 148, 150, 156, 166,  
179, 186, 200, 209, 217, 220, 221, 267, 295, 296,  
298, 299, 300, 301, 302, 304, 305, 306, 332, 337,  
338

immateriality, 9, 13, 14, 16, 21, 32, 33, 36, 37, 39,  
41, 46, 66, 67, 69, 70, 71, 72, 76, 79, 84, 91, 105,  
112, 116, 156, 177, 178, 182, 201, 217, 221, 234,  
269, 298, 299, 303

immersant, 122

immersion, 18, 104, 340

India, 157, 158, 162, 238, 239, 347

Indian, 4, 11, 19, 25, 39, 45, 147, 157, 158, 160, 161,  
162, 166, 168, 218, 240, 286

information, 10, 11, 16, 19, 21, 23, 32, 34, 39, 48,  
51, 52, 57, 59, 62, 66, 67, 70, 71, 72, 75, 76, 77,  
79, 80, 83, 84, 92, 95, 99, 103, 104, 108, 109, 110,  
111, 112, 132, 139, 140, 141, 142, 143, 146, 155,  
160, 180, 215, 251, 255, 280, 296, 297, 298, 306,  
307, 349, 350

inhalation, 122, 164, 213, 250, 251, 254, 256, 262

inhale, 23, 125, 158, 163, 173, 201, 213, 257, 219,  
259, 285

interaction, 10, 14, 16, 17, 34, 48, 51, 57, 68, 70, 71,  
100, 109, 121, 126, 127, 128, 129, 131, 132, 138,  
139, 143, 144, 181, 217, 232, 237, 261, 269, 290,  
292, 297, 299, 301

interactive, 11, 14, 16, 17, 18, 32, 33, 34, 41, 63, 64,  
74, 87, 89, 90, 91, 93, 95, 102, 103, 104, 105, 125,  
126, 128, 130, 131, 133, 135, 137, 138, 143, 144,  
177, 221, 235, 237, 297, 299, 328

*Interartive*, 3, 47, 48, 49, 50, 51, 52, 56, 58, 167,  
184, 204, 211, 335, 336, 337, 338, 342, 348

interface, 78, 93, 131, 349

interfaces, 63, 92, 327, 332

Internet, 47, 62, 63, 70, 78, 80, 83, 99, 110, 139,  
140, 141, 142, 143, 298

Irigaray, Luce, 4, 20, 38, 39, 148, 166, 167, 168, 169,  
170, 171, 172, 188, 190, 204, 211, 214, 218, 286,  
300, 323, 346

**J**

Jauss, Hans Robert, 25, 96, 100, 237

**K**

Khut, George, 4, 18, 40, 91, 106, 125, 126, 127, 128, 129, 175, 251, 302

Kimsooja, 4, 23, 149, 205, 206, 207, 208, 209, 220, 303, 330, 343

Klein, Yves, 17, 39, 46, 116, 117, 118, 187, 207, 302, 322, 337

Knezevic, Barbara, 5, 27, 226, 261, 262, 291, 341

Kollath, Edith, 4, 23, 149, 209, 210, 211, 212, 213, 220, 303, 336

Kozel, Suzan, 135, 136

**L**

language, 5, 18, 21, 22, 25, 26, 27, 77, 79, 106, 144, 151, 173, 204, 206, 217, 220, 224, 225, 226, 227, 233, 236, 237, 240, 242, 248, 249, 258, 260, 263, 269, 271, 278, 280, 281, 290, 291, 292, 300, 303, 344

Laskaridou, Sophia, 44

LeWitt, Sol, 17, 116

life, 3, 4, 10, 19, 20, 21, 25, 38, 39, 43, 46, 56, 62, 64, 73, 74, 78, 91, 100, 103, 104, 105, 110, 116, 129, 130, 131, 142, 143, 144, 147, 149, 150, 151, 152, 153, 154, 157, 158, 159, 161, 164, 168, 169, 170, 171, 173, 175, 176, 178, 179, 180, 182, 184, 188, 189, 190, 191, 192, 193, 194, 197, 198, 199, 201, 204, 209, 211, 213, 214, 216, 217, 220, 226, 232, 234, 243, 244, 246, 248, 250, 253, 256, 257, 263, 265, 270, 277, 280, 282, 286, 291, 297, 298, 299, 300, 301, 302, 303, 306, 307, 317, 336, 341

Lippard, Lucy, 16, 33, 68, 69, 71

literature, 12, 13, 26, 44, 50, 56, 83, 247, 344

*logos*, 11, 23, 26, 28, 38, 74, 166, 170, 242, 256, 273, 281, 336

Lovejoy, Margot, 35, 77, 103, 298

Lytard, François, 16, 21, 33, 70, 71, 76, 85, 86, 97, 344

**M**

Malevich, Kazimir, 17, 114

Manzoni, Piero, 4, 21, 149, 177, 178, 220, 302, 330

material, 4, 9, 11, 12, 14, 17, 21, 24, 33, 36, 43, 44, 52, 56, 62, 63, 67, 68, 69, 72, 76, 84, 85, 91, 93, 99, 105, 107, 153, 154, 156, 171, 177, 180, 189, 197, 214, 216, 217, 238, 245, 250, 255, 257, 265, 280, 298, 299, 301, 332

materiality, 9, 14, 17, 24, 33, 37, 43, 63, 68, 69, 114, 116, 119, 189, 245, 282, 296

meditation, 11, 20, 91, 121, 124, 126, 138, 161, 163, 164, 194, 275, 284, 287, 288, 292, 304

Merleau-Ponty, Maurice, 11, 16, 34, 87, 138, 174, 186, 235, 332

Middendorf, Ilse, 209, 210

Mignonneau, Laurent, 4, 18, 40, 106, 129, 130, 131, 132, 133, 134, 302, 328

modernism, 37, 44, 98

modernist, 44, 107, 290

**N**

Nair, Sreenath, 39, 155, 159, 160, 161, 162, 235, 237, 239, 241, 243

Nauman, Bruce, 5, 28, 39, 227, 232, 270, 271, 272, 273, 274, 275, 276, 292, 304, 325, 343

Navridis, Nikos, 4, 5, 21, 27, 45, 46, 149, 171, 186, 187, 188, 189, 190, 191, 192, 193, 194, 195, 200, 207, 220, 227, 262, 267, 268, 269, 270, 292, 303, 326, 330, 337, 338, 345

*Neuromancer*, 92, 119, 318

Nietzsche, Friedrich, 230, 231, 242, 325

**O**

odour, 38, 184, 342

online, 32, 40, 47, 48, 49, 50, 51, 52, 53, 56, 57, 58, 59, 70, 73, 76, 80, 86, 103, 109, 110, 112, 123, 141, 142, 143, 152, 178, 180, 202, 204, 211, 230, 262, 273, 277, 284, 297, 310, 320, 325, 326, 331, 332, 333, 334, 335, 336, 337, 338, 340, 341, 342, 344, 345, 346, 347, 348, 349, 350

Oriental, 158, 347

**P**

participant, 40, 322

participation, 11, 14, 17, 18, 19, 58, 59, 64, 69, 75, 84, 90, 92, 95, 99, 100, 102, 103, 106, 109, 144, 216, 235, 299, 306

participatory, 17, 84, 89, 337



Penone, Giuseppe, 4, 21, 149, 177, 180, 181, 220, 302, 330

performance, 4, 11, 12, 14, 18, 22, 24, 25, 26, 27, 28, 31, 33, 37, 38, 39, 41, 46, 49, 88, 100, 102, 115, 134, 135, 138, 160, 173, 207, 222, 224, 225, 226, 227, 228, 229, 231, 232, 233, 234, 235, 236, 238, 239, 240, 243, 244, 253, 255, 260, 264, 265, 269, 275, 276, 278, 279, 280, 281, 282, 283, 285, 286, 288, 289, 290, 292, 296, 299, 300, 301, 303, 304, 306, 307

performative arts, 134, 135, 138, 234

performativity, 24, 52, 225, 230, 235, 236, 237, 290, 301

phenomenological, 3, 4, 10, 16, 19, 20, 25, 34, 36, 43, 47, 64, 84, 89, 90, 91, 92, 93, 95, 122, 127, 129, 134, 144, 167, 172, 175, 176, 184, 196, 219, 235, 251, 297, 298, 300, 320

phenomenology, 11, 17, 34, 39, 41, 64, 68, 84, 89, 90, 93, 95, 96, 148, 174, 175, 235, 298, 320, 332, 346

piracy, 111

Pirate Bay, 109, 110, 331

Plato, 74, 85, 153, 155, 192, 218, 233, 246, 285, 286

Platonic, 155, 158, 247

*pneo*, 151, 247

pneuma, 151, 152, 247

poetry, 26, 38, 56, 120, 126, 152, 173, 231, 232, 247, 248, 249, 250, 251, 252, 263, 276, 301, 333, 338

postphenomenological, 11, 93

Postphenomenology, 17, 34, 64, 93, 96, 320

postproduction, 11, 303

*prana*, 158, 159

*Pranayama*, 161

programmers, 47, 77, 111

programming, 36, 47, 74, 79, 91, 130, 296, 298

*Psyche*, 151

*psycho*, 151, 156, 247

## R

Raaf, Sabrina, 4, 23, 149, 213, 214, 215, 217, 220, 303, 339, 351

ready-mades, 107

remix, 3, 17, 29, 48, 84, 107, 260, 296, 303, 341

remixing, 36, 64

reproduction, 3, 5, 76, 79, 80, 101, 130, 131, 261, 277, 291

respiración, 62, 336

respiration, 11, 12, 19, 22, 26, 53, 56, 151, 154, 155, 156, 158, 160, 161, 178, 179, 182, 210, 214, 226, 251, 252, 266, 299, 303, 333

respirational, 19, 210, 212, 218, 300, 302

Rigopoulou, Pepi, 37, 148

## S

*samana*, 158

Sappho, 6, 9, 26, 172, 249, 280

scenic arts, 22, 24, 235, 237, 268

Schiphorst, Thecla, 4, 18, 40, 106, 134, 135, 136, 137, 138, 302

Schneider, Alan, 258, 259, 319

Shanken, Edward, 35, 73, 94, 103, 105

silence, 17, 115, 117, 229, 249, 267, 274, 284

Situationism, 111

Situationist, 107, 112

smartphone, 46, 78, 135, 139, 141, 143, 299

smell, 21, 62, 86, 150, 181, 184, 185

software, 11, 14, 18, 29, 35, 62, 67, 74, 77, 79, 81, 84, 98, 105, 108, 119, 126, 140, 177, 221, 296, 302

Sommerer, Christa, 4, 18, 40, 106, 129, 130, 131, 132, 133, 134, 302, 328

soul, 19, 26, 37, 38, 85, 151, 152, 153, 154, 156, 158, 159, 162, 165, 178, 211, 217, 245, 247, 250, 351

speech, 12, 26, 28, 38, 133, 158, 159, 169, 215, 222, 225, 227, 237, 242, 243, 244, 246, 247, 248, 249, 250, 252, 254, 258, 259, 264, 265, 266, 273, 274, 278, 280, 281, 291, 292, 300, 344

Stiegler, Bernard, 16, 33, 71, 72

Stratou, Danae, 4, 22, 149, 201, 202, 203, 204, 205, 220, 303, 335

suffocation, 219

## T

tablet, 141

tablets, 46, 84, 135, 299

teatro, 311

*techne*, 73, 74

technology, 3, 10, 13, 16, 32, 35, 36, 37, 40, 41, 44, 47, 52, 54, 62, 63, 64, 66, 73, 74, 75, 76, 78, 84, 85, 88, 91, 92, 93, 95, 98, 103, 104, 105, 106, 108, 118, 125, 128, 130, 131, 132, 135, 136, 138, 139, 143, 144, 146, 195, 213, 217, 220, 221, 295, 296, 297, 298, 299, 302, 329, 338

*thanatos*, 286

theatre, 4, 12, 24, 25, 26, 27, 28, 38, 46, 56, 117,  
207, 208, 224, 225, 226, 227, 229, 230, 231, 233,  
234, 238, 239, 240, 241, 242, 243, 244, 253, 254,  
264, 269, 270, 290, 291, 301, 303

theatrical, 5, 13, 25, 26, 27, 39, 70, 224, 225, 226,  
227, 229, 230, 232, 235, 236, 237, 238, 239, 240,  
243, 244, 254, 255, 256, 258, 260, 264, 267, 269,  
270, 287, 291, 301, 303, 307

theatricality, 24, 38, 225, 230, 235, 236, 237, 256,  
288, 290, 301

*Theory of Reception*, 25, 45, 100, 118

*Thymos*, 247

Torres, Francesc, 4, 21, 149, 177, 179, 220, 302, 329

## U

*udana*, 158

Ulay, 29, 284, 286, 287, 324

Upanishads, 159, 160

## V

vacío, 330

vanguards, 17, 37

Vedas, 159

vida, 324

video games, 34, 78, 84, 99, 120, 143, 297

Viola, Bill, 4, 22, 27, 39, 149, 195, 196, 197, 198,  
199, 200, 201, 220, 303, 316, 333, 334, 346, 347

virtual, 3, 18, 29, 32, 34, 36, 42, 50, 51, 54, 74, 78,  
79, 81, 83, 84, 93, 94, 96, 99, 112, 115, 119, 120,  
121, 122, 123, 124, 139, 142, 144, 242, 298, 302,  
307

virtual reality, 18, 34, 36, 79, 119, 139, 302

voice, 5, 12, 24, 26, 28, 29, 38, 72, 80, 126, 225, 226,  
227, 228, 229, 237, 240, 244, 245, 246, 247, 248,  
249, 250, 252, 253, 254, 259, 265, 266, 268, 271,  
273, 274, 276, 278, 279, 280, 281, 282, 283, 284,  
287, 288, 289, 290, 291, 292, 300, 301, 302, 304,  
338

void, 4, 17, 21, 29, 114, 116, 117, 118, 170, 171, 172,  
186, 187, 189, 190, 195, 207, 211, 220, 284, 286,  
295, 305

*vyana*, 158

## W

Warhol, Andy, 111

whisper, 55, 56, 273, 274, 276, 278, 279

Wikileaks, 110

## Y

Yoga, 157, 161, 162