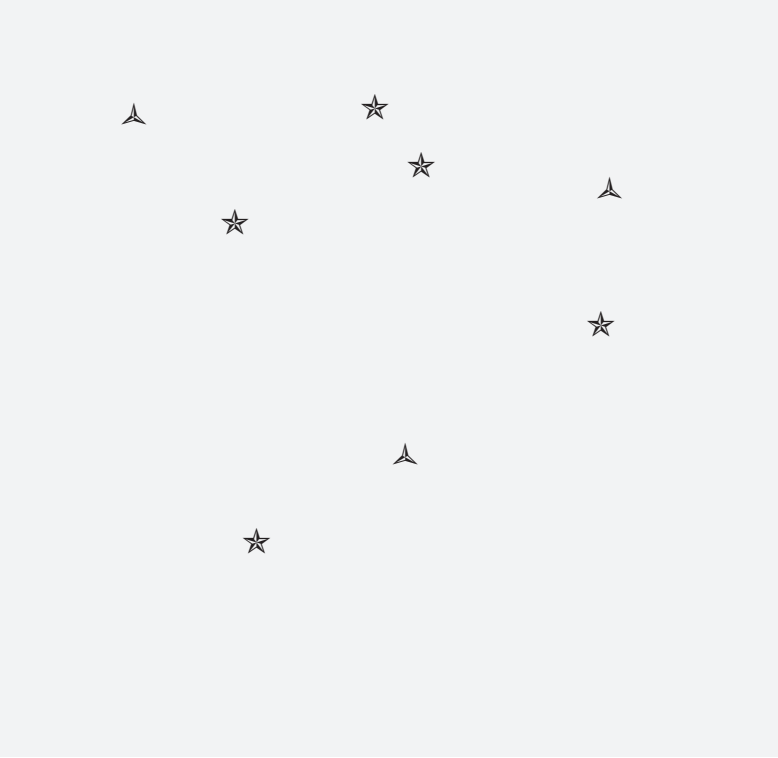
The Molyneux Problem*

Five backstage stories — and a map of why and how



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⋆ The titles come from the book *The Techniques of the Observer* on Vision and Modernity in the Nineteenth Century by Jonathan Crary (1992, MIT Press). On page 58 he describes the Molyneux problem. As stated in Crary's paragraph, the best formulation of the problem is Locke's. And he quotes:

> Suppose a man born blind, and now adult, and taught by his touch to distinguish between a cube and a sphere of the same metal, and nighly of the same bigness, so as to tell, when he felt one and the other, which is the cube, which is the sphere. Suppose then the cube and sphere placed on a table, and the blind man be made to see: Quaere, whether by his sight before he touched them, he could now distinguish and tell which is the globe, which the cube?

Summary

My practice based doctoral project in fine arts is a content-driven process that is grouped into three main components that are at the same time inter-linked. These three central elements are:

– Working with Natural Science Collections
– Working in direct relationship with the natural landscape
– Working with random existing patterns

The inquiry into these topics is explored mainly by using drawing as a thinking tool, that is using drawing as a methodology for artistic thinking. The text and the work make a strong emphasis on process, the process of thinking the work and conceiving the projects; but also on the process of making the work, the material construction of it, and the specific problems that this entails. The learning experience plays a central role in the text and it is a goal in itself.

The text tries to contextualize my practice by taking into account my formative context and the impact that my artistic education has had on my practice.The text describes my practice as a process-based practice, which gives special attention to the experience of having been immersed in certain situations (collections, landscapes and random patterns) which are always charged and empowered by a significant investment of time.

The text gives a general description of the above-described methodology, which then becomes more clear and explains in detail the five projects which are organized as the five chapters of the structure. There are five projects described within the text. These are: *UBX expression, Scale 1:2.5, Lévy's Flight, Meditation Piece* and *50 Meters Distance or More*.

The doctoral process convinced me both of importance and also the great opportunities in drawing as a tool for artistic thinking. It made me want to invest even more time and energy to move slowly into the nuances of the medium.

Contents

1
Introduction

The story has to start from somewhere.

I started this trajectory slowly in 2005, although I had been thinking for a while about the possibility of doing a doctorate and trying to work out where and how. At that moment I was conducting two large projects in collaboration with the collection of the Geological Museum in Amsterdam, and at the time I believed quite strongly that my doctorate would be about interventions in natural sciences museum collections along with interdisciplinarity as a subject matter.

Over the years I began to realize that the aforementioned approach was only one side of my practice, a side that had to do with a very peculiar process that I was undergoing in those years, a long process of adjustment to a new country, a new culture, and being immersed in a different understanding of art-making and its systems than I had previously been used to. These had a huge impact on my practice and the development of it over many years. After a while I realized that my work and interests were in fact broader and less fixed than I had thought, and my doctoral work should not give account only of a small part of it.

For many readers this might be difficult to imagine, but: for a South American, artistic and historical collections, museums, libraries, and all other European material heritages are very, very eccentric and even exotic. Only now can I see that my attraction to such institutions was obviously related to the fascination of seeing those collections on that scale for the first time.

At some point, I started suspecting that I would prefer that my doctorate be about the philosophical problem of the tension between sameness and difference. I thought that I would reopen the category of sameness, and via means of representation, I was hoping to make evident that it is impossible to enclose the complexity of nature into departmentally tight categories. My point of departure was that most of what we find in Natural Sciences collections are schemas of how the samples look in nature, with one pattern that is supposed to identify the pattern of all butterflies, zebras, tigers, shells or fossils. Whereas in reality, if we look at endless numbers of cases, we would find equal numbers of variation in these patterns, simply endless variation. This was an ambitious topic to tackle, and it guided me through at least half of one of my artistic projects (entitled *UBX expression*).

It was a decent rationale which lasted until, one day when I was having a conversation with my friend Amalia Pica, an Argentinean artist whom I met when she did the Rijkskademie in 2004/2005. I was finished with the program by then, but I still lived in town. Surprisingly she knew well one of my best friends in Cordoba and I knew well one of her best friends in Buenos Aires. Those coincidences set the frame for the quick development of a long-lasting friendship. Amalia is from the south of Argentina, from a place call Cipoletti. While I was describing the entire construction of a project, she looked at me and remarked: "Tell me the truth: at the end of the day, what you want is just to make drawings." I looked at her, both surprised by and petrified at her sharpness at realizing that I wanted to focus on drawing rather than on the issues of natural sciences collections and their devices and problematics of schematization. Those big topics became in a glimpse absurdly pretentious and I timidly answered her: "Yes, but don't say it to anyone."

At that point, I more or less came to believe that the doctorate would be about drawing as a method, and about the specificity of drawing. This had always been a crucial aspect of my work, but never until then had I thought about it as a main topic of the doctorate. I started thinking that the doctorate would explore why it is that drawing seems to be the only way, at least for me, to learn about certain morphological and physical phenomena. This realization conferred on me a new understanding of the projects on which I was already working.

Perhaps I should say here that before coming to Europe, my work was about landscape—as in natural landscape; places that have been untouched by people and are not inhabited, not even

as farms or for any other human activities. I came from a city that is surrounded by beautiful mountains, and my practice consisted very much in taking walks and drawing the landscape I witnessed. I was very influenced by people like Hamish Fulton, the "walking artist," as he defines himself—an artist who since the early 1970s has taken walks through landscapes and brought into exhibition space diagrams, notes, and photographs which came from those trips. Born in almost the same year was Richard Long, an artist whose work is very closely related to landscapes, taking walks, taking action in the landscapes and bringing elements from the landscapes into exhibiting situations. Not very surprisingly I was interested as well in Robert Smithson, an artist who was born almost a decade before the others and who was one of the founders of the art known as earthworks or land art.

In January 2002, when I relocated to Amsterdam, I realized that the notion of natural landscape, as I knew it, no longer existed there, but that landscape was rather an artificial thing that men could modify and determine. There, my interest slowly moved into natural science collections, into the pieces themselves—I worked with crystals, fossils, insects, and so on.

That led me into quite a number of projects whose outcomes varied according to each project. Sometimes they resulted in a series of small sculptures, and sometimes in a series of drawings, but in all the cases the material outcome was the consequence of a long-term engagement with the chosen collection—materially and socially. One of these projects made its way to my doctoral structure (*UBX expression*). As the issue of working with natural science collections was at the core of my proposal since the beginning—and it is still—I thought it important to include one project of this kind in the text. I would not have found it challenging to include an accomplished project and therefore I decided to start a new one, that I would address from the beginning with the awareness that it would have a textual and reflective component. I decided to work with a collection in which I had been interested for a long time, a collection I already knew quite well—I knew what it materially held as well as the people who work there. That gave me the confidence that I could navigate the project in depth.

UBX expression was a project carried out in the Entomological Collection at the University of Amsterdam. The research focused on the morphology of insect patterns. I sat in that collection for a number of months drawing butterfly wing patterns. The outcome of the project was 120 drawings of 8 × 8 cm.

After quite a number of projects using Natural Science collections as a point of departure; I started longing again to confront, with my work, the experience of nature. So far I have managed to do three projects engaged with landscapes.

Lévy's Flight is a project departing from a field trip in Hawaii's National Park. The trip focused on realizing a series of drawings of lava formations at the site. After returning from the field trip, I made a series of clay pieces reconstructing fragments of the Hawaii landscape.

Meditation Piece began with an invitation for making a piece based on Allan Kaprow's scores. The project would entail at least two stages: a research trip and an exhibition. I decided to work with one of the Kaprow scores called *Meditation Piece* in creating my own meditation piece. The parameters were to make a trip to Egypt's white desert with the aim of collecting only one stone. Back in my studio I would draw the same stone every day from the same point of view for one month. The outcome was thirty drawings of 30 × 30 cm.

50 Meters Distance or More started with a trip to the Antarctic. On 6th January, 2010 I departed from Ushuaia, Argentina toward the Antarctic territory in the sailboat *Spirit of Sydney,* with seven other people. The trip lasted twenty-six days altogether. During the expedition, I intended to draw landscapes with icebergs and glaciers I expected to see during the trip. Weather and space constrictions, cold, snow, rain, the boat drifting, the boat changing locations, the reduced space, and the impossibility of returning

to shore—all became part of the process and the project. I did return with a series of pencil on paper drawings and a small series of water-colors.

I would like to mention that during these past seven years I have created more projects than the ones here described. I have chosen to discuss here a number of projects that I thought could help in describing a variety of issues present in my work. The inclusion of works of different natures in my doctoral project prompted me to decide to avoid forcing any rigid coherence in the doctoral trajectory, and rather to let it unfold in a 'natural' way. During the doctoral process I was tempted more than once to focus only on one side of the work, understanding that this could make the description of it much easier; but I kept deciding that the struggle of trying to put the complexity of it together was also the most interesting part of the process.

One strong thread in my work has to do with random organization; forms that are out there not by chance, but that are shaped following a certain logic—a material logic which is assisted by time (through erosion), by material tension (like asphalt on the streets breaking open); and by human unintentional actions (for example in the traces we leave behind when we paint a wall white, or hammer nails into it). Patterns are formed for a variety of reasons and it can be absurd to spend time noticing them. But they are there, in our daily experience, and they generate endless variations and permutations of forms.

I decided to include in the doctoral trajectory one piece that was related to this strand, a piece that was the result of an invitation to do a site-specific piece at a place called Outline in Amsterdam. For this piece, I decided that I was going to use the texture of all the walls of the exhibition space. The system for doing so would be 'frottage,' placing paper on the wall and rubbing it with a square graphite bar. The frottages were to be photographed and printed on matte paper, 30 × 30 cm, or four times smaller than the original paper. The photographs were displayed for the show in the exhibition place on the same walls where the frottages were made. The exhibition was called *Scale 1:2.5*.

These pieces have been exhibited in different locations, some of them more than once. *UBX expression* was exhibited first at Apex Art, New York, in 2008, as part of the exhibition "Nameless Science"; in 2009 in the exhibition "Planet of Signs" at Le Plateau, Paris; and in 2010 as part of the exhibition "Asteroide B612" at the Museum of Modern Art (MAM), Mexico DF. *Scale 1:2.5* was shown in 2008 at Outline, Amsterdam. *El Vuelo de Levy (The Lévy's Flight)* was exhibited at Montehermoso Art Centre, Vitoria-Gasteiz in 2009 and in 2010 at Motive Gallery, Amsterdam: in both cases as solo shows. Part of the installation was exhibited at the show "Planet of Signs" at Le Plateau, Paris, and another part was shown in 2011 at Fondation d'entreprise Ricard à Paris as part of the exhibition "Beyond the Dust." The *Meditation Piece* was exhibited in 2009 as part of the exhibition "A Fantasy for Allan Kaprow" at CIC, Cairo. *50 Meters Distance or More* was shown as a solo show at Labor Gallery, Mexico DF in 2011.

Some of these pieces will be exhibited at BAK (Basis voor Actuele Kunst) from 20 August through 25 September, 2011 as a part of my final doctoral work.

Again, the story has to come from somewhere. I suppose it is impossible to describe what shapes a practice into its form at any given time. But there are ingredients, at least in my case, that are hard to deny. During a conversationt with a French artist, Raphaël Zarka, few months ago, he told me how amazing it was for him to go to Brazil and see that large butterflies could be found flying instead of being pinned down in a collection. I looked at him thinking that his experience was the exact opposite of mine, or at least of what was mine something like eight years ago, when I was used to seeing butterflies in the field rather than pinned down in a drawer inside a cabinet inside a huge display inside a research collection in an Entomological Museum.

My practice can be described as process-based, which means

that it has to do with having been developed step by step, with one aspect leading to the next, and with having an inherent logic which will produce a formal outcome, rather than a formal logic. I will explain this at length later in this text, when I discuss my methodology specifically.

It is a process that has a daily studio practice, and it is anchored in a material practice, meaning that it is very much part of my practice to establish a dialectical relationship with materials, to feel their needs and limits, rather than to disassociate from them and produce art conceptually, on a computer, for example. I can also say that my practice is interdisciplinary, not in that it exists in many disciplines, but in that it sources from different disciplines. And it is landscape-oriented.

A practice, like any other, does not come out of the blue. It has a reason to be that can be partly explained and traced, which I will do in the subsequent analysis.

1.1
Background Part I

This story comes from somewhere.

It started in a city in Argentina called Cordoba, where I was born; it is the second-largest city in the country. It is a university town that gathers thousands of students from the northern area of the country. Cordoba is the metaphorical center of the north, partly because, in Argentina, universities are still public and are therefore highly populated.

In general, the place where one learns how to be an artist has a major effect on both person and practice. The place where I took my first steps was the University of Cordoba, where I engaged in five years of studies and a year of developing a thesis (which, coincidentally was about "contemplation and landscape"). At the university, the degree was approximately forty percent theoretical and sixty percent practical (skills acquisition). My first two years were spent holistically, in painting, sculpture, printing, and drawing. By the third year, we chose one area as a focus. I chose painting, as drawing was not an eligible area, and it seemed that painting was the department that offered more freedom and a more open understanding of the medium's specificity, the department which was more open to artistic experimentation by students. By the third year, students slowly start moving toward an individual practice, always strongly imprinted in a curriculum and a 'frame' in the sense that the professors had a very strong idea of what painting should or should not be. In the third year my professor was very strongly influenced by expressionist and figurative painting and it was quite hard for him to consider anything else as painting.

The space that each student was provided for working was something like one square meter. The best characterization of the spaces altogether is as a jungle, as in a place in which must focus on finding means of survival, space-wise. In order to find a spot

to work, students would have to go to the classroom twenty minutes in advance. It was also conceptually a jungle, in that it was very difficult to make sense of all of the different discourses and criteria that we heard from our professors. In this jungle, students built up their own understandings of what an artistic practice is or could be.

This jungle might have been a good thing. It did give students many different options, and one important thing we learned was to develop our own criteria for and ideas of what art could mean to us and how to navigate the process of learning in such an art school. At the university I met some extraordinarily smart people and, importantly, some very artistically conservative people. On one side, people who purported that everything is conceptual, and on the other side, who maintained that painting is painting only when the layers of paint are thick and show expression.

My first drawing professor still laughs at me remembering how at the very beginning of his course I went to him and asked him for extra working exercises because I felt the assigned task was too hard to be accomplished. The task was to draw a paprika. He still wonders what I saw in that paprika that scared me so much. And yes, there is something in the universe of the paprika that still impels me to do work. It still contains that universe of infinite variations that forms can have. The paprika itself, the complexity of it, the folds, the shines, the way in which the light reflects or is absorbed by it is a whole universe to be observed. And no matter how many paprikas or stones or lava formations I look at, or how many traces on the floor I map, or how many pieces of glass I break, they will always be different, and never will one of these elements be fully similar to the other. This dynamic of difference and repetition is still one of the central axes of my work.

So, we had the expressionist jungle in one side, and we had the theory department in the other side, and the paprika somewhere in between. This was an art school that existed alongside the departments of philosophy and humanities, and of theater, music, and cinema. This meant that one could cross the university campus and sit in a philosophy class or in a history class for a semester (which I did more than once). Within the visual arts curricula there were five required years of history of art (beginning with European History and ending with Argentinean History), in courses like "Problematics of Art" students read works ranging from authors such as Theodor W. Adornoto Michel Foucault. This was the side of the university that was the opposite of the expressionism: the thick paint and Adorno. It was very complicated for students to figure out how to put the two sides together.

Important to mention is the fact of a generational gap in the schools of art due to the history of dictatorship in Argentina (which stretched from March 1976 until December 1983); an entire generation that would bridge the generation before and after it is missing. The artistic thinking process was sharply limited. Among the smaller implications of that violent and dramatic story, but relevant in this text, are that my artistic references were either people who were seven to ten years older than me, or thirty years older. It might be difficult to understand how this could influence someone's practice and education. It is hard to imagine it, but a sure outcome was the feeling of a broken narrative in the understanding of cultural history, an abrupt cut which prevented the traces of a disruptive history from flowing through the story. There was a disconnect between an older generation whose art conceptions where very difficult to engage with, and a much younger generation (barely older than the students) which developed ideas of what art should be that were almost too strong, in that they only believed in the conceptual side of it. As a young artist I felt the need to believe in one of them, to take one of the sides. At that stage, I took the conceptual side, and as will slowly be revealed throughout this text, it took me many years to come to terms with both parts of my practice: the conceptual side and the material side.

My art school is situated in a city where the art institutions are (or were at that time—fortunately it is changing) almost nonexistent, or at least did not exist in a manner that was relevant for young artists and did not contribute to the imaginary of what an art practice would entail. There were scattered artists' initiatives that

were inclined to disappear after a few years, though some lasted. There was no substantial gallery scene, a rather conservative contemporary museum (now improving), and a very strong Spanish cultural center (the only one with resources in the city, but a bit inaccessible for proposals).

It sounds like a horror scene for an artist, but it was not, or was not necessarily so. It was a scene that led to a non-competitive structure and to a rather thoughtful type of practice among artists in the city. There was no urgency to finish work, but there was a strong urgency to make work. And this was combined with a long, strong tradition of thinkers and writers, normally associated with the university and with a strong influence in the art scene. The result was a group of makers and thinkers with what one could call a process-based practice. A group of people to which, in a way, I still belong.

Not to be forgotten is that Cordoba is culturally autonomous. There are other cities with strong cultural presences, such as Rosario, but the scenes are pendular to Buenos Aires. Argentina is a centralized country. Only Cordoba and one other city, Tucuman, shares the characteristic of having quite a strong art scene, or artists who develop their practices there and do not move to Buenos Aires, refusing to depend on such centralized structure.

And then there is the landscape. In a city like Cordoba, people go to the countryside every weekend both as children and when older. Wealthy or not, everyone does it, either going by bus to the river or by going to a house in the countryside. Becoming a teenager entails engaging in more daring walks and hikes, camping, and crossing the mountain chain from one side to the other.

Going to the countryside and learning how to be an artist were hand-in-hand experiences, again reflective of a long tradition of landscape painters in the region.

And that is the way the story started for me: in that city or at least in the way I lived in that city.

1.2
Background Part II

And then came the Rijksakademie in: Amsterdam, in the winter 2002. I came from the opposite side of the ocean with an opposite idea of being an artist and an opposite idea of landscape and found myself in a studio, in a white cube, with no windows. A studio. A studio separate from my living place, which renders art-making work, as in having a job: being in my studio is work. The studio became a space that was no longer in the garden of my house, but rather in a white cube. Instead of taking a break by watering the garden, I take a break by looking at a white wall.

I wondered about the landscape in that environment. Was my work about landscape before—was that the subject? What else could it become if landscape were no longer there? Should I build up a landscape? And then a long process started: a long series of exercises, somehow autistic (in the creation of sets of autonomous rules that would not depend on external factors), a series of actions that would lead in one form or the other to, wrapping up with thread all the tools in my studio until I could no longer use any. I hammered thin nails onto the wall, creating some weird optical effects; I created spaces with almost invisible white threads going from one side of the wall to the other; I put powder in a corner of the studio and made random forms on it with a spinning top; and so on. As I said, this was a series of somehow autistic exercises stemming from my attempts to find a new system and a new subject. The most extreme of them was making ceramic balls which measured between 3 mm and 10 mm during my first three months at the Rijksakademie. I was thinking about how to materialize, and whether it is possible to materialize, the passage of time. I still have a plastic container full of them, with a note from the head of the ceramic department saying, "balls of the Argentinean girl." I always kept them in that, a memento of that moment of utmost confusion—when I could not rationalize the tiniest bit of what I was doing and I was intuitively reacting to the new situation in which I found myself.

All that time I was wondering what one could learn from making, from the action of making and which thinking processes could be awakened by certain actions. Is one's thinking a consequence of what one does? What does one do, then, to generate ideas? I thought about the process in different ways during that time. I tried to look at it in a performative sense, thinking that I could involve my presence in the piece, as the one making the actions; I tried to document the actions by filming them and once I even tried to have the public watch the actions as in a performance. None of those seemed to be the solution. The goal was obviously not to create an 'image' out of those actions, but rather to spark a thinking process. I felt that the thinking process was interrupted the moment I let public into the room, while the documentation of it did not succeed in communicating the experience. At the end I always opted for the material outcome of the actions (the balls, the outlined powder by the spinning top, or the hammered nails) as the evidence and result of them.

My own methods, which had triggered my processes before coming to Europe, were not productive any longer. What now? Would ideas come through the repetitive act of kneading clay? I had the idea that these types of actions would lead me into some kind of thinking process, into new ideas. I was used to activating ideas in the contemplation of nature, or at least in the slow passing time of watering my mother's garden. I was trying to find a similar state of contemplation by repetitive actions. What if I did it over and over again? It would be annoying to be meditative, but probably also too mechanical to become something else.

I remember once, when I was in the middle of working on the clay ball piece, I called a colleague, Kiran Subbaiah who was at the Rijksakademie with me, to look at the piece to tell me what he thought. He said, "It's nice but I would do only one." I asked why. He answered, "Because I don't like to feel like a donkey." He was of the idea that making 'a ball' would be enough to let the idea come across.

Smart man… I still have to think about his comment at times. Do I feel like a donkey? Well… no, but I do believe in some kind of learning curve that builds up in the repetition; some kind of accumulation of knowledge that is hard to describe but definitively happening while working.

It took me a while to come to terms with the idea of trusting the 'material world.' I moved to Amsterdam with a very fixed conception of art-making. I strongly believed the often-referenced notion that ideas had to come before practice, and I could not do any action without having a clear program about what it would follow conceptually and why. It took me months to allow into my system the possibility that "actions might sometimes come first," a notion that came to be the cornerstone of my approach.

And it took many more years to understand that I am neither solely conceptually based nor solely action-based, but rather am both. I need both sides of the equation, and sometimes one is more predominant than the other, and sometimes they work together.

By the end of that first year at the Rijksakademie, I began to realize that the artistic 'insight' I sought was not going to come any time soon, or not in the ways I expected. I decided to settle for one artistic action and really work at it, to find out where the practice would take me.

The action I settled for was to create a site-specific installation using the space of my studio. The work incorporated the traces of three different actions that could be identified as three different elements in the space. The first action was mapping all the scratches, marks, and traces that existed on the floor of the studio. I re-marked them with a waterproof pencil. The second action was making one-to-one replicas of the irregularities on the walls. I duplicated these little marks next to the original, generating a sort of echo of each of them. The third action was a drawing all around the space. I drew the mirror images of the cut shadows from the gap between the floor and the skirting. The holes and disparities were all over the room. These actions were extremely absurd, and they left an almost invisible piece of work.

The process of documenting the piece and making a publication (as I subsequently did) opened up the process of trying to

systematize minute and endlessly different objects. What opened up this mental space was, in a way, a lucky coincidence. The piece was extremely difficult to document as it was almost white, colourless, and formless, so I needed to find a photographer who was familiar with archaeological documentation. The photographer, Rene van der Weerd,was extremely systematic and mapped the whole room step by step, and frame by frame. He created a mapping system by which he could organize himself in that micro-universe of minute traces. Watching him working and watching the results helped me to understand what I was trying to do, which was to create systems that would allow me to record random, subjective responses. I was trying to generate systems for grasping those invisible nuances, to map something which is essentially impossible to delimitate.

This work connects more obviously with some of my other work (such as *Scale 1:2.5*, –described in chapter 4), but it did imprint in me a new understanding of my own practice and open up further artistic steps.

The first year of my experience in Amsterdam left a taste of confusion in me and culminated in an idea of how to continue, while the second year proceeded via a programmatic series of works. In the second year, I developed another process-based work, an installation called *Tlon*. The process consisted of five different subprojects that I systematically worked on during the year, and that resulted in an installation: five tables on which I placed different pieces, and which I presented in my studio in the Rijksakademie. I called them tables A, B, C, D, and E. Each part of the process was archived in a metal box that was designed and made specifically to accommodate the content it was meant to hold/display. Each of the tables contained one of those archives and some elements on display.

On table A, I installed an archive that contained a series of line drawings. The drawings describe a little pebble from twenty-four different angles. I made a series of fifty drawings. The idea was to comprehend how an object that looks very simple at first glance becomes extremely complex when examined carefully, how an object changes when seen from different perspectives, and, finally, how a bunch of little stones that all look the same contains an immensity of nuance if you observe them in detail—which conveys the idea of difference in resemblance.

Table B was similar—it also held a series of drawings. The drawings were done in chiaroscuro. The object observed was quite different from Table A, in that I generated my own model. I threw colored glue onto a wooden surface, let it dry, illuminated it with side lighting, and made an observational record. I wanted to register how the same gesture, using the same materials on a similar surface, could generate endless numbers of results and infinite variations. This series also contains about fifty drawings. On Table C, the samples that I observed were the same, but my action was to reproduce them as small sculptures by direct observation. The sculptures were first made in plasticine and then molded in rubber. I presented the originals in a box and displayed the replicas separately.

Table D repeats the same structure of archive and display. I made a frottage on paper, from the wall of my studio, systematically, and then numbered the fragments and traced a diagram of them. I took photographs of each paper (positives of 6 × 7 cm). I then placed each positive between two pieces of glass, following the system of framing daguerreotypes.

On the last table, Table E, I again presented a box, thinner and larger than the others, the shape of which was suggestive of the boxes doctors used to hold their instruments in the old days. The interior of the box was divided into very small compartments, each of which contained a fake stone. These stones were made from clay and pigments, but looked very much like real stones.

The concretion of this piece reinforced an intuition I had from the year before: that somehow, what I was after was the development of systems that would allow me to get a grip on certain formal patterns of reality, patterns that I could at times self-generate (like the glue) or imitate (like the clay stones) or apprehend by depicting (like the small pebbles). I started to realize that my

working procedures were instances that I needed in order to understand and apprehend bits and pieces of the reality — making the work was in itself an investigation. I started thinking about my work in relation to the notion of models, as the instance of materialization between the thinking process and the world.

My work started to have a very similar appearance to natural history collections. I often presented the works in showcases or display systems that recaledl the settings of nineteenth-century natural sciences museums — my displays are effectively inspired by those collections. My attraction to those modes of presentation was not a priori, but rather the other way around — as I started building up archives and mapping systems, the visual resolutions of my pieces began to be associated with those collections. It was to me a logical consequence that I felt the need to visit natural history collections. If I worked with the methodologies and systems related to natural history objects, I felt I should also investigate those systems and see how they could influence my work.

It was truly fascinating for me to start finding all kinds of collections; one led to another. For a long while I did not understand what it was that attracted me so strongly to them. Ultimately, by examining the exploration from a distance, I realized that my fascination with these collections was their twisted and intricate exoticism. Such a systematic way of archiving was exotic to me. I could not understand what kind of drive would impel such an extreme desire for organization. I grew up in a context in which it was more common to be in touch with the natural landscape than with the natural sciences museums. It is not that they do not exist in Argentina, but they do not exist on the scale and with the importance in society that they do in Europe. On a Sunday in Cordoba most people would rather go to the river than to the museum. The natural museum historical heritage with such dimension and weight was new to me: I could feel in them the whole dimension of history, centuries of history, and also how the natural landscape was exoticized there, an inversion of how I had previously exoticized artistic museum collections. Looking at those collections was a way for me to understand the new culture in which I was living.

But overall, it is clearly beauty that attracted me: the beauty of all those nineteenth-century plates representing nature, the beauty of those glass models, of the optical instruments, of the display systems, of the crystal samples, of the micro-fossils, of the patterns of insects. I can still see the beauty of it, and it was all there — still, quiet, and semi-forgotten — to be looked at.

I ended up looking at the micro-level of the particular samples in the collections, instead of at the overall collections themselves. Why? Because my interest was not about the nineteenth century, the European Enlightenment, or colonization, but was rather in quite another direction: it was about representation, and the history of representation, drawing, and landscape.

How does one conciliate all those universes? It takes years to solve this question. And how does one benefit from or understand the benefits this exploration? It takes many years more.

The story I have told probably sounds quite logical, linear, and coherent as I have described it, but it was much more convoluted and confused while I was in the middle of it — and I will probably have another reading of it if I try to describe it again in five years. Again, it is probably impossible to pinpoint what causes a practice to be what it is. I could not guarantee, for example, that my tendency to make detailed, minute pieces did not come from something as basic as my father being a surgeon. The factors that make a practice what it is are not quantifiable; I will not ever be able to assess it and account for it, and in a way that ungraspable aspect of a practice is what keeps me going. It involves constant attempts (and inevitably failures) to keep doing while trying to understand what I do.

I like the idea that only one combination of factors could result in the combination of certain artistic influences and elements. An artist from Cordoba, Argentina, living in Amsterdam, The

Netherlands, I am only a sample of one, neither good nor bad. I sometimes see this circumstance as a positive, and sometimes as a negative. Sometimes I think I will never fully understand this scene in which I live today, and sometimes I think that fact gives me freedom. I do like to think that people condense their experiences and that all of those experiences are unique in their combination; this combination creates a cosmogony, which is, again, unique.

2
Method

2.1
Method of a Practice

In the following I will describe the central questions for my research. My working methodology can be grouped into a few different components:

– Working with collections
– Working with landscape
– Working with random existing patterns

A key influence in my trajectory is the issue of to the relation of time experience.
This takes place:

– In the material process
– In the accumulation of source material at collections
– In spending time in landscapes

The work builds up in the accumulation of experiences, source material, and stories. It grows through dialogue — with other artists, with people from a variety of disciplines, with materials, and with landscape.

What gets in and what is left out of the production processes is hard to measure, and creating a system for production is probably impossible. I am able to know what triggers my own ideas, what can be the tipping point of creation, and what opens a mental space for ideas to combine. Triggers for me have included learning botanical illustrations in a botanical garden in London, walking around that garden, talking to biologists, spending time in natural history collections, and reading landscape theory. But how do those experiences combine in the creation of a piece of art? That is seriously hard to describe. To me, it is about accumulation — accumulation of stories and material — and letting that accumulation sink and mature, waiting until it propels me into practice.

I cannot force experiences into artwork. Accumulation and patience are my method. I wait for experiences to remain under the surface of my thoughts until they become an urge to do something with them.

My written reflection departs from and is based on my own work — the material and written elements are both guided by the logic that the work itself establishes.

This understanding is based on my conviction that artistic practice can generate a certain type of thinking that can only be brought into being by practice. My writing deals with issues that arise from artistic practice. For me it does not have the ambition of becoming explanatory or theoretical, but rather of living in a parallel path that organically develops in dialogue with the visual work. I hope that my texts will help contextualize my art by giving the reader access to the mental space in which my work is created.

Nor is my work, or my writing about it, discursive in a literal, unidirectional way. If the work is viewed or the text read in search of a plain statement, the viewer or reader will most likely be disappointed. Rather than offer a clear statement, I would rather open a space for discourse, to disclose and expand, both in the show which will take place at BAK (Basis voor Actuele Kunst) in the city of Utrecht from 20 August until 25 September, 2011, and in the text.

The works, along with the texts, are, together, tools for thinking things through, for revealing ideas that I cannot otherwise develop and for casting light upon answers to questions to which I cannot respond in any other way. The exercise of attempting to describe what one does and how one does it is an exercise that is condemned to failure from the beginning. Having said this, I also have to say that writing did help me, even forced me, to see certain features and strategies that are entailed in the work.

I would like to describe the manner in which I wrote: many of the case studies are described in a diary-like style. I had loose

papers next to me while drawing or painting, and I kept writing while working, hoping to be able to represent the thinking process that is connected to the process of making. This writing exercise has become very much part of what I now do almost every time I work. The writing has become part of my practice, and thus is important to describe in this text.

This type of diary writing has historically been used in many fields, particularly in fields of knowledge that are dear to my practice — for example in traveling accounts. A short while ago, in chatting with archaeologist Gert Jan van Wijngaarden in my studio about this writing system, he mentioned that archaeologists use the same system in fieldwork — they record in writing everything that they find, even their moods. This data helps reconstruct the context of their finds.

It was one of my aims in this trajectory to develop a writing that stays very close to the artistic practice and that departs from questions implicit in it. To give a clear image of what I mean by this: I would recall a scene of sitting in an icy landscape, drawing in front of a beautiful view. After a couple of hours my fingers started freezing and my mind started pondering the old illustrators who depicted unknown landscapes in extremely difficult working conditions — and then my writing started going in that direction too. If I were to draw a time line showing the development of my work, there would be no text or inquiry that appeared ahead of the making of the art itself (or the attempt of making).

Writing during artistic practice helps me to keep focused on my endeavours, whether drawing, painting, sculpting, reading, researching, or learning — actions that lead toward thinking and other actions, but that also, in a way, allow me to think about other objects, associations, and connections. Writing does not allow me to distract myself from the question: What do I want to say with all this? Writing in the way I do — which is by simply describing what I try to do and from whence it comes — does not allow me to be distracted.

2.2
A labyrinthine path

I started this doctorate because I believed that I would find, via this platform, a manner in which I could talk about process, in which I could be open regarding the idea of process — to be transparent. I started because I thought it would be interesting, if not vital, to talk about the production of art in terms of reflection — as a reflective practice. There are a variety of other options for proceeding with a doctoral trajectory: I could throw my archive straight into an exhibition space and call it research; I could practice in the service of another field (meaning, I could nstrumentalize it); I could engage in institutional critique and talk about the problems of academia itself; or I could 'simply' engage in a reflective practice. And regarding the latter: Why not? Where else, if not in the context of a doctorate, could I do that?

From my years pursuing this doctorate, I have, at least, become more aware of the topics and methodologies within my own practice. I know that it is not about one subject, but rather about the overlap of many. It is neither landscape nor collection nor chaotic organization, but rather a parallel track among all of them that can converge and meet at various points. For me, the subject could be the Argentinean landscape, or it could be visiting natural science collections, or it could be representing existing material organizations on walls. It is about all of this, and the methodology that emerges through all these practices.

Another thing I learned is that I do not have to choose between being a studio artist and a conceptual artist. I can be both. And rather than having just one research question, the point for me is the exploration of *how* one builds a research question. How does one build up the mental space in which research questions arise? The questions confronting when engaging engages hands-on with the tools of visual art are of a very different nature from the ones found by, say, browsing the Internet or even a book. Not only is a piece of art different texturally and emotionally from the

Internet or a book, but also different are the ideas that come to mind while making the piece, which impacts the following processes, leading eventually to a body of work. Similarly, the progression of this doctorate could be followed as a construction of a set of questions that leads into new questions.

I am trying to pinpoint the difference between an ugly sculpture and a clean one, a sweaty fragile drawing and a neat one. A paper that was wetted by the rain in Antarctica versus a paper comfortably outlined in the studio — or even printed from a screen. I like to imagine that a certain intensity is condensed in the wiggly and marked paper. It is a drawing that might show the traces of a thinking process and not a drawing that is there to illustrate an idea. It is about a dialectical relationship between the thinking process and the materials. Because the action modifies the way one thinks, it is only natural that the procedure of an artist modifies the development of the work. Is this doctorate an apology to the old-disdained practice of craft-work? Is it a resistance to a system that encourages artists to speed up, to be effective and detached from a material practice?

I do not know, and I cannot really answer that question. But certainly the endeavour of the doctorate is a great attempt to try to understand a phenomenon, to recoup my own trajectory as coming from the place from which I also come. The challenge for me is to try to map my own practice in the comprehensive meaning that the word "practice" can have; this means that my quest is not to try to explain my work in a linear and coherent narrative, but to assume and work with the fact that the narrative is sometimes linear, sometimes associative, sometimes programmatic and sometimes none of these. There is not a necessarily and compulsorily a line to develop, but all the branches and threads there are elements of 'a logic' that can be labyrinthine.

2.3
Process

One of the reasons I decided to engage in this academic trajectory is because I do find it important to talk about process, about working as a thinking process, in both writing and in the pieces of art themselves. The outcome in both writing and visual art is the trace of a thinking process, and perhaps this is what makes it a process-based practice.

My art is about the process more than about the final product. It is about the process of thinking and the process of engaging with materials, chosen media, and techniques. Once the making is complete, the pieces are there, materialized and somehow less relevant for me than the process. There are visual traces of a set of variations, permutations, and concatenations of thoughts as well as of material and formal maneuvers.For me, one eternal question is: What do I do with the process — show it or hide it?

Also, I am interested in examining *why* it is the procedures and processes, both artistic and thinking, are what interest me. There is a certain quality of thinking that comes into being only by drawing, and certain thoughts that would not occur in any other way but by drawing. It is, of course, very hard to describe such an abstract process; the best way I could describe it is by talking about the concentration that is involved in the act of drawing from direct observation, to the intention of organizing what one sees into a form on the flat paper. From that concentration one can access a peculiar kind of thinking process that I could not imagine experiencing by any other procedure. In this sense, the act of drawing is an agent for triggering the thinking process. In explaining why I am so interested in this, I could try to allocate the answer in my own background and in the context in which I became an artist. It might be due to having grown up and studied in Cordoba. But more interesting than allocating the reason would be to inquire into what I could learn from the making process and why this could be relevant in the context of a doctoral

project Then, of course, it follows to inquire for who else it could be interesting.

When I started the doctoral trajectory in 2005, I understood my practice as research-based. Now, I would rather describe it as process-based. The idea of research seems quite foreign to my working means. I do spend hours and hours sitting in libraries looking at old plates representing nature, and perhaps that can be considered research; as, perhaps, can tracing information and stories by interviewing people from all the ranges of existing disciplines; as can the wildly different courses I take, the collections I have seen and want to see, the botany books I flip through and sometimes even read. Images, information, botanical knowledge, geological knowledge, museological knowledge, historical knowledge is all there in my process, mixed up haphazardly. This information is then sometimes incorporated into my works and sometimes not — most of the time it is not, and certainly does not go into an organized archive — which is why I am not inclined to call it 'research' but rather 'process.' This process is about learning and, again, about creating (or even forcing) a mental space that allows for the making of new works and the understanding of them in a different light.

Understanding the artistic process as a fixed form of research seems to me too inflexible in light of the procedures that actually take place, at least for me.

The most intense moment of process is, of course, the moment when I must figure out exactly what to do and how to do it functionally — the stage in which a system has to be established for a piece. After the piece is finished, the process becomes a story, the narrative of the trajectory of a piece. It is the telling of a story to reveal the piece's complexity, to make transparent the gradual pace of that piece's generation, to try to defend the fact that creating a piece is not a machinery of object-making but a complex set of procedures to facilitate its being. The narrative examination of the process is a slowing down of the experience of a piece, and the key word here is 'experience.' And the key notion for me is how forms and procedures are related to experience.

I tried, more than once, while installing a show, to bring with me all of my process material, which I always find incredibly interesting and beautiful. I tried to hang it on the walls, set it on tables, and so on. At the end of the installation process, I always opted to remove it as it somehow felt that it took away the strength of the pieces themselves — as if it revealed their secrets, and if it were shown in the same space and time, the power of the pieces would be tempered or lost. My decision instead has been to tell the stories of the art-making process in different contexts, such as in lectures or publications.

Why is process so interesting? To me it is interesting to consider the thinking process in creating art, and being able to think through experience that contributes to art. In the case of collections, it is the experience of the moment in which ideas build and interact with materials, in which thinking processes become entangled in the material process.

A fundamental question remains, for me: what is the impact on process of the passage of time and the continually growing distance from the making experience?

Since I became an artist, people have hammered into my head the idea of the necessity of having distance from a work. Is this distance really necessary? For whom is it so fundamental? Time is irrevocably passing, and the more important question is: how do I spend it? I focus on one thing or the other; with luck and effort I focus on a couple of them. Where am I going to concentrate my time and energy? The answer is that I chose to concentrate in the making itself and in the reflecting about it; in the learning curve that can be traced (hopefully) by experiencing a piece itself.

I seem to be constantly talking about the moments in which ideas are generated, moments in which questions are built and expand, moments in which I find a system and moments in which I find material and formal definitions of my pieces.

Is the exhibition stage outside of the learning curve? No, it is not, but it is another stage, where definitively some distance has grown between myself as the artist and my work of art, and

where I do not feel I can guide the viewers' understandings of the piece very far. I set a few parameters; I leave some traces and it is then the viewer who sees what they want to see. I have no interest in forcing a particular understanding of a work.

The exhibitions within this frame of thinking work as 'visual essays' rather than as statements. They are means of understanding how the pieces work in the space and in relationship with the other pieces, in order to open a mental space for the viewer to create his or her own reflections rather than a linear and didactical understanding of the pieces.

The primary questions relevant to this process component include: why does it make sense to talk about the making process? I would say, quite simply: to learn. And why to learn? And what to learn? Because learning about the complexity of elements that make a piece what it is, is important in order to avoid reducing art-making to a process of industrial production.

If I were to select an image to help explain this, the first one that comes to my mind is a mirage, often seen on desert roads, shining on the horizon and evaporating every time one gets close, just at the moment one thinks one can grasp them. To a certain extent, that happens similarly with art-making: I do a piece, I think I manage to understand the meaning of it, and one minute later I find out that the meaning was somewhere else. Or even more interestingly, I think I have done a totally new piece and very soon after I realize that the piece is similar to the piece before, and to the one before that one too.

2.4
Experience

Experience does not only seem to be the key word for my work, but also the magic word. Every time I mention experience in a text or in a lecture, people ask: What do you mean by experience? Can you explain further? For me, simply and commonsensically, experience has to do with "being there"—with having a physical and cognitive involvement in a situation. I am aware that *experience* has been a big topic in the history of philosophy, but I am quite comfortable with the understanding I have of it. But the questions regarding the nature of experience keep bouncing back to me again and again, and I become curious about the conceptions of others regarding experience.

When engaging this curiosity, I remembered that one of the objects that I brought with me when I came to live to Amsterdam, within my twenty-three-kilogram baggage allowance, was a philosophy dictionary, a Spanish one by Jose Ferrater Mora (1999), which when I moved I was sure I could not live without. Since I became an art-student, I have had the fantasy of being interested in philosophy. I took courses as an undergraduate, but I neverfound the patience to go through the philosophy books fully, and sometimes not even to go fully through Ferrater Mora's extensive explanation on the concepts. When thinking about how to describe 'experience,' I remembered my old ritual of checking Ferrater Mora for reference, so I did. His explanation (pages 1181/1188) of the term begins with talking about the commonsense explanation of it, which is not that different from what I described earlier. The explanation continues and becomes more and more confusing. After reading the five pages of definition three times, I began to understand more clearly why so many people emphasized that I must define what experience is for me.

One third of Mora's text focuses on explaining why it is so difficult to define experience. He solves it by giving an historical development of the term, from Plato to the Middle Ages, and modern times. In modern times, definitions of experience

become so diverse that the dictionary cannot even list all of them. In the different conceptions, overall, it seems to be important to distinguish between internal experience and external experience; also there is an important distinction between philosophers who thought experience was only a sensible experience, before reasoning, and people who thought that it could be part of the cognitive process. Francis Bacon and Immanuel Kant are the main references in the entry, in addition to the German idealists: Johann Gottlieb Fichte, Georg Wilhelm Friedrich Hegel, Henri-Louis Bergson, and, much later, William James and John Dewey. All possible understandings of experience are presented. The chapter finishes by saying that the concept of experience is one of the most vague and imprecise, and what philosophers must do, at the very least, when they use the term, is state to which type of experience they are referring to: whether it is an internal or external experience, or pure experience, or not pure and total experience, or particular experience.

I am not much less confused than before, but now I am at least aware of the complexity of my confusion and am wondering where, among that chain of concepts, I should place myself. Should I take Ferrater-Mora's advice? If so, I should say that I am presumably talking about an internal experience, which is total and not pure.

All this considered, the important thing for me is that I somehow feel the need to explain my trust in experience, presumably against the invisible enemy (probably a ghost I invented) of a rational, pure abstract thinking process; to explain the need to throw myself into experiences and then think through those experiences via my artwork and my writing. It is, in a way, 'a system,' through which I find my research questions and get closer to my subjects of inquiry. One example of experience for me is driving in an extremely gorgeous landscape with the idea of making a piece of art; from this arises questions about the modernist desire of apprehending a landscape, of bringing bits and pieces of it to the place in which I live — dioramas, panoramas, etc. — all of which seem to exist in a very clear shape when I drive across a lava field. How on earth I can show this beauty to someone else?

First, I decide to begin by making some drawings. Then, after awhile, I manage to decide exactly what to draw (not a small achievement), and sit in the lava field. An hour passes and I am still not even halfway done with the drawing. The sun burns, the wind annoys me, and I am nowhere close to being finished with the drawing. I wonder to myself how those artists of long ago did it. How did they create such complex landscape drawings, from direct observation,as they did in the nineteenth century in the Amazon, surrounded by mosquitoes and probably suffering from some kind of fever? What was the nature of their relationship with time, with physical comfort? Did they have schemas they followed to 'solve' the image faster like basic techniques for drawing an ocean, a river, a mountain? Only by taking a landscape trip and attempting to work with the lava fields, for example, could I begin to think about those questions. It seems to me to be a different way to access (probably the same) questions that art-historians might be asking themselves; another gateway to address similar inquiries and also another methodology to attempt to answer them.

Reading in a text that no butterfly looks like another is simply not the same thing as sitting and becoming acquainted with that fact by drawing twelve butterfly wings of ten different species, each drawing taking about an hour. The mental process is completely different in observing and drawing than in reading, and makes a huge difference in my work. I doubt the drawing would be the same even if I had taken photographs of the wings, printed them, and traced them with transparent paper or projected them. I am convinced that the drawing quality in that case would be different — no worse and no better, perhaps — just different. Even if we imagine that the drawings would come out the same, via the different techniques explained above, the thinking processes they entail would have been completely different. This understanding is reflected in how I construct a corpus of ideas and work; in how new ideas are generated during the working process — which

quite plainly is related to the issue of experience and how the cognitive process is modified by it.

Now I must discuss how this translates into the studio experience and how it relates to the negotiations I must establish with the material reality of the art-making. Reading Richard Sennett, I find some interesting reflections on the issue. He talks about the craftsman, but, am I one ? Thinking as a craftsman sometimes does not necessarily mean that I have to be a craftsman every day, but it means that I think and experience things through materials and making, and I trust that thinking and experience.

Richard Sennett, in his book *The Craftsman*, quotes John Ruskin on this topic (page 113):

> You can teach a man to draw a straight line; to strike a curved line, and to carve it… with admirable speed and precision: and you will find his work perfect of his kind: but if you ask him to think about any of those forms, to consider if he cannot find any better in his own head, he stops; his execution becomes hesitating; he thinks, and ten to one he thinks wrong: ten to one he makes a mistake in the first touch he gives to his work as a thinking being. But you have made a man of him for all that: he was a machine before, an animated tool.

For Sennett, Ruskin's draftsman will recover, and his technique will be better for the crisis through which he has passed. I find an interesting echo of this paragraph in the dialectical relationship that I establish with material and the working medium in the studio, and also an urge to reflect on it, even, at times, while I am working. Writing becomes, in a way, a reflection on writing too; painting, a reflection on painting and drawing on drawing. Presumably it is more effective and most probably faster just to go for a mechanical accomplishment of working procedures, but somewhere I also find an interesting challenge in decelerating the process, giving time and space to reflect on it—and in trusting that that will give a different insight into both the task and the outcome.

The subsequent step is to think about how all of these cumulated experiences and processes get into a shape that actually allows me to do work. I have mentioned the relevance of and my belief in experience, and in the material experience (if different from experience generally), the complexity of the working process, the twists and turns of the writing and the making in general. Now I must discuss how I proceed with finding a system within all these. And that is by trying to create a method.

The complex topic of experience is a hard one to tackle and understand. One of my attempts to do so was by the very practical procedure of doing a workshop on "experimental history." My aspiration was that by doing the course I was going to be able to deal further and more deeply with the topic.

2.5
Experimental History

Around the end of 2004 or the beginning of 2005, I became aware of "experimental history." I am quite sure it was via the librarian at the Teylers Museum, Marijn van Hoorn, with whom I used to talk extensively when I visited the library every Friday in search of old illustration plates on nature. Once I heard about it, I was advised to meet a specialist in the field, named Klaus Staubermann, who previously had worked at the University Museum in Utrecht. I went to talk to him once, twice, thrice… I became really interested in the practice.

"Experimental history" was then, and still is, a rather new field of knowledge that is based, as its name indicates, on experimentation. The idea is that via the reenactment of certain historical experiments, it is possible to understand such historical processes in a different way. For example, if one faced the problems that, say, Galileo faced when he invented the telescope, one would have a more precise understanding of what the telescope is and of who Galileo was than if one worked only with written historical evidence. I found that idea quite amazing in terms of a parallel to what I believe happens with art-making when it is related to handmade work. A certain type of understanding develops that has to do with, and that can only be manifested in, the experience of making, facing the limits and possibilities of the matter. It is an understanding that cannot be explained,but can only be understood by trial and error in the experience of making.

I kept thinking and reading about experimental history until it came to light that a summer course on the topic was being organized in the city of Utrech. I enrolled. It was the First Dutch International Summer School in the History of Sciences, held at the University Museum Utrecht under the title "Instruments at Work." The course took place in July 2005 in Utrecht (at the University Museum) for two weeks, all day every day, and we had all kinds of interesting experiences. I met people with whom I still collaborate, gained a lot of both useful and useless knowledge, and even gained a new understanding of how teaching could occur in my field.

About eighteen people did the course, of whom my colleague from *Uqbar*, Mariana Castillo Deball and I were the only two artists; the rest where astronomers, historians, and researchers from the scientific fields. The program was structured around a series of guests who were specialists in different instruments. They would come with a historical instrument or a prototype of it, and talk about it, let us handle it, talk more, and handle it more. This was a very practical way of understanding the way the instrument worked and what it entailed to use it, in what is often called "hands-on knowledge."

All kind of instruments: sextants, microscopes, telescopes, air pumps, solar microscopes, camera lucidas, magic lanterns, globes, and so on were present. The material construction of them, the different materials in different historical moments, the contexts of them, and difficulties in using them were discussed.

Did this endeavor make sense? What is its enduring impact on my work? A lot of it did make sense, while a lot of it did not. It did have a huge and long-lasting effect on my work and on *Uqbar*'s preoccupations and activities. I felt I found some kind of background that helped explain why it makes sense to believe in the material experience.

A small disappointment was in not being able to figure out how to translate the experience into a broader scope than the experience itself. My feeling was that the experience communicated successfully to those who were there, but that we would not be able to communicate what we learned and experienced to others. My hope was to find out how to overcome the gap in between the experience and the communication of that experience to others. The simple description of it does not solve the problem.

Spending two weeks listening to people talking about sextants, lenses and screws did not fulfill my ideal of listening to

people explaining how to transfer the knowledge. Much of it was about the frustration or success of the experiments in using the instruments in the past. The group was trying to recreate the spectacle of the solar microscope in order to try to imagine what it was like for the public then; but the public today has seen so much that it becomes difficult to recreate the experience. Still, the images, the visuals, and the attempt at understanding were beautiful.

I did not find what I had expected, but I found instead some great material. For example, I was introduced to the camera lucida for the first time, not as a conceptual abstract idea but as an object that I could touch and handle and look through. I met great people as well, including for example Bert Theunissen, with whom I still talk and from whom I often ask advice and Tiemen Cocquyt, with whom I have collaborated since then on different occasions and projects.

In terms of ideas, aside from the small disappointments and unanswered questions from the experience, I always kept thinking about the experts in experimental history who had such deep understanding and who believed in the issue of embodied knowledge. Throughout I have been aware that there was something that I could not really grasp.

Very recently I have got hold of it, precisely via the comments of one of the actors involved in that workshop and one of the readers of this very text, Bert Theunissen. I gave him this text to read along with the chapters that accompany it, and among his comments was a beautiful one that I have to quote here as it connects various threads together in a very meaningful way:

> Several of your projects testify to the 'resistance' of the world against our trying to get to know it (the arctic, the desert). Here is an important similarity with doing science of course: scientists are working hard to overcome such resistance all the time. I include what I think is a beautiful example: a scientist trying to repeat an historical experiment done by James Joule in the nineteenth century. 'Getting to know' means overcoming such resistance. In your case, you get to know an object by drawing it (which is like 'observing with your hands without touching') and you can't do that when you can't draw due to the instability of your position or of the object.

2.6
Artists initiatives and collaborations

An important aspect of my practice and vital in my methodology of work is collaboration with practitioners from different areas of knowledge, as well as with other artists. Over the past few years I co-founded two artists' initiatives that have been essential, not only for my development as an artist and as a person, but also for the creation of platforms on which I could expand and allow my practice to exist.

The older of this is *Uqbar*. In 2005 I created *Uqbar* along with Mariana Castillo Deball. Mariana is an artist from Mexico, who lived in Amsterdam when we started and who is currently living in Berlin. When we met in 2004, Mariana was doing a project in the Internationaal Instituut voor Social Geschiedenis in Amsterdam while I was doing a project in the Geological Museum, which is part of Artis (the Amsterdam Zoo). We engaged in continued discussions about working methods and even logistical constrains that we would encounter in collaborations with institutions which are not art-related and which are not used to working with artists. We decided to join forces and started plotting the birth of *Uqbar*. The name of the collaborative is based on a short fiction story by the Argentinean writer Jorge Luis Borges in the book *Fictions*; Uqbar is a fictional universe with its own rules and systems, a parallel universe. Such a utopian title served as the perfect metaphor for what we wanted to create.

Our *Uqbar* aims to generate a platform for interdisciplinary practice and discussion, creating a dialogue among artists, scientists, and institutions and developing new ways of collaboration. We strongly believe that it is important to expand the frontiers of art practice into other areas of knowledge and to generate new spacesfor production and discussion. This includes the way different disciplines and sections of knowledge approach the world, how those methodologies function, and how they contribute to building a collective notion of reality, all of which are are central questions for *Uqbar*. We consider that artistic practice generates a space, which is not based in specialization, but in an open gaze over the general state of our times.

Uqbar aims to explore this capacity, working toward a close collaboration with different areas of knowledge, individuals, and institutions, including museums, universities, archives, and libraries. During our years of working together we developed a few projects with expanded fields, organized and taught workshops, and even collaborated in the production of art-pieces.

Then, in 2006 we started developing a project called "A for Alibi", in which a group of artists was invited to develop a project, using as a base the collection of instruments from the Universiteitsmuseum in Utrecht, creating a productive tension among different historical moments. The questions the artists raised and the way they made use of the collection was completely different from an academic approach. We consider that "A for Alibi" contributed to the exploration of the historical line from a different perspective, thus creating another narrative and adding various layers of interpretation.

"A for Alibi" had different stages, including two symposiums, research within the collection, an exhibition, and a publication. The first symposium took place in May of 2006 and was held at the Universiteitsmuseum, and included recognized academics from the Max Planck Institute in Berlin. The symposium had a second stage on the occasion of the exhibition in 2007, when we invited lecturers from the Max Planck Institute in Berlin and the University of Oldenburg. As part of the program we organized a visit to the private collection of magic lanterns from Professor Peter Wassenar (in Holland). In this project we worked very closely with Tiemen Cocquyt, who will appear more than once throughout this text, and who was at that time one of the curators of the collection of instruments at the Universiteits Museum. Currently, he is a curator of a collection of instruments at the Museum Boerhaave in Leiden. Tiemen was a key figure in this project as he guided us and the entire group of artists in the

collection, not only logistically, but also by following and helping us to unveil the meanings of it.

The exhibition took place at the Art Center De Appel in July/August 2007. We also released a publication with contributions from the artists and academics who participated in the symposia. Within the publication, the artists' projects and the academic papers shared the same space, thus enforcing the conceptual and methodological connections between the different approaches.

The second large project we did with *Uqbar* was "Philosophical Transactions," which took place in Cordoba, Argentina, in April 2007. Philosophical Transactions used as a base the Historical Observatory of the city of Cordoba. This institution was the first observatory ever built in the southern hemisphere and indeed was the first reference point of the southern sky. The activity was organized as a ten-day workshop, in which practitioners from different fields were invited to do research within the museum's collection and archives. Parallel to the research, we organized a series of lectures that discussed various topics, such as representation in art and in sciences, the relationship of the observatory and the project of modernity in Argentina, the use of optical instruments in relationship with traveling expeditions in the XIX century, and many other topics. The output of the project was the workshop itself and a publication.

Last year, after doing three landscape projects on my own, and thinking for a while about their difficulties and potentials, I started talking to a friend of mine, Sebastian Diaz Morales. Sebastian is an Argentinean artist, also living in Amsterdam, who, like me, misses contact with and the experience of the natural landscape. We decided to start work together and slowly started to collaborate under the name of *RN3. RN3* is based on our common desire to explore the landscape as a physical, symbolic, and cultural space, based in the strength that collective experience can provide.

The name *RN3* is the acronym of, "ruta numero 3," meaning, "route number 3." Route number 3 is an Argentine highway that stretches down the eastern side of the country from Buenos Aires to Tierra del Fuego in the south. From start to finish it measures 3,045 kilometers, and it ends (literally) at the end of the continent.

RN3 will revisit locations, but also history. It is our aim to look back at traveling expeditions and to try to imagine how the landscape was understood by culture then and how we can understand it today. We focus on the process of experiencing the landscape. The traveling itself will be a central part of our projects and such experience will potentially modify the actors involved and eventually become part of the results.

I mentioned *Uqbar* and *RN3* because I do think it is important to understand that most of my projects are inscribed in a way of thinking about and perceiving artistic practice in terms of an ideological and social practice. This understanding must grow and develop along with others. Even if there is a side of artistic work that is extremely isolated and self-centered, there is also a strong aspect of if that has to do with an open conversation with others. This is why I consider workshops and teaching programs a strong part of my practice too. The doctoral work is for me, again, a mode of dialogue, a way of being able to talk about my work and the processes that are entailed in it. And, if nothing else, I am quite certain that this, along with the ambition (on a small scale) of encouraging an interesting dynamic in dialogues with others, will come across interestingly in teaching and iswill not be forgotten in the dialogue with interdisciplinary institutions and their actors.

I have witnessed on a tiny scale the way the people with whom I have worked in collections have changed their understanding of an artistic intervention via our interactions. I have seen distrust grow into curiosity and finally culminate in very enjoyable and long-lasting collaborations. The impact of such practice is quite small, but still exists, and is quite interesting in the sense that it does not stay only in the system of the art-world but expands a little bit further into other areas of knowledge, opening up a dynamic of dialogue which did not exist before.

The European artistic art-world is more enclosed and isolated in comparison to Argentina, where artists normally interact much more with society, simply because they normally need to have jobs which are outside the art practice. I am not making a moral judgment about which is better or worse, but am just trying to explain why I do have the urge to create situations where interaction and dialogue can occur.

For example, in the case of a project by *Uqbar* in the Observatory at Cordoba, Argentina, our projected created a precedent for the institution to work with artists, after which a number of artists approached the museum and worked with it. This is not going to change the history of humanity, but it did create an interesting dynamic and opened up a dialogue which was not there before.

At some stage of the trajectory I decided to start recording the interviews I kept doing with scientists. This was not that productive for me. The dialogue derives from whether or not further talks occurred, from whether or not the afterlife of a meeting that endured as an urge to go back to the person, from whether or not the interview ignited in me the need for a further search. Certain collections trigger something which I cannot explain immediately, which draws me to them again and again, until a more concrete urge to address them has built.. Transcribing the interviews as proof of my inquiries turned out to be a waste of time for me in the working progress. I realized that the impact of those dialogues on my thinking process relied on the afterlife of the stories that came out in the conversations. It was not about pure transcription, where I could cleanly recoup the data from those talks, but rather about the stories that remained in my head and ignited ideas. Transcribing the interviews became then a mechanical activity with no further implication in the work, and therefore I stopped doing it. Instead, I kept kneading the experiences of witnessing and dialogue until one of them gained force enough to become a project. Meanwhile, my experiences kept building up: a notebook that contained loose thoughts and potential projects to be done, an archive of images, an index of the collections I wished to see, names of people I talked to and descriptions of textures of landscapes I wanted to visit. It was an ongoing and continually growing gathering of working material. To make this process clearer, I will tell just a couple of relevant stories.

One day, in 2006, I visited the Department of Malacology at the Zoological Museum in the University of Amsterdam. Malacology is the branch of invertebrate zoology which deals with the study of the Mollusca — molluscs. I heard then, for the first time, that a very tiny percentage of snail shells exist that coil counter-clockwise, while the majority of them coil clockwise. At the time, I did not realize that this was something that could happen in other organisms in nature as well, but I thought it was beautiful that this rare case of exception could occur in nature. I treasured this piece of information for many years, thinking that at some point it would click with other ideas and I would be able to work with it.

In summer 2009 I heard, while doing a project at an entymological collection, about a course on something called "systematics biology" which is about how things relate, connect, and depend on each other in nature. At the time I was reading a biological book called *On Growth and Form*, by D'Arcy Thompson, and had been reading parts of biological books and articles on related opics for years. I was quite confident of my intelligence and capacity to jump into unknown areas of knowledge. I started daydreaming about taking the course, imagining all the kinds of interesting things I could find out in the course: the types of interesting people, information, and new ideas I would meet. It seemed a full universe of fantasies which would surely open up from there onward.

The congress lasted three days. It took place in the city of Leiden at the Leiden University Medical Center (LUMC). It was called "SYSTEMATICS, 7th Biennial Conference of the Systematics Association." Luckily it was a short one. I did not understand one single thing. I could not follow or assemble one single body of ideas. It was as good as being in a congress in Chinese for me.

The delegates spoke a foreign language. I could not even talk to people during the coffee breaks because I had no idea what their lectures were about. My only insight was a realization about how far specialization had gone in recent years. And I saw some beautiful graphs and images.

Some of the stories I have described above eventually unfolded in concrete projects. I am currently working toward the realization of two of them, as described in the following paragraphs.

Quite recently, I came across the same subject again. I visited NCB Naturalis to meet evolutionary biologist, Menno Schilthuizen. He showed me the collection he works with, and explained to me part of the research he was doing, which deals with the evolution of mirror images in snails, insects, and other animals and plants. It was through this that I realized that such mirror images form a widespread phenomenon in nature (known as chirality), and many organisms (like orchids, microfossils, and even humans) contain a (usually very small) percentage of mirror-imaged individuals. Menno suggested a book to read to get acquainted with the subject: *Right Hand, Left Hand: The Origins of Asymmetry in Brains, Bodies, Atoms and Cultures* by Chris McManus. This was a scientific text that could also be quite funny, but that was helpful in terms of understanding certain phenomena which were unfamiliar to me.

The term chiral is used to describe an object that is non-superimposable on its mirror image. Human hands are perhaps the most universally recognized example of chirality: the left hand is a non-superposable mirror image of the right hand; no matter how the two hands are oriented, it is impossible for the forms of both hands to coincide.

The account stayed with me; relapsed and returned with more force and I think it is now time for me to explore it via a project. It will be a project next year about chirality at NCB Naturalis. The planning started, involving: a lot of talking with Menno Schilthuizen, who strongly encouraged the project; an interview with Barbara Gravendeel, who works with the phenomenon in orchids and an interview with Tom Van Dooren, who researches the same subject in fish. There is a possibility of someone in Maastricht who works on chirality in micro-fossils, and of someone in Nijmegen who is a specialist in chiral molecules, both of whom I plan to contact.

The ideas have begun to build into a strong desire to dive into the subject. Menno and I started to work on logistics, made a plan, and I wrote down a project proposal. The museum is more than happy to host the project, so the correct conditions and desires are in place. The next step is to start spending time at the museum, on the collections and with the people working there, getting lost and trying to find my way. Presumably I will start in the second semester of 2011. By now, I could say, it has become a method. The first time I worked like this I thought I was truly lost and that the project would be a failure. Now I trust that getting lost is part of the process and I just have to focus enough and at the same time remain open enough—and sooner or later I will solve the riddle and my art will transpire.

The second happy case of a story that unfurls into a project which is currently in the process of being realized started long ago when a friend of mine told me about someone in Peru who is popularly called, "el Rey de la Papa" (the king of the potato) because he cultivates and preserves all possible existing varieties of potatoes in the region, of which there are 183. It sounded hilarious. Again, this fact stayed in my head for years. From time to time I would remember it and wish to do something with it. Four years later, I saw a chance through an open call that would give artists grants to develop and realize a new project. I thought it over and over again until I decided that I was going to apply and use this long-hoarded story. I applied and received the grant.

The project began to build from there onward, starting with planning a field trip to Peru, reading about potatoes, contacting an institution called, "El Parque de la Papa" (The Potato Park), finding out who they are, what they do, and whether I could collaborate with them; looking into another Institution called El Centro Internacional de la Papa (CIP) (The Potatoe Internacional

Centre); trying to get with "The King of the Potato"—who is proving to be quite hard to locate—and so on and so forth. The next step is to get to Peru, to see the archive that the The Potato Park hosts, to see the communities that cultivate potatoes, to talk to the researchers who keep the data on potatoes and travel to the village where I am supposed to find The King of the Potato. I'll be traveling there in May 2011 to start working on the project

My method is often similar to that described in the paragraph above: going to a place, getting lost in my own process, finding my way, assembling fragments together, creating a system within the confusion, starting to make sense of it, imagining a form the art could take, and beginning to move into production. The medium that the project would take and need is decided at a much later stage, after I have spent time in-situ and have begun making sense of what I have found.

My project, the *Lévy's Flight*, began with an accumulation of images of volcanic formations in a file on my desktop computer. It did not matter then where those forms actually existed. The accumulation was, rather, related to my desire to see various textures, and to see those textures in constant formation and change. sometime later, a project based on this started.

My works grows and develops through the accumulation of visual material, through the accumulation of stories which I find in dialogue with colleagues, and in wandering around in museum collections and talking to people there and in hunting for stories that can eventually trigger ideas.

2.7
A Kind of a lineage

My work does not often find references within the art world and the history of art but rather somewhere else, often in literature and in other fields of knowledge, like biology, geology, glaciology and so on. I do read (or browse) much more often in biology books than in art books.

Thinking of a reason for this (and often I do) I can only go back to my years of education in Cordoba. I grew up having no direct contact with contemporary art—direct as in looking at it in person. Sometimes I do wonder how the fact that I only saw contemporary art in books, without direct experience, might have influenced my being an artist. What one can grasp from the reproduction of images are very clean versions of what the pieces are. One thinks a Mondrian is clean, and the colors in his paintings are flat, until the moment one sees a real Mondrian and then realizes that one's Mondrian image was a fantasy. One loses sight of the irregularities and even mistakes that works have that that give them life.

So instead of viewing art directly—and I think many people do the same in similar situations—I watched many films and read many books. I fed my greed for art with media that do not need the experience of direct contact in order for the experience to feel real.

My encounter with art-history was through slides in my art school in art-history classes. The images were in plates in books, never larger than A4 size and on shiny paper. I saw the paintings by J. M. W. Turner and tried to guess what it might feel like to see those paintings in their reality; I tried to read through the flatness of the print in the shiny paper of the catalogue; I looked again and again at those images and forced my imagination into what could be behind that reflective piece of paper.

If I describe my encounter with contemporary art, I think in these two stages. First, as I said, was the stage of looking at slides

and shiny reproductions. Second was my move to Europe, where, interestingly, contemporary art was not one of my most artistically touching experiences. Seeing Goya for the first time was something to remember: the quality of the prints, the textures, the sizes, the opacity. The day I saw William Blake's painting was a day to remember and also Caspar David Friedrich and J. M. W. Turner. Those are memories that stayed very strongly in my mind, the days I saw and sensed the material quality of those works.

Also impactful was the day I saw how blue the blue of Ives Klein really is and when I saw the textures in Anish Kapoor's early work, his sensitivity toward materials. The most shocking was, in all those cases, was to discover that the pieces were not that clean, were not perfectly neat and spotless. The distance between the pieces and me disappeared. And that was a happy moment.

My material encounter with Claude Monet was a more recent and hilarious story. I went all the way to Paris to see his paintings last year. Paris, being Paris, was full of people sharing the same desire as me. I lined up outside the museum three hours before I could enter and see the paintings. By then I was so exhausted and the number of people in front of the paintings was so great that my idea of "contemplating" the paintings perished. My dream of seeing the paintings quietly and sinking into those surfaces vanished as soon as I finally entered. However, it still will not be easy to forget the delicacy of those paintings. The Rouen Cathedral series hit a spot in me; the sensitivity needed to perceive the slight changes in light is something I can very easily relate to (or would wish to relate to).

The other trick in transitioning from art school for me was to grow in a dialogue with other artists—always to try to create a community with whom I could discuss my process and surroundings. At the stage of being a student I was in very intense dialogue with colleagues, many of whom are still best friends of mine. These include: Paola Sferco, Letici El Halli Obeid, Laura Del Barco, Carolina Sen Martin, Sofia Garcia Vieyra, and Carina Cagnol (the last one a young professor who is still very close to and very influential on my work). These interpersonal experiences and habits linger in my practice today, and presumably that is why I continue to try to create small communities to work with (such as *Uqbar* and *RN3*). I needed then, and I still need, to create communities. In this process of trying to find communities, or artists with whom I can share interests, I find myself sometimes more connected to artists of my generation who like immersing themselves in information, including Raphaël Zarka, Aurélien Froment, Melvin Motti, and many others; and in a much freer and associative way, my colleague Mariana Castillo Deball. But sometimes I feel more allied with artists interested in landscape, and in those cases I relate to Ulrike Heydenreich, Ilana Halperin, Ann Botcher, and Geert Goiris. Do I belong to one lineage or another? Probably not. Do I have to? Again, probably not.

I'd like to emphasize that I did grow as an artist through looking at art books. I can envision some figures in art history and in contemporary art that function as landmarks, which gives me a certain frame and understanding of how my work could fit in history. For example, when I started thinking about settling rules that when applied will generate a form, I thought about Sol LeWit. I thought and looked at Mark Dion's work when I started looking at archives and trying to imagine how to cope with exhibiting the material found in the collections—I tried to understand the narrative he created. I 'talked' to Agnes Martin when I saw how white and minimal my paintings looked and with Georgia O'keeffe when I engaged with surface in drawing a flower.

At a very early stage of my career I thought that artists like Hamish Fulton were important to me—obviously for the connection with landscapes and walks.

I also cannot avoid mentioning the influence on me of Land Art artists like Richard Long and Robert Smithson. This is even though my work operates almost in the reverse direction of theirs, since instead of intervening in landscape and using natural materials, I do the exact opposite: I replicate and depict elements from the natural environment through artificial media.

I have become an artist who refers to minimalist artists, especially minimalist and conceptual artists from Latin America: I adore Gego and Hélio Oiticica, Raul Lozza, and Víctor Grippo, for example. I have become an artist who thinks of Sol LeWitt as a reference in terms of methodology, of Anish Kapoor when I must conceive of a master of handling forms (at least in his old works), of Hamish Fulton when thinking about landscape. Marcel Broodhaers and other artists working with collections came later into my personal scenario of references.

Because I studied art in a city somewhere in Latin America, information came to me randomly. For some reason or other, some artists make their way into history more than others. It could be because of the tastes of a favorite professor, or because of a slide that looked better in class, or because something I encountered bounces in my head more than something else.Sol LeWitt made his way quite strongly in that scene; often I think I owe the programmatic side of my practice to that reference.

Giuseppe Penone and Vija Celmins are artists from a different generation to whom I feel very closely related. Penone in the use of materials, the observation of nature, and the way of thinking through work; Celmin in terms of rendering details of the natural environment by very careful use of the visual language.

Matt Mullican is also an artist I admire greatly. I do find certain areas of his work which my works echo, especially the ones that use drawing and grasping chaotic organizations. But further than that I appreciate a great deal the way he deals with the material world and the conceptual world in one body of work. I see an artist who is present, thinking and growing in every piece.

Having said all this I must mention that I feel my work has been much more heavily influenced by literature (and probably films) than by visual arts.

I grew as an artist on those references—and those references are the ones that helped me to build up a mental space from which I could start creating works.

Literature and movies have the democratic side of distribution; one can have a one-to-one experience with them wherever one happens to be. If I think in deeper terms regarding my references, I mustconsider the Argentinean tradition of literature in authors like Jorge Luis Borges and Adolfo Bioy Casares. These are authors in whose work fiction and theory are entangled together, authors who developed very strong strategies for creating their ouvre. Additional influences for me are Ricardo Piglia and, earlier in Argentinean history, Macedonio Fernández.

Another influence is the Japanese writer Kenzaburo Oe, *in Letters For Nostalgic Years*. The story of one of the characters, Gii, is that he began a large-scale construction project to make an artificial lake, in the middle of which there was to be a big old tree. He meant it as the construction of a place for contemplations, and this stuck with me. Many such stories have stayed in my mind and guided my work in one way or another. Other influences include Raymond Roussel, who created rules and systems that allowed him to write his books and Thomas Bernhard, in his book *The Lime Works*, in which two isolated characters sharpen their senses of hearing by having contact with outside world only by through sense.

Additionally, I learned from Witold Gombrowicz, the Polish writer who lived in Argentina for many years. His description of how fiction arises via the repetition and extreme focalization of one single element that seems at first glance irrelevant made an impression on me. His example is beautifully described in *Autobiografia sucinta corresppondencia* (1972, 56):

> For example, I look at this table and I focus, for example, on the ashtray. If I had look at it only once nothing happens. But if I go back to the ashtray and I focus on it again, then I start wondering why I focused precisely on that ashtray. When I inquire on it, the ashtray becomes an object which is more interesting than the others. And I come back for the third time to the ashtray, and then it can impose

itself for a fourth time, in a way that suddenly it becomes a decisive.

This quote has stuck in my mind for years, and comes back to me every time I sit and draw a stone and focus on one little aspect for even more than a day (like in my project *Meditation Piece*). As I have already mentioned many times throughout this text, I think is very difficult to recall what truly are an artist's influences; nevertheless if I must try to name the stories that have stayed with me and impact my work, these are the ones.

2.8
Time factor

As might be self-evident throughout the text, my work-method is rather slow; and that is in all the phases of it. It is slow in the accumulation of material; and it slow in the time that has to pass for ideas and the accumulation of material to decant and sink in; and it is slow during material production in the studio. Slowing down the artistic process and spending time with materials is a methodology and at the same time a political gesture. It is a way to try to resist the speed at which the contemporary art scene seems to force artists to produce. As a methodology, mine is a way of staying with things in every stage of the process, from the field work to the studio work. In order to remain close to one's practice, one must continue to reflect upon and learn from it, and in order to do so must spend time with it.

I will support my point of view anecdotally. Recently I was invited to do field work in Rio Grande Do Sul, in the southern part of Brazil, almost on the border with Argentina. This was an extremely pleasing invitation and perfectly suited to my artistic desires. I had to choose from among three areas one which I could develop into a project for the Biennal of Porto Alegre. This was a landscape project. I could not ask for more. I chose an area with beautiful canyons and inspiring landscape, but became quite scared when I realized that the field trip was going to be three or four days—a short time— I knew that I would need to spend a long time every day in front of one of the views Idecided on, in order to draw it, and to let it sink in, to scrutinize and even to get bored in front of it. How else could I understand those morphological structures? I went there in February and, not surprisingly, the experience was as I feared: too short.

It was productive to go to the place in order to identify how I could work with it. Camping is not allowed in the National Park, so it entailed a drive and a walk every day, of about two hours to reach the vistas to draw. I identified which vistas I wanted to

draw, and imagined how many days I would need if were to do a piece for the show. The weather was quite bad for drawing, very rainy, so I had to consider that aspect for when I went again. Also, the structure and the material quality of the landscape started, from then onward, to become internalized, and to work on me. I am quite certain that these formsget somehow embedded in my system, and make a difference when I go again and sit in front of the landscape—this time with pencil and paper.This was a unique situation, a pre-field trip prior to actual work in the field; a trip to prepare the conditions to go effectively to work.

2.9
Landscape

I will probably never forget the day when, not too long after I arrived in Holland, I was driving outside of Amsterdam with a friend. We passed a small village and she told me that her grandparents used to live there. After a while she looked nostalgically through the car window and said, "My grandfather never could get used to living far from the sea." I asked her,

"Where did he move?" She replied,

"He didn't move; the sea was pushed further back and this part was turned into land." I looked through the window and saw at a massive, dense, extensive, and totally convincing piece of land.

This story came back to my mind for many years; and I kept finding more places of the same type, including a fishing village which had been surrounded by water and was suddenly no longer near water, leaving its inhabitants, fishermen for centuries, without either an activity or an identity that had been part of their society through a long history.

Once, I went with a friend to visit an archive at the Universiteitsmuseum in Utrecht. After awhile she approached me with a box containing old photographs of birds on an island. She told me that the island did not exist any longer; it was submerged at some point in history because a harbour was needed in the area.

I cannot avoid thinking about and referring to my own background and place of origin, where the landscape is something so immense that no one would dream of controlling it in the manner humans have done in the areas around Amsterdam.

It is interesting to compare how this view of my home is very different from the one that, for example, Romanticism possessed toward landscape. The living experience (to me) of these land manipulations is the feeling that in Holland, nothing is natural; everything has been touched or moved or planned.

Landscape is something that can be stretched, compressed, grown, drowned and increased. Landscape is something susceptible to variations and permutations, not by its own forces but by the human hand.For me, there are two worlds: Argentina and Amsterdam, two ways of relating to nature and my attempt to conciliate both in one artistic practice.

This way of experiencing the landscape created in me a total lack of desire to work with it. I could not imagine or believe that it was landscape. That precise crack, that fracture, was what made my work change so drastically into work with natural science collections for quite a number of years after I came to Europe, and it forced me to re-adjust my entire methodology. Logistical limitations at the time prevented me from being able to search and go to places that are closer to what I experience and conceive of as landscape. In that new context and situation I did not have the mental space even to conceive the desire of working with the landscape.

Slowly, slowly, the logistical limitations began to lift; or rather I began to understand ways to create the necessary conditions to explore again. And most importantly, I comprehended the importance of recouping my experience into my work.

In Holland, the landscape was not that of Cordoba. I had to start imagining which other landscapes could exist and why and what attracted me to them. My artistic practice was no longer about the specific landscape in my hometown but about something else that had to do with landscape in general — as a topic.I realized that what I am after in landscapes, and what I search for, has to do with textures, and with the endless variations of them — forms, and patterns — landscapes that drift, shift, move, change, and erode; those landscapes that are not easy to look at. They are places that slowly reveal themselves. Places where, at the first glance. everything looks the same, where I have to wait for my own eyes to open up to the differences They are places whose beauty is not constructed by human culture.

Folders in my computer were building up, landscape books were accumulating on my shelves, and I was engaging in conversations with geologists asking silly things like: where I can find these kinds of lava shapes?

I can be told till the end of my days that Switzerland had beautiful landscapes, but to me it is always going to be another idea of landscape than the one that inspires me. It is a chain of mountains that has cities all around it, and not a place where I must keep an eye on a path because I could easily get lost and be forgotten. There are almost too many images in my head of Swiss landscapes, too many postcards, too many illustrations I have seen, too many years of representation interpreting that landscape that make it too hard for me to imagine that I can see it with a different eye than all those images constructed throughout history. When I work with landscape, I like to imagine that I can add a new layer of understanding of it, that I can spot and open out a new dimension on it, that I could build up a new story, to highlight and focus on some features of it that might have not been seen before. This procedure seems to be more feasible when the history of culture and science has not visited the locations so much and so often, or if I have not seen too many documentaries about it.

I would be naïve to imagine that there are landscapes that still can be discovered, but still, I do like to imagine that there are places that are not yet very conditioned to be seen under one single perspective. Places that have been forgotten, places that are part of fantasies, places that can be reinterpreted are there/still exist.

When I was finishing art school in Argentina, I did a piece that I still remember as an important one within my own thinking process. It consisted simply of two photographs of the Perito Moreno Glacier in Argentina.I went to Perito Moreno for the first time when I finished secondary school. The sight of that landscape is difficult to forget — it is gorgeous. Its forms stayed very strongly in my mind, as did the light. I did not know then that I was going to become an artist, but I very often remember that sight, the grey sky absorbed by the ice mass.

A few years later, when I was already in art school, I went on

a trip again to the very southern part of Argentina. I decided to go to Perito Moreno again. The glacier was there, but the form was completely different; instead of a flat front it had a triangular cone on the front, and a lot less water in between the ice and the earth. The sun was shining, and the color was different too It was shocking.

It was the first time I had had such a strong experience of landscape drift. The landscape was one thing at one time and something different the next time. The masses change while we are here.T he piece that I presented was just two photographs, the same view but of seemingly different places. And for the first time I realized that shift was my interest.

In this process of engaging with the landscape,asking what it brings, I am trying to understand the dimensions of how powerful the impact will be on art via these faraway locations, and how that will have an impact on my work. I arrive at questions of the relevance of these engagements in the moments that my fingers are frozen from sitting making a drawing outdoors at five degrees below zero in the Antarctic, or when I feel I am about to experience sunstroke from sitting in a black lava field at noon in Hawaii. At these points, I seriously wonder if it makes any sense to be in such places rather than finding a good book in a library and working from it instead.

The answer is always yes; it does make a fundamental difference. The materiality of it sits in my head and stays and assists me when I go into the further development of a piece. For example, with respect to my lava pieces: could I have done the reconstructions without having been in direct contact with the materiality of the place at which the lava actually exists? The shapes come out, almost magically, and that is not because I am talented but because I have been there, in the place, observing them. They have somehow become integrated into me.

After my second landscape project, *Meditation Piece*, which involved a trip to a white desert, I started noticing that what I see when I look at landscapes is their protuberances, their fragments (large or small), which I can isolate from the material mass. An entire landscape is impossible to draw, so I tackle it through bits and pieces that drift apart from the vision as a whole: crusts sticking out of lava fields, the rocky protuberances from the dunes, icebergs.

Because of my experience with these processes, when I confront a new landscape now, I can imagine, more or less, where to go or how to begin.

The Cordoba landscape is still present for me, in a way, backing the whole of my practice, and giving me the feeling that there is a place to which to return. It is the place that provided the impulse for my entire work to exist: the driving force. That place is there, latent, most probably changing in its slow tempo. Latent also in me is the desire to revisit it to discover how it has changed and how I have changed. Can I still remember each of those fragments that I drew, that became a part of my system?

2.10
A conceptual side of a practice

The artistic question that arises in a case like mine is: where is the conceptual move? If drawing, painting, and sculpting are traditional forms that involve concept, then where is the conceptual move in my work? It is in the ways in which I approach my pieces, ways that are always part of a work's context. It is simply not possible for me to make a drawing for the sake of making a drawing. It has to have a framework, a program, a question that has to be answered.

I have learned that what links me to conceptual practices is the programmatic side of my work. Making is, in my case, a construction. It is part of a working method; that which starts as a curiosity builds up into a project that entails a program, which is usually long-term.

A good way for me to describe my procedure is to say that I go in and out of conceptual and material universes. Sometimes the universe is an insect's collection and at other times it is the universe of thinking and building up ideas, which are then transitioned into the clay universe or into the universe of painting. In this latter universe there is thinking, thinking about the surface, the ways in which colors behave so differently when they are in the palette versus when there are on the canvas and in relationship with each other. Sinking in and out of a conceptual practice and in and out of a studio practice is one main part of my work.

2.11
Drawing as a thinking tool

Drawing is part of all the projects I have included in this doctoral trajectory, and in everything I do. I think things through by means of drawing. Drawing is the most direct tool I use when I want to understand the physical world. Drawing is, for me, not a medium but a mode of artistic thinking. It is a way of perceiving differences (as in my *UBX Expression* piece), and a way of inquiring into observation itself (as in the *Meditation Piece*), and a way of making visible the almost invisible (as in *Scale 1:2.5*), and is a way of thinking a landscape and of engaging with it (as in the *Lévy's Flight* and the *50 Meters Distance or More*). The nuances of the use of drawing in each case will become more clear when reading the chapters on each project; for now, the reader must keep in mind that drawing can be used in my practice in different ways, but each will be always related to a thinking process and an inquiry. It will never be about creating an image in itself, but rather about the outcome of an inquiry, a puzzle that can be solved only by drawing. It is thus a methodology in itself—a means for learning.

In the two last pieces I mentioned, drawing is connected with other media—sculpture and painting. In those two projects drawing is also present in technically assisting procedures, for example in enlarging the images and transferring them onto the canvas or clay surface.

If I question what drawing gives that anything else does not, the answer is: a way to relate to the world and subject matter; it leads back to the whole belief system that I keep describing as a method throughout this text. Drawing engages with a way of getting to know the world, and is a tool for learning. It is part of a process of thinking and thinking slowly, by staying and spending time with 'my subject'; a trust on relenting the production process by keeping on for the longest possible the moment of getting to know your subject. It is the experience of slowing down time

by drawing, the experience of thinking through drawing and the experience of apprehending the world via drawing.

Whenever I draw, and that is very often, I remember my first drawing professor and now close friend, Pablo Gonzalez Padilla. Pablo has already been mentioned here in the Introduction (Background I) with the paprika story. He was my drawing professor during my first and second year of undergraduate university, and by the third year I was his teaching assistant (for two years), and during all this time I took private classes with him. I spent amazing hours sitting in his studio drawing and talking about drawing and readings. He had a very strong impact on my way of looking at the world and at drawing. I can still hear him talking, from when I had just started university, trying to make us understand that exercises could be boring, and the subject could be boring, but it was up to us to make them interesting. How did one turn a boring subject into an interesting one? For him it was via visual language, by the language of drawing and by staring at something long enough with the same question. What I draw is not whatIdraws, but rather what I develop and ponder in the process of drawing; a thinking process that gets turned into a visual language. He would always say the motif can be 'the cow,' but the question is how to turn something as dull as a cow into interesting subject matter.Drawing for him was, and still is, a way of thinking—a way to know the world, to organize it and make it my own. And that lesson stayed rooted in me, and is with me every time I draw.

When I started approaching collections I thought that drawing was no longer used in the artistic field. It has now become apparent that quite the opposite is true.

Many years ago, I had a conversation with an archaeology illustrator in Groningen, named Lykke Johansen. She was the first person who made me see that drawing was still the most valuable tool for observation in the archaeological field. The combination of being a careful observer and being someone with knowledge in archaeology was the utmost ideal for archaeological drawing. Someone who can observe and who knows what is relevant to observe is invaluable in that field.

More recently, a researcher in the herbarium at Kew Gardens in London, mentioned to me that often when he commissions a botanical illustrator to draw a plant, he notices things he never noticed before about the plant in the drawings, and returns to look at the specimens and realizes that the features drawn are actually there. The illustrator's eye sees much further and much more sharply than his own eyes, often more sharply than a camera.

This is of course a different case, as it is a case of drawing assisting other fields of knowledge. But I do like the story as a vindication of drawing.

2.12
Working with collections

My work with collections appeared first in my interest in archiving, and afterward in my interest in archives and collections. It was not an a priori interest, but rather an organic development in the process of my work. The work started to entail repetition, piling up of endless numbers of drawings and small objects which needed to be archived. And then the curiosity for archival systems and museums' depots for archiving made its way onto my artistic path.

My work seems to share the continually growing nature of archives, in which the limits to the infinitude of objects that can be included and described are not clear by default, but have to be traced through an artificial system. A perimeter has to be created via criteria. How else can I decide how many butterflies to draw? There are endless permutations of butterflies, all of them unique and beautiful. The decision ends up being x amount of drawings of x amount of species. It is a programmatic criterion that is based on the empirical experience of intuitively testing how many drawings would work in the series in order to show repetition, without the effect of the drawings cancelling each other out through the repetition itself.How many drawings do I need to do in order to perceive whether I see the same stone every day (as in the meditation piece)? Endless numbers of drawings are possible, as the experience can go on forever.

The measure I settled on was thirty days. I thought thirty days would be an interesting time capsule for the project: a month, an enclosed period of time. It was a rule I settled on, an artificial one, as probably are all the rules I set for the construction of work, but a month seemed to be the right time to be able to explore deeply the act of drawing without letting the repetition reach the saturation point. I had the intuition that thirty days would achieve the right balance.

The subjects I work with and the objects I choose to look at have in common the characteristic of having endless variations. This feature makes it very difficult to choose and constrict the number of pieces to be drawn and exhibited. But there is a need for a constriction in order to delimitate the frame of experiences.

Once I realized that my work shares this fundamental quality with museum collections, I decided to approach some of them and see what collections are about. I chose natural science museum collections because I am inclined to be interested in the samples they have; as I mentioned before, natural science museum collections are a little oasis for me when I need to see objects coming from the 'natural' world.

Convincing museums to allow me to work with their collections was not always an easy task. The notion of patience in practice appears here again in various ways, beginning with the number of talks I had to have with the actors involved in order to gain access to the collections. And then it took patience to figure out how to find material in the archives, how to find a story there. It is really a rare case when I find what I am searching for during my first visit to a collection. I usually wander around, open drawers, explore, but still, often, nothing becomes clear to me. Sometimes after hours of looking, when I am about to die of boredom and disappointment, a curator opens a box and there it is, an amazing piece that I can use.

Often, when interviewing a scientist, after forty-five minutes I start wondering what I am doing there. But, the story always appears. In one case, it was about a collection of cow patterns somewhere in the south of Holland. This was at a Museum called the Veeteelt Museum. It is in the area of a small city call Beers. The trip to the museum was in itself an odyssey: a concatenation of train connections, and a taxi (for the lack of any other transport) to the middle of nowhere. The place is in a farming area, very much outside of the city. The museum has an archive documented in microfiche of all the cows that were born in The Netherlands up to the 1960s. The way people documented them was by drawing the pattern that defined and made every single cow unique.

That piece of information was beautiful, and the archive (which of course I visited) was amazing. The story is still waiting to be continued. The fact that this museum existed was offered to me by Bert Theunissen, a historian of sciences who has been involved in my doctoral trajectory in various ways since the beginning. The cow pattern collection is one that deeply triggers me—and I presume that the reason can be traced to the anecdote of my drawing professor in art school and the inquiry into "the cow" as a motif to be drawn. This collection was the proof that 'the cow' as a motif could unfold into multiple and infinite layers.

My work with an insect collection progressed similarly. I visited it often before something opened up to me and for me. The first time I went on a guided tour of the collection (by appointment and for a small group of people). The curator probably thought that I was one of those curious artists looking at insects. The second time I went he was more patient with me and my questions. Then after the third time he began to come to my shows, and by the fourth time I went to the collection he understood what I was after and offered me a beautiful piece of information: he told me that mathematical formulas often define patterns in insects, and in many other animals. It was then that I started to think about drawing butterfly patterns.

Whenever I did one of these projects, I needed someone from the respective collection—an insider—to open the material up for me. Otherwise I would have become lost in the thousands and thousands of drawers and shelves and information and the collections would have always remained hermetic to me.

2.13
The collections I did not use

I am constantly building up an archive of stories and potential material, much of which remains unused, maybe waiting for a moment to be taken into my work, or maybe not. It is like the backstage in my work that reminds hidden, even while it keeps growing. I cannot force the material into the work, and even if I could I could hardly decide when that moment should be. In a way I like the lack of efficiency in the system, the acknowledgement that not everything we do can be profitable. Instead, the material becomes a collection of information totally foreign to my area of expertise that I can barely use. Knowledge about a parasite's behavior, pollination, pattern formations, evolution, and so on are stories that I definitively like to know about and that help on one level or another. Their impact on my work might not be direct and/or obvious, but it affects it in a variety of ways, from the construction of a mental space that allows other projects to arise, to display systems that I sometimes use.

Among the collections that I have not explicitly used but that have impacted my work I can recall the Warburg archive in London; The Museum Veeteelt, Beers; The Boerhave Museum in Leiden; the Department of Chemistry, Utrecht University (Albert P. Philipse), Utrecht; the Botanical Gardens in Rio de Janeiro and Leiden; the agriculture Museum in Cairo; the Department of Morphology, Ghent University; the Museum of History of Sciences, Gent University; the Museum of Zoology, Ghent University and the Mineralogy Museum in Ouro Preto Brazil.

2.14
The collections I have not yet visited

Presumably, my list of influences will continue to expand. Curiosity has no end. It just keeps branching. A list could start like this: the Hugo de Vries-Laboratory, University of Amsterdam Herbarium, from the Zoological Museum Amsterdam at UVA University: Fishes collection, Mammal Collection, Vermes/Marine Plankton Collection; the Johanna Westerdijk at Wageningen University; the Blaschka Glass Models of Plant at The Harvard Museum of Natural History; the Mundaneum museum in Mons; the National Art Library in London; the Nationaal Herbarium in The Netherlands. And I could go on.

2.15
Materiality

A fundamental part of my working process is the selection of materials for every project. Every venture is different, and it varies according to the necessities of the project. I cannot predict in advance what the medium in each work will be—I have to stay with the project, be a bit lost for a while until I realize which is the best way to go.As much as I love painting or sculpting, a medium is never a priori for me. I can never simply say, "I'll make a painting." It has to be an urge. The drive has to come from the internal logic of the piece. In fact, it took me five or six years after I finished studying painting before I finally found a couple of scattered ideas that would work the best as paintings.

Once the materials are chosen, a whole procedure of trying, failing, and finding new materials starts. I talking to specialists, try out new materials, and sizes, and more materials. This stage of the process is not any less important than any other. In fact, it is probably the most important one. It is the moment at which things come together. It feels almost as if I am another artist at this point. It entails a completely different mindset, set of questions, and set of priorities.

A funny anecdote that exemplifies the struggle that starts when the materials are chosen is the experience of the large paintings I produced for the *50 Metres Distance or More* project. After a rather long process (which I will describe in detail in the chapter on the project: Chapter 7), I decided that I wanted to make three very large paintings. I made tryouts of the size on the walls of my studio with masking tape, projecting the images with an overhead projector until I found the size I thought was perfect for the images. It was 415 cm × 200 cm, which is landscape format. Very pleased with my decision, I called and ordered the canvases; the company said they would deliver them in two weeks, and I confirmed the order and even made the payment before realizing that I could not work on the three canvases at the same time in my

studio. Then I began the marathon task of attempting to find an extra studio for few months in order to work on them. I found the studio on the very the day of the delivery, and the canvases were so large that the workers could not turn them such that they could enter the studio. Materials have their resistances and constraints. Those canvases were like sails against the wind and solid walls when offering resistance to the architecture of the building. In the end, the transport attendants had to put the canvases back on the truck, take them where they came from (Nijmeger, which is three hours away from Amsterdam), disassemble them, and return a week later with the separate parts. They built a huge table inside the studio and put the frames together there. This is how my paintings started, with a clear sign that I have to remain aware of the needs and limitations of their materiality.

Generally selecting materials for a project is not as open asI make it sound; there is a limited range of possibilities with which I feel comfortable, and with which I can think. There are always analogue techniques to the initial techniques I try, which has to do with the fact that I think through the very tactile qualities of the subject matter. It is also important to me to work on a scale that I can handle, to keep the production on a scale that I can follow and understand, and a scale on which I can stay in charge of the production. It might happen that I need assistance, and I can accept assistance (though not without internal wrestling about it), but the backing has to come at a stage at which I am already very well aware of the procedures that will come and when I have already solved the system and the tempo of the piece.

Again, this is because I am not interested in the effectiveness of the outcome of the work, but in the process. The piece has to be done with the goal of gaining knowledge, whatever knowledge is—at this stage I call it material knowledge.

2.16
Scale and making things visible

Repeatedly in my work there is an issue of making things visible via a variety of strategies. In the case of the *Scale 1:2.5*, the strategy was about making visible the invisible via frottages, a drawing technique that reveals a pattern which would otherwise remain hidden. In the *Lévy's Flight* the visibility makes its way via material filtrations, turning bits and pieces of a lost landscape into sculptural projects. In previous projects I have drawn microorganisms, samples that would remain hidden to the naked eye otherwise, but via drawing they become part of what we can see.

This preoccupation has a connection with the history of science via the invention of instruments for observation. As in the case of my interest in archives and collections, I developed this interest somehow without being aware of such a strong connection to my work.

At the Rijksakademie I developed a couple of devices that helped me in the development of two series of drawings. In one case I needed a device that would keep my model (a stone in that case) always at eye level. I needed a light from behind in order to see the cut of the shape, and I needed to rotate my model systematically always at the same angle, and I thought it would help to have a grid in order to perceive the perspective at least.The goal was to draw fifty small (about 2 cm diameter) stones from twenty-four different angles each. I started with all kinds of domestic props until I realized that my life would become easier if created a device to assist me.

Parallel to the stone project, I did another very programmatic series. In this case the object observed was quite different. I generated my own model. I threw colored glue onto a wooden surface and let it dry. I repeated this action many times, and my idea was to draw each sample, in order to see and depict the endless variations

that the forms could take. The best way to draw those stains was by chiaroscuro, so I needed a strong light from one side of the drawing, and I needed it so that the eye level would be always the same. I needed a way to substitute my model quite comfortably many times and I created a simple device to meet my needs.

While doing these series I realized that devices like these might exist for people with similar needs in other fields. That was the first time I talked to the archaeological illustrator in Groningen, Lykke Johansen, mentioned previously.She showed me a device she uses for making her flint drawings. It consists of a small table, about 40 cm × 20 cm. the bottom of the table has a mirror and the top part is a piece of glass. The sides are wooden with small grooves so the heights can be adjusted. The sample to be drawn is placed on the bottom part, and transparent paper is placed on the glass part. The observer is supposed to scan the stone with the eye, physically moving while drawing. The eye and the hand must finally be attuned with each other in order to get the drawing done.I reconstructed one of these devices and did a couple of trials that never went very far, but that were more than interesting to experience—and that might find place in a later stage of my work.

Quite a while later I had the chance to handle and experience Van Leeuwenhoek's microscope (a replica of the original), an experience described in the chapter *Meditation Piece*.

After using a regular microscope for "reconstructing time" by drawing a series of microfossils, I realized how difficult it is to draw by looking at my sample in one place while having my paper in another. Quite recently I have been told about a device by which one can align the microscope's lens with the paper. I will find and use that device soon.

In my Antarctic project, I tried to use the "camera lucida" and the "Claude Lorrain mirror." I had, as in other attempts to work with assisting devices, an interesting experience. But I still found it easier to observe with the naked eye. I presume it is only a matter of training—too many years of training in one way and not in the other (with the use of devices). I am still curious about the use of these types of devices and very keen to recreate another instrument I heard about last year, a graphic telescope. The graphic telescope was patented in 1811, and was developed by Cornelius Varley. It is a complex version of the previous instrument (the camera lucida), which combines a low-powered telescope with the camera lucida itself. The graphic telescope was a very rare instrument, not largely disseminated originally, and of which are not many existing samples left. It has the quality of projecting an image (like the camera lucida) while bringing the image closer (like the telescope). In brief, it is a dream come true for someone working with landscape—the possibility of bringing far away vistas closer to paper.

2.17
Kew gardens experience

After a couple of years of repeated questioning and wondering about technique in old landscape drawings, I decided to find answers, again, via experience. I enrolled in a course on botanical illustrations at Kew Gardens in London, for two weeks of eight hours a day, during the summer of 2010.

My first thought on the first day was a weird awareness of the joy of becoming brain-dead in technique; I am excited about my course, I am trying to take in what I see and everything the professor tells me, and I have 'ideas' (or rather pre-conceptions) of what I am going to find and learn. I have come with an idea of it, an abstract idea, a concept. But then the exercises start. The flower is there, and the paper, and I am holding a device never held before in my hands, and I start taking measurements, marking points, and tracing coordinates. Bit by bit all the conceptual baggage I brought with me melts and I move into another zone, much more blurry yet much more intense. This was similar to the process of working on my clay piece (the *Lévy's Flight*). Then, I moved to a place that was only about clay-making. The universe at this course were different from what I was used to; they were about planes, distances and angles.

The difference between what I was doing at Kew Gardens and what I normally do in observational drawing is that when I observes I think and understand the internal logic of a structure, while on the course I measured patiently and hoped for the best. When I draw with my naked eye, my concentration goes into every subtle detail of what I am drawing. For example in the case of *UBX expression*, while drawing butterfly wings, I was absorbed by every little detail of the wing, and had to think about every element. Each feature of the pattern deserved to be observed and taken into account in order for me to understand the overall visual structure. The procedure at the Kew gardens was rather the opposite: measuring distances and coordinates and forgetting the overall structures, losing track of the object, but seeing it as a collection of points and lines that have to be linked together. It was not about understanding it any longer but rather about making a realistic drawing of the leaf on the piece of paper. It felt more like playing the game of 'join the dots' than getting to know the morphology of the leaf I was drawing.

I kept thinking about a question I heard from Tiemen Cocquyt more than once: How can I know if I am a good observer? (Tiemen is an individual who has appeared before in this text, in the description of the experiemntal history workshop and in the description of the "A for Alibi" project by *Uqbar*.)

I realized that I am interested in nature in its perversity more than in its beauty, in its complexity more than in its potential to be understood. Each element that composes a flower has a reason to exist that makes the mechanism work. There are forms that develop for the light to reflect and then that attract certain insects; there are textures, roughnesses that are there to retain those insects, and smoothnesses that are there for the victims to slip on; there are smells that are there to appeal to those insects to trap them.

There are monstrous stories of parasites that live in the stomachs of elephants, inserting themselves first onto the elephant's leg by biting, and when the elephant licks its leg the parasites enter its digestive organ, and then eat their way out of the elephant's stomach. They can only live in this way.

There are horrible stories, and thousands of people researching them.

I pondered often the questions I kept getting from people about my work, on the craft and the time-consuming aspect of it — questions about why I did not send things away to be made, why there were so many and why not make them bigger. These kept bouncing in my head while I was immersed in the dedicated task at Kew. I get that range of questions often and it could make my life easier to have things made, and doubtless there are other possible options.

The answer is: For what? What would it add to my work?

Basics for this drawing technique (notes compiled based on the classes given by the professor Annie Farrer and my own experience within the course):

A starting point. The fewer starting points the better.
You can move the proportional divider in only two directions: vertical and horizontal—never diagonal. It is easier if you have the leaf at an angle.

If you don't take the measurements for the details, don't put them in the drawing. Don't sketch them either. No suggestions. Just draw what is there and measured.

It's better to start with the veins and do the outline after.

Start measuring at the starting point for every growing bit.

The proportional divider has to touch the leaf—so the distance from the device to the leaf remains always the same.

That was the chorography of instructions on the first day: a set of serious rules; and this only for drawing a simple flat leaf.

When it came to flowers material things become even more serious. The instructions were:

Measure every part of the plant from a different plane so the botanist can see the real side of every part of the flower.

You shouldn't loose the curvature of the leaf but it cannot be in perspective—otherwise you might not see all leaves.

Choose as a starting point in the flower a part that doesn't change too fast and collapse; for example, choose as a starting point the middle.

By the third day it became much less tiring. It seems that I got used to the concentration of the activity.

It was nice to see how, after few lessons, while walking in the botanical garden, I could perceive the structure in everything I saw. I could not stop seeing all the veins in every plant. It was interesting to acquire a new skill, to let it sink in and to watch how it transformed my way of seeing. I could not imagine that I would draw like this afterwards, but it was a valuable thing to learn—to look at nature form this perspective. I still preferred to trust my eye rather than the proportional divider—and this for the simple reason that I need to think about the object instead of keep measuring it. I have to say that it was great fun to let myself get lost in the micro-universe of numbers and angles.

Did I need to go through this to understand why not to do it this way? Maybe. My feeling was that in this technique one does not need to think about what one draws. So why do it?

However, it has definitively affected the way I look at things. I began to see everything in angles and planes and distances. Looking at a fountain while talking on the phone I could not help but imagine the lines in between the streams of water.

I hoped that the method would slip into my system subconsciously. I would never rationally adopt this method but there was something in it that was interesting to learn. I keep thinking that my drawing would be better if it was only based on observation. And I returned to Tiemen's question: How do I know if I'm a good observer? Or a good experimenter? It was very hard for me to negotiate between measuring and observing. Either I measured or I observed. It was as if my brain had to choose one or the other. I continued to think that when I observe, my brain is more active and I understand something.

Drawing "in the service of" botany, in this case, did not allow me to choose, fragment or cut out what I found interesting. Everything was needed.

Tips I found for myself:
- Always close the same eye.
- Always sit in exactly the same position.
- Mark the position of the chair on the floor.
- Pay attention to the virtual planes, specially in flowers with volume

After something like fifteen years of training my observational skills, it is very difficult to trust any measuring device more than my own eyes.

I tried to be a good student, and not to resist the learning process. I hoped that the learning would settle in and that I would eventually manage to combine techniques later.

Another tip:
I found a good system for aligning myself with the flower—then I could see if the flower is in the same position and if my eye is on the same position. This consisted in putting a piece of white paper as a background of the flower and tracing the outline of the flower on it from the perspective from which one would expect to be making the drawing. After this, I could search for the same alignment each time I drew.

The greatest fun is always finding the system.

I might have been cut out for this, for drawing with a proportional divider. I have the patience for it. The question is: For what? Why would I want to get stuck on this for years? Which is the limit in working with the idea of a time-consuming work? Is there a limit?

I suppose it is like having to learn how to play tennis when you already play tennis. How do you go back to square one at what you have already learned? A good beginning would be to want to do it, and I certainly did not either want to or believe it was necessary. There is a distance between the object and the depiction and in my case there is a gap. The gap is created by what I decide to do: which parts, which fragments, which color or line. The margin for decisions and errors is subtle, but is there.

Why would I want to draw a flower that looks like the flower I see?

There is a difference between observing and measuring. The difference is that once I get used to measuring, the features of the plants will be there, but my brain will have gone to sleep. By the time I have to use my observational skills in order to use color, my sensitivity for color and observation is gone, and I cannot see anything.

Probably once the new technique sinks in,I would be able to combine one state of mind with the other.

A day and half went wrong because my "00 miniatures series" had a problem with accumulating water, which made the brushstroke too wet even if I dried the brush each time before applying it to the surface. I had to laugh at imagining the amount of water that can be held in such tiny brush.

It took me days to figure out how to apply color to the drawings. At the end I understood that I had mentally (and almost literally) to enter the inside of the surface, enter the brushstroke, in the micro-scale of the "00 miniatures series" brush. The secret might be not to foresee the result, but to build it layer by layer.

The subject of the last day was 'the petal.' On the last night I dreamed of lights and shadows in a yellow substance. When I woke up I knew that it was probably the day that I would solve the color issue. The trick was to avoid the anxiety of wanting things done, and rather just to sink into the process of making them.

The last day I had to walk for an hour before I found the patience to draw.

A petal of a white flower was the task for that last day. I could not hold the proportional divider anymore—my concentration for it was gone. I decided to trust my eyes, to trust what I saw.

What I do normally is definitively different from what I did on the course. It is a very thin line, but that line is there—it has to do with working or not working for a purpose—at the "service of" something else: another field of knowledge.

At least after this I could answer, when people asked me the question of what the difference is between scientific illustrations and what I do.

3
UBX Expression

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UBX expression is a project that was carried out at the Entomological Collection in the University of Amsterdam (UvA) that is part of the Zoological Museum, University of Amsterdam. It is a very extensive collection with about eight million labeled specimens. The collection is used for research and it is not open to the public. I decided to start my doctorate project there as it is a collection I have been visiting for a number of years, so I know it quite well—not only the collection but also the people who work there.

The research focused on the morphology in insect patterns, thus looking at the specimens themselves but at the same time intending to examine the overall structure that is needed in order to archive collections of this sort.

I have chosen to work with moths and butterflies, because, owing to their pigmentation it is easy to visualize the differences in patterns. Literally, each individual specimen, even when belonging to the same species and family, is always at least slightly different from all of the others. The rule of differentiation is shared by all living and non-living organisms, but in the case of moths and butterflies the differences crystallize in forms and colors.

The title *UBX expression* alludes to a chemical expression, the Ubx protein, which regulates detailed aspects of scale morphology, pigmentation, and eye spot pattern in the hind wings of butterflies. The Ubx protein affects ways in which patterns are organized and it is related to the variability of those patterns.

My fieldwork consists largely in visiting natural sciences collections, hunting for material with which I can work, and building up an archive of raw material. In working with archival material, one of the first questions I encounter is how to approach the collections, and I'm sure every artist working with archival material has a different strategy. For me the most important thing is to find the people who will open up, not only the collection in a material sense, but also the stories around it. Without those stories, the archival material is completely hermetic and therefore dead. Related to this is the issue of patience, since it takes much time and many visits to get to know the people in the collections, to get an idea of how to navigate each collection and how to tackle the usually gigantic amount of information each contains.

This project has many antecedents. When I was at the Rijksakademie in 2002/2003, before even starting to think about working with natural science collections, I used to bicycle through the street, Plantage Middenlaan, and see in a small window the model of a gigantic insect skeleton. I was always curious about it.

Years later I became more seriously curious and stepped in, rang a bell, and asked if I could visit the collection. They explained to me that it was a research collection, that people could only enter by appointment but that they do sometimes do guided tours. I made an appointment for a guided tour. The person who talked to me and many others on that day was Willem Hogenes. Willem is one of the curators and researchers at an entomological collection which is part of the Zoological Museum at the UVA University in Amsterdam. Willem worked in that collection for something like thirty years; he knows were everything is and why, and he himself has collected a large number of the specimens that are contained in those hundreds of drawers.

I went on the guided tour a few weeks after my first entrance into the collection. That was the first one, a fascinating one. That little window, which in the front looks small and narrow, guides one through a long corridor into another room, a huge one, full of a display system with many drawers, two floors full of insects, insects and more insects.

I kept thinking about the collection, and a year or two later went again, and then again—always waiting for a magical, artistic idea to ignited, but always feeling overwhelmed and never quite imagining what to do with such immensity One day, I realized that I just had to make an effort, lost as I was, and sit there until I could imagine how to cope with it.

I asked for an appointment with Willem Hogenes, talked to him, and asked him if it would be possible to start using the collection for a project. I explained as much as I could at that moment: that I was interested in the patterns of insects and in the fact that they are always different, even if at the same time they are almost the same that there are always tiny subtleties that make one different from the other. I was interested too (at that time) in looking at the pattern of the collection itself, the display systems, the way the insects were classified and ordered. It was one more interesting pattern to look at: the pattern inside the drawers, the patterns that were defined by the insects pinned on the drawers. I did not know what I was going to do with all this, but I knew I wanted to undergo the process of figuring it out. Willem could empathize with this, and asked me for a small proposal explaining how I was planning to work, my interests, my schedule, and my additional needs, so that he could explain my presence to the museum's staff. I wrote the proposal and a few weeks later I started my project.

The first thing that happened when I began (and something typical in Holland) was that I sat with the museum staff for a coffee when they took a break at ten or so in the morning. Then I was introduced to the team which works in the museum and got to know what they do, and they got to know what I was going to be doing there. I explained my project and why it was that they would see me in their working environment for awhile. I always love this part of a museum project, as it gives me the illusion that I belong to the place and that I could become part of it. And it is also the moment when I start hearing stories about staff interests and activities.

For a few, seemingly long, weeks I kept going to the collection and wandering around, opening drawers, driving Willem Hogenes crazy with all kinds of silly questions; sitting in the collection's library, and driving the librarian crazy too. I was still thinking that I would get one idea, a big one, as big and solid as the collection, something to say about the collection.

The more I asked, the more stories I heard: stories of specimens found here and there, and also images of Willem collecting specimens in different landscapes. These ignited my will to dive into that collection—huge for me but tiny in comparison with those landscapes. It was a tiny artificial context for studying the ungraspable variety of specimens and landscapes.

Another nice person who worked in the collection was Rob de Vos; I enjoyed my talks with him too. He has also been a researcher at the collection for many, many years. Rob told me that aside from his job at the entomological museum, he was part of The Papua Insects Foundation, which has the ambition, in cooperation with biology students in Papua New Guinea and entomologists, to do research on the insect fauna of Papua New Guinea in order to be able to recognize important and vulnerable areas of high biodiversity. That story also stayed in my head, in the form of the image of people in the forest searching for insects in Papua New Guinea. He described the Papua project as his aim in life, and said he would be happy if he finished collecting specimens of certain species in that country before he died. As hard as I might try not to create idealized stories, it becomes very hard when I hear such stories, not to imagine the scale of the forest and the insects contained in it, the number of insects in comparison to that one man.

The museum collection could remind alien for a neophyte at entomology. The system is organized by the evolutionary process, with the later insects in the evolutionary line at the front, moving spatially to the back of the collection in parallel to their evolution over time. If one is not familiar with the evolution of insects, one does not know how to circumnavigate this place. This was, of course, my case and was why I so badly needed constant dialogue with the museum staff.

The one thing I knew was that my main interest was how different the samples are from each other. After digging, struggling, and reflecting on my own practice over a number of years, I knew at least that part of it. There is a core preoccupation in my work

and that is the dynamic of difference and repetition: how things that are almost identical at the first glance reveal themselves as different if we look at them long enough and carefully enough. Beyond the type of elements I look at, I somehow know that this main interest will be guiding my search.

The elements I could work with might be of very different kinds, in that they could be natural as existing in the landscape; or systematized knowledge about nature, as it appears in scientific collections; or artificially generated situations in my studio—all of them share at least one quality: no matter how many stones or how many lava formations we look at, how many traces on the wall we map, the forms themselves will always be different, and never will one of these elements be similar to another.

With this certainty that anchors me in the ocean of information I kept diving throughout the collection. I kept opening drawers and taking photographs, knowing that that was not taking me very far, but trying to open space for thinking within the confusion. I was aware that I was the one who had decided to throw myself into the confusion and I also knew that sooner or later I would get out of it.

I could recognize the 'state' and trust that confusion can be, at times, productive.

I started to create maps and diagrams of the collection so I could relocate the material that often I found by chance, just by randomly opening drawers, or that Willem or Rob showed me. I kept writing notes and thoughts. One day I starting making drawings in my notebook—drawings of the butterfly patterns I was seeing—and I started thinking about the making of the drawings and realized that making the drawings was helping me to understand what was happening there, in the butterfly's patterns, in the small nuances that every single wing has. Every tiny subtlety in the patterns became visible through drawing. In the process of drawing I was figuring out the nature of my interest in it. I decided to find a format for those drawings. I decided to use small squares of paper—card-like, thick paper that would give me the feeling that I could play with it. It was 8 cm × 8 cm cardboard paper. I bought a lot of it, cut it in the 8 × 8 format, and started going to the collection with a little box containing the cards.

I tried different pens and pencils. I opted for a cheap version of a pen I found—I liked the quality of the lines I could get with it. On the back of the 8 cm × 8 cm cardboard drawing I also created a diagram, a chart of the drawer—mapping the location in the drawer of the butterfly I drew. I did not know if I would ever need to reconstruct that puzzle, but I liked the feeling that I could trace my navigation through the collection through these charts.

At that stage Willem had already designated me a desk were I could sit and work. By then I could already take the drawers to my table (which previously only authorized researchers and workers could do). He taught me how to do it so that I would not mix the drawers up or forget where they belonged. He showed me how to leave one drawer, below, or above open, in order to see where to put the one I hadremoved back when I had finished with it. It was a system within a system.

Even though I had the premise of wanting to prove that in every sample the pattern was different and that I could not draw schemas that would embrace all those differences, it was really very difficult to visualize differences at first glance when opening the drawers. During the first weeks, I was photographically documenting many samples of the same type, comparing them and trying to figure out the differences between them. After awhile I started making drawings, since that seemed to allow an analytical observation of the samples and an apprehension of the small variations and permutations in each individual butterfly. The process of making drawings slowly developed into the urge to build an archive system allowing the visualization of each drawing and the comparison between them to develop.

The pattern on the wings of butterflies is unique among animal patterns in that the elements that make up the overall pattern are individuated. Unlike the spots and stripes of vertebrate color

patterns, the elements of butterfly wing patterns have identities that can be traced from species to species, and typically across genera and families. Because of this identity, it is possible to recognize homologies among pattern elements and to study their evolution and diversification.

During pattern evolution, the same set of individual pattern elements is arranged in novel ways to produce species-specific patterns including such adaptation as mimicry and camouflage. Patterns still exist and coexist with many others which evolved from the first one. A trained eye is needed to see that a pattern undergoes different variations and permutations during thousands of years. In the evolutionary line sometimes the spots reappear as spots, and sometimes they expand, becoming a stain, or merge together in becoming a line. All of those cases could be flying and coexisting at the same time in amazing cases of camouflage and mimicry.

After sitting in the collection for a few months and opening a good number of drawers, I understood the urge to schematize the variety of forms into an idea of what those forms were. While the theory that the patterns are never equal to one other has once more been proven throughout the project, I understood the need to create some kind of synthesis, which could help in identifying and differentiating the immensity of samples within the same type as one image. The overwhelming vastness in existing butterfly species, and the subtlety that sometimes exists between different families, combined with the fact that each individual sample is different from the other, makes that universe inapprehensible.

Once I had looked at a few drawers and within these at individual samples, I understood not only the need to create schemas which would identify, at least, the types, but also the need to apply to the natural system an artificial system that would help me to understand it.

It was interesting to me to realize that no amount of reading on the subject I did would help me to understand this in the same way as undergoing the process by navigating the collection, by trying to find a system to work with and by making the series of drawings. Willem kept handing me articles as he realized what I was after, and the people in the library did the same — trying to help. I browsed through those articles with beautiful illustrations and graphs, but they did not take me that much further than where I was before reading them in my thinking process. I cannot even remember their names now, much less the content

I also came to a new understanding of the concept of evolution. It is actually very easy to understand it visually when you can see how a family of butterflies changed color overnight because they needed to camouflage for certain environmental reasons. That realization might be quite a simple thought and might be read and reread in many books, but my point is that there is a certain type of embodied knowledge that can be achieved only by undergoing the experience.

The understanding does not come into being only by visualizing the individual samples, but also by a very specific approach to the visual information which is (in my case) the attempt to understand its morphology by drawing the samples. Opening a drawer, observing the samples, and even photographing them did not lead me to a very comprehensive understanding of the samples, nor of the collection. It had even been impossible to notice, only by observing, that every single wing on every butterfly is different from the other. It was only by drawing them that I was able to acknowledge the small details that made each pattern a unique pattern, similar to the next one but not the same. There is an analytical attitude in making the drawings which forced me to 'see' what I could not otherwise visualize in the samples.

Another interesting thing about drawing as a way of acquiring a certain type of knowledge is that it also requires certain types of skills. These skills are not only skills of drawing, but also skills of observing, which cannot be learned overnight, but requires time and patience. Richard Sennett, at the very beginning of *The Craftsman,* refers to this issue in terms of the number of hours it

takes to acquire a skill. He says that, "By one commonly used measure, about ten thousand hours of experience are required to produce a master carpenter or musician." (1998,20).

If there is something in which I have done my ten thousand hours, it is in drawing: in my lessons in art school, in my lessons with a 'master' separate from school, and in my hours of drawing at home. The need to draw existed in me from the day when I decided to become an artist. I took very seriously, from the beginning, the need to draw well—drawing well not as in making a beautiful drawing, and not even as in being able to express abstract ideas on the paper, but as a tool for observation and thinking, as a way of mapping. My ten thousand hours of observing as a way of understanding with a pencil and a paper as my allies, made me, if not a good draftswoman, at least a trained observer.

The time factor is thus a fundamental element for this project: time seeing, time drawing, and time engaging not only with the material collection but also with the people working in the collection. The vastness of the collection is initially a blockage when one tries to enter it. One can get lost either in the overall landscape of the seemingly-infinite drawers or in the details of one particular sample. It is the people who work in the collections who help to make or break a project of this kind. And it is again the time factor that allowed them to understand what I was looking for in the collection. They needed to see what I was doing, to look at what I was looking at, and to see me getting lost in the collection a few times before they realized how they could help me and guide me through the collection. Finally, the time factor is also implied in the process of letting the information settle until I understood how to materialize it as a piece of art.

During this kind of research, one often finds impressive information or beautiful material that cannot always be rapidly used in a project. It is important to understand that there are a series of filtrations and processes that the material has to undergo before it can be turned into a piece. These filtrations are material and conceptual operations which allow the creation of distance in between the references and the material outcome of the project.

In this case, the process itself grew into the piece. There was never a stage at which I arrived at a grand idea, and there was never a moment at which I realized clearly what to do. The process was to keep making the drawings while I kept defining the parameters of format, materials, and quantity. The number of drawings was also defined while the work was in progress, according to the necessities of the inquiries I was undergoing.

There was a stage when I realized that the process was going to become the outcome of the project. I then traced the parameters of a format, a program that I would follow, and started working along those lines. It seemed to make sense then to start making notes of it, to write while working—following the track of the work in progress and following the logic of trying to figure out what I was doing while doing it.

Below are the notes I kept while working on the project.

Working Notes

08-07-2009

I am struck by all of these butterflies being unique and irreplaceable: each of them equal to the other but not. Each little stain, another pattern. Sometimes mistakably alike, not because they look the same, but because there are so many of them, and there are patterns that look repeated, types of patterns. The beauty of it is that after I have drawn them, they sit in my system in a way that I could never mistake one I have drawn with another that one hasn't been drawn.

It's interesting to write here, being enclosed in this room, and where the smells are so peculiar — almost disgusting. It's only here, in this time and space where I look at the butterflies, I smell them and I think of them, and where I also wait for the mercy of the "specialists" that pass my desk from time to time, have a distracted glance at my paper and let fall a comment like: "you can figure out by the contour of the butterfly if the butterfly is feminine or masculine" and it's then that I go one little step further in this universe which otherwise I would only have understood through visualization.

At times I think what I'm doing here, by doing these drawings, is to try to deconstruct the idea of the possibility of making schemas. A certain type of butterfly cannot be represented with a schema of it; each of them is different and unique.

I've been thinking about the idea of synthesis in drawing. I have learned how to highlight (making synthesis) the necessary features for the form to be visible. What I seem to be doing is highlighting almost too many elements, and that, in a certain way, prevents me from seeing the whole.

In one drawing, there is no comparison. But how many would be needed for the comparison to start cancelling the particularity of every drawing? When does repetition not allow the individuality to be seen any longer?

I remember a number of patterns, a butterfly's pattern, the pattern in the drawer and the pattern in the collection.

Strangely, if I put too many details into the drawings, they don't seem to represent the butterfly. The excess of elements goes somehow against the possibility of recognizing the object.

As usual: I started tracing the orientation lines on the paper — and then I leave the pattern to define the shape of the contour.

08-07-2009

The smell assaults me when I arrive: naphthalene. When I arrive,

I sign in at the front door (a security requirement). I see my name in between the names of the people who work there: the office people and the librarian who recognize me. I have a weird feeling of belonging, being part of something where I've infiltrated another type of work, in another type of life.

Time invested in the drawings: 4 drawings a day; 3 days and one family of butterflies.

The system could have been: "all the existing specimens in one species."

Why some butterflies and not others? Is it pattern I like for drawing — what is it in them that propels me to draw that specific type and not the one in the next drawer?

It is about imagining them in black and white- and with such a rough pen that doesn't allow subtleties or corrections.

I try to represent the inapprehensible in this, get involved in the details, the nuances of the nuances, dipping my nose into the slightest micro-details and expect them to reflect on 'the whole.'

Once I've drawn them it is as if they belong to me; as I would never mistake them with others.

Why only the front wings? To keep the level of abstraction. A scientific book drawing is good when you can recognize the sample. For that you need to know what is relevant in the sample, and remark the importance of it.

As an amateur observer I don't have that kind of information.

16-07-2009

For a few days I didn't come to the museum, and again: the smell, the old man greeting me and my desk waiting for me.

I know today which type I'll draw: the continuation of what I started the other day. Rob's favorites. I need to find them first so I start deciphering my own mapping code of the space.

I count the blocks from the back of the space to the front: the second one looking from the back, after from right to left, the 7th one,and from bottom to top, the 15th one. I make the effort to remember whether this is the path that I did before and it feels weird. I open the drawer and the pattern of the butterflies shows another drawing than the one I remembered. The type of butterflies is the same but the pattern in the drawer feels different. I look at the drawer below, just in case, then the upper one, and there, there were more. 16th instead of 15th. How would it be a piece where the viewer could sense the infinitude of the material here?

Why 12 drawings of each type?

It's the number where I thought that one can still perceive differences, it allows for comparison among the drawings, but does not cancel others out.

They could have been the existing ones within a type. And then sometimes there would have been hundreds in the series and sometimes only four.

27-07-2009

The story of how a good drawing can be a bad representation.

Is every drawing a meditation piece?

The day that I lack concentration is the day that I shouldn't even try to draw.

Today I wouldn't even remember the pattern of the butterfly I drew today; no features got recorded in my brain system; no memory left, no imprint. Just a nice drawing left, maybe even nicer than the others.

28-07-2009

The smell of this place is beginning to get on my nerves.

I'm starting to recognize where the sample could be. Big accomplishment. When the butterfly's pattern is simpler, it's harder to get a good drawing done. How do I create an interesting image when there are almost no visual elements in the pattern I'm depicting?

The ruled of the game:
- The size of the paper
- The pen
- The number of drawings

Back to the conviction that through drawing and only drawing can I apprehend what I observe.

The collection itself is a language. It is organized in a system that can only be understood if one knows enough biology; it's organized by the evolutionary line; if one does not know it one is lost.

I'm slowly beginning to understand it.

Maybe all drawings are a meditation piece for me, the only way to stay quiet and focus on something. I wonder if through this project I can understand other projects I do at least those of the same kind — meaning at least the ones in which I work with natural science collections?

My sitting here, having first got permission to come, then to come without a curator assisting me, then to open the drawers by myself; then the next step to be allowed to take them away from their position to the table, after which it becomes always the same table, my desk. Then I am allowed to remove the glass that protects the samples in the drawer. And the last step: I'm allowed to remove the pins with the butterflies from the Styrofoam to which they are hooked.

One thing after the other, getting lost in the collection, starting finding my way and so on and so forth.

31-07-2009

Is every drawing a meditation drawing?

Maybe not, every drawing helps me 'to be with' the samples, to understand them and to understand the systems. But — as I change the model every time, everything has to readjust; every one of them responds to a completely new order of decisions, parameters, and coordinates. So in that sense, no, it's not a meditation piece, but something that gets renewed constantly. In this series it is about finding a new micro-method within the method every time.

The first sample in the series is always the most chaotic, until I understand the form, and where it is more convenient to start the drawing and approach the form. I slowly become able to 'see' the areas in which the patterns have the tendency to vary more drastically (in micro-scale) and the areas in which the patterns are more stable.

Slowly I even start to notice the gender differences in the species.

One day, one of the entomologists reveals to me the fact that if I see the specimens from the underside they are also beautiful.

I saw in the entrance today a poster with an advertisement of a congress in systematic biology. Three days later I was signed up.

How else, if not coming here, would I gain access to this kind of information?

Every drawing is a way of understanding and thinking. It is always about establishing systems of relationships within the drawing itself and with other things.

Not every drawing is a meditation drawing.

◇

Today I started with the last group. For this I chose one that has lots of variations among the specimens: quite radical.

I sometimes secretly wonder if it wouldn't have been simpler, easier and probably more effective to take photos, print them and trace the samples, or overlap them to see the differences. Basically what the device that Willem mentioned does (a machine where you upload scans of many patterns and the device detects and highlights the differences among them). I'd then have only the differences. Perhaps a nice idea for another piece.

The one thing I'm certain of — is that all these thoughts and writing wouldn't be here if I hadn't done the drawings.

◇

For each type I need to develop a little system. Sometimes the best is to go 'art-school' style, tracing first the orientation lines and placing after where the spots and lines are within the structure. Sometimes, depending on the pattern, it is easier to get oriented from the spots and details into the general form.

In this type the structure first works better; in the one before it worked better starting by the nuances.

04-08-2009

In a drawing of this kind, the hardest thing is to establish the coordinates. Once I have the coordinates established the rest is about filling in gaps.

The fiirst thing is to establish a system of references. How many veins does it have? Where do the lines converge? What is the surrounding form, the contours? Do they normally converge here or there? There are certain features that seem to be repeated in all of them, a general pattern, and then I start finding the nuances in each of them.

14-08-2009

The consequence of thinking about something else, and not setting the coordinates, is that I erred quite drastically in the drawing.

This is the first drawing in which I feel I err, Maybe not enough to throw it away — or maybe I do not have the patience for it.

15-08-2009

Nothing can be as fulfilling as finding the drawer I need by myself, without asking anyone in the collection.

A sign of beginning to understand the code.

First drawing in the series that goes to the trash. Impossible to draw without concentration

16-08-2009

Today I had to go back to one of the first series. Before I decided each series would consist of 12 drawings I was stopping before reaching that number. Now, I need to complete the drawings that are missing.

I had the name, I had already identified the column where they were and then, the surprise, six drawers had the same family.

I was carrying with me only one drawing from the anterior series. I was aware that I had a map that would easily help me find the right drawer. I always draw, on the back of each drawing, the whole pattern of the drawer and where my samples are placed. Nevertheless I decided to prove my own theory, I wanted to see if I'd remember the butterflies I already had drawn. They all looked almost the same, but there it was, no doubt, there it was, the one I had done. I checked on the back to see if I was right. Number 11, counting from bottom to top.

18-08-2009

Last day.

A drawing with no time and no patience. There is no research or cognitive process in this today.

It's good to know that not every drawing entails a cognitive process and that what I've been writing these months does not always apply. The last two drawing sessions have been disastrous. The one before I could recover my concentration by the second half of it. I only threw away one drawing; the first one I considered 'a bad drawing', not because it was ugly, but because it lacked observation, it was a quick looking at the object, with no love, no engagement. I'm not even sure it shows in the drawings; but I don't feel the last eight/nine drawings make sense. They could have been done by someone else, another hand; I could even have traced them. There were no processes that have been activated in the making. Only the desire to finish.

UBX Expression

Apex Art (New York, the United States)
November 2008

UBX Expression is the result of a working period at the Entomological Collection in the University of Amsterdam (UvA). The work focuses on the morphology in butterfly patterns. It basically consists in five series of drawings, pen on cardboard (8 × 8 cm) of butterfly wing pattern (always the upper wing to the left). The piece focuses on the subtle difference in each wing and in seen how those wings which are represented as schemas in books don't ever respond to the schema but there are as individual as the amount of butterflies flying and collected in the world.

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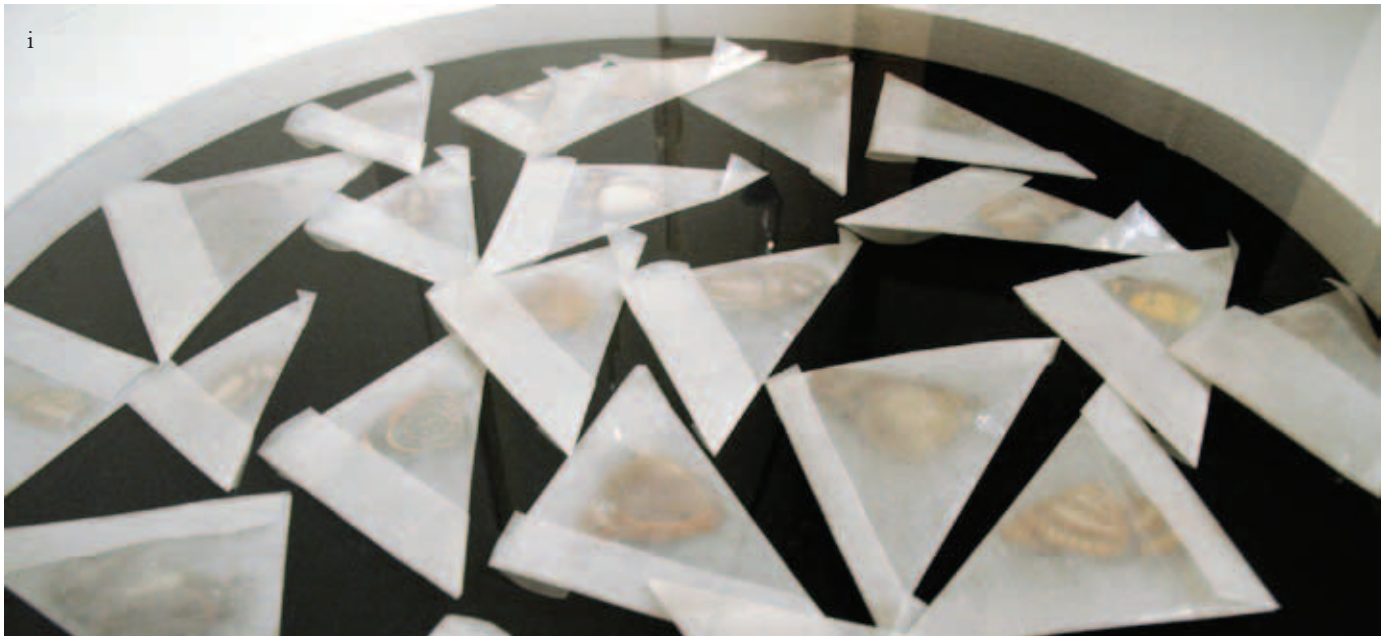
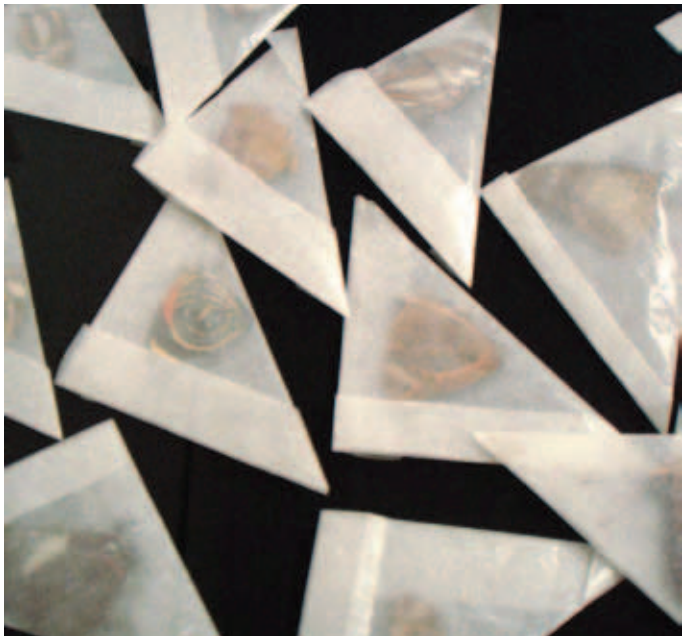
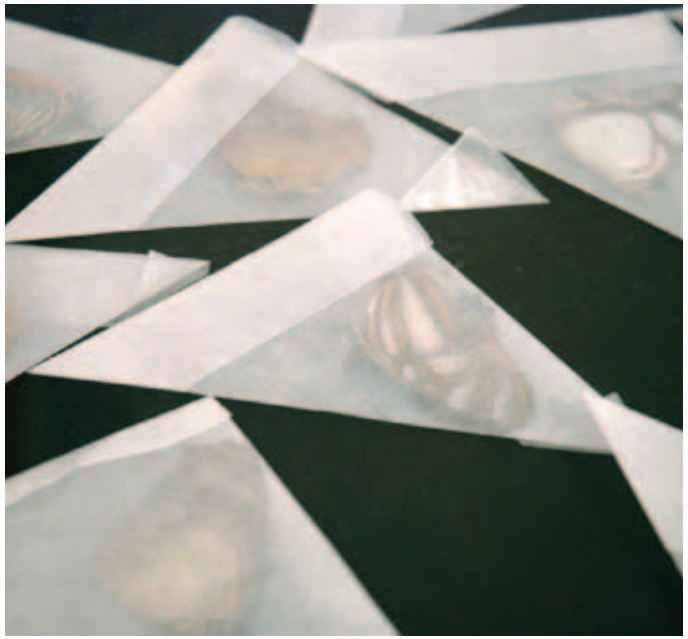
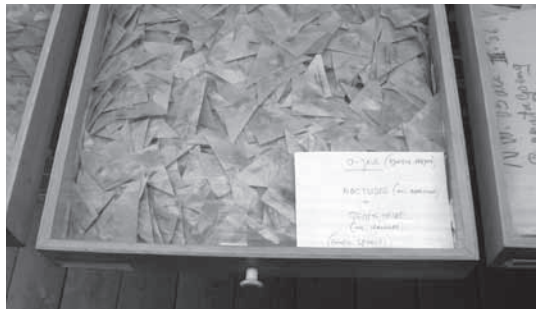


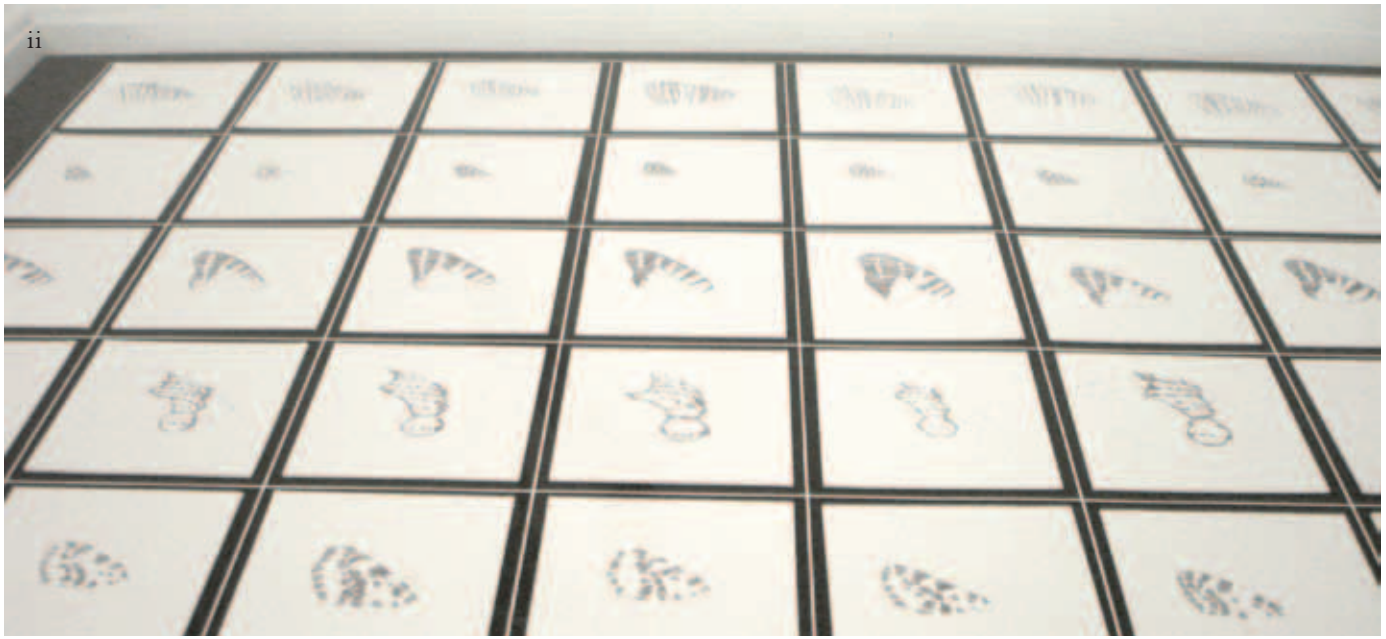




i
Wrapped butterflies as they are kept in the collection when they are not yet classified. When entomologists do field work, they wrap the samples in paper to transport them from the field to the collection; there they remain in drawers as unclassified material till they eventually find a spot in the collection.
(Source from Entomological Collection at the University of Amsterdam.)



ii

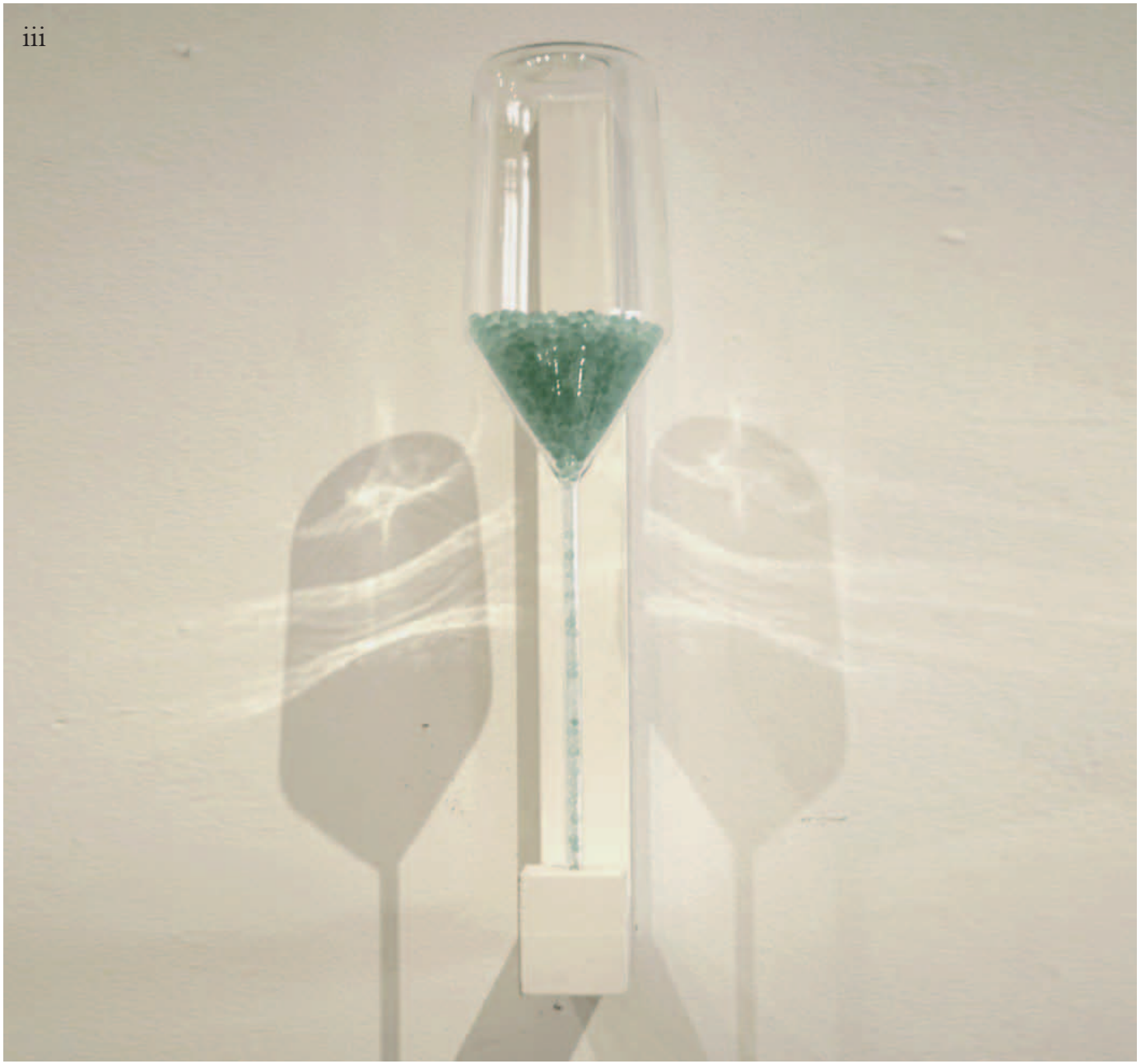


i–ii

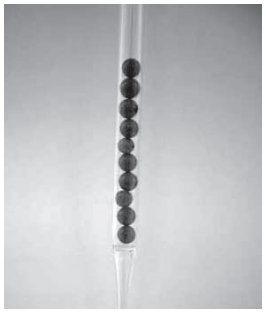
i–ii
The work gathers sources from other collections such as the Geological Museum in Amsterdam and the University Museum in Utrecht. The display table is inspirited by a slide system, which is use to storage tiny microfossils in Geology.

The glass pieces depart from a device which I find in the depot of the university museum in Utrecht which was used for pedagogical purposes in teaching the genetically organization in biology. Basically you have those spheres (in different percentages in each container), you turn the container up and down and the spheres always appear distributed differently.

iii



A remake of a pedagogical device used to visualize chance in genetic organization. The different colored glass balls are mixed in a container and will consequently always appear differently distributed in the glass tube. The devices will contain different percentages of colored glass balls: 1)10% - 90%, 2)20% - 80%, 3)30% - 70%, 4)40% - 60%, 5)50% - 50%, 6)60% - 40%, 7)70% - 30%, 8) 80% - 20%, and 9) 90% - 10%.
(Sources from Collection at University Museum Utrecht)



4
Scale 1:2.5

✯

Year 2008. I was invited to do a site-specific piece at a place called Outline in Amsterdam. The space itself was beautiful but quite complicated for a show, with plenty of windows and only two white walls, which were very close to the wall in front and very narrow. The space was not suitable for hanging works on the walls as there would be no distance from which to view them.

My first idea was to present a series of pieces on which I was working at that moment, but the space did not seem suitable for them. I was working on a series of sculptures and watercolours that I could not imagine exhibiting in that space — as I said, it was very narrow, the windows would have interrupted the narrative on the walls' display, and there would be no space to walk around my sculptures. And, the invitation wanted site-specific work which the space seemed to call for anyway.

I started wandering around the area and the space, going to visit it a couple of times. The neighbourhood used to be a hospital, but had been turned into a living area. It was a bit enclosed, separated from the surrounding areas of the city by its own architecture and greenery. Outline is in the middle of it. No one knew very well what it used to be when it was part of the hospital. At one point, while I was installing my piece, a former nurse was nostalgically walking in the area, and she stepped in and told me that the room used to be a surgery room. I never would have imagined that, I had always thought I was working in an old church — but I liked the idea of it having been an operating theatre..

Site-specificity in this case involved, for me, very concretely responding to the space as such, even to the surface of the space; I wanted to develop a project that would depart from the space itself.

I had worked site-specifically on other occasions by reacting to the history of a place, as for example in the case of another former hospital, which was later turned into an exhibition space (SMART project space). On that occasion I took the idea of site-specificity very differently, and worked around the fact that the building was a hospital — more precisely, a laboratory of pathological anatomy — and from there somehow addressed the question of what anatomy was some centuries ago. I also worked with the memory of a book I had found a number of years before on Monsters — a catalogue by Ulysses Aldrovandi, who in the fifteenth century did a complete encyclopaedia of thirteen chapters on nature, one of which was about monsters, not as fiction but as anatomical possibilities. F,rom the old plates I reconstructed three of those monsters in plaster and placed them as reliefs on the walls of the exhibition place. They were almost white on white walls.

In different projects, site-specificity might mean something else. In *Scale 1:2.5* the primary work in question in this text, it was related to the space itself. The history of the place did not ignite any curiosity in me, and nor did the history of the area. For me it was the space: a beautiful one with lots of light and an uncanny shape, that was inspiring, but the history of which I somehow did not want to unveil. I was wondering how the space could talk, in a way, about itself.

It was an interesting challenge, for me at that time, to go out of my way and do a project I would not otherwise do: to start from scratch on something unexpected, something I did not plan, in a space which I could not connect to any conceptual construction I was working on, just a space. In a way, it addressed the idea of construction per se via the question: how do you build up a piece from zero?

I decided to revisit an old piece, a site-specific piece that I did when I was at the Rijksakademie (which has been briefly described in the introduction of this doctoral paper) and that I felt I had left unfinished at that time, even if it was exhibited. I had always thought about going back to it. The piece was done in 2003. I had done frottages of one of the walls of my studio, one full wall. I took photos with a manual camera, with large-format negatives. I somewhere remember that the format was larger than 6 × 6, perhaps 8 × 8, and I remember engaging in quite a bit of

research trying to find a larger format as the negatives were going to be the final piece. I talked quite a lot with Roy Taylor, the head of the photography department at the Rijksakademie, a man with lots of patience who helped me think, plan, and try ways to find the right material, film, camera, and so on.

I took photos of all of the frottage papers and again engaged in some research to find ways of framing the negatives. I was looking into how to hold the image in a very light way, without frames or anything else that would interfere; something that would allow just the image to be seen. I wanted to work them as old daguerreotypes plates, in between two pieces of glass and with no surrounding frame. The solution was some strong tape around the glass and then cutting off all leftover tape, just leaving enough material to hold together the glass pieces. The negatives existed in between the two pieces of glass.

All the negatives were framed that way. The storage system was also conceived to be part of the display system. I built a special metal archive box for the pieces, designed like the storage boxes which were used to hold glass slides in insect collections. By the time of the open studio shows, I had built five long tables (each of them with one project), one of them showing these negatives and their archive box. The archive box was on the corner and some of the slides were displayed with some distance from the table surface so that light could go through and the image was visible.

What I liked about those images was that they looked like old astronomical representations of the sky. I liked the clash of knowing that those images originated from the wall, but looked like night skies. What I did not like about it was that it felt like a good idea, which was not pushed to the extreme of its possibilities. I thought that the way to push it to its maximum potential would be to have done the whole room. I thought also that the scale of the image was too small, which made it very difficult for the viewer to empathize with what I was seeing in the images.

I remain uneasy about that piece, not because I did not like it—quite the opposite. I thought it had a lot of potential, which I killed by not exploring all its possibilities and chances to expand. I have kept wondering over the years what it would have been like if I had done this or that. As it was I felt it did not succeed—I almost did not feel it was a piece, but rather an unfinished exercise.

That disquiet has stayed with me and built up into a desire to rework the piece; as I continued to daydream about it, I wanted to revisit and work with it differently. In a sense, it did not matter so much for me which space or which walls became involved; the history of the given place or floor map were not as relevant to me as the fact that I wanted to work with an entire space, and let the piece expand into the possibilities I thought it had.

Then, five years later, I was asked to work on a 'site-specific project' in a space that I didn't find interesting in any other way than as a space (Outline). And the space was actually very interesting as such; it had a very weird shape, like a cross, a bit church-like.

I was interested in the surface of the walls and in the idea of dealing with the surface as a layer that might connect with something else, with the history of the space, and which might become or could become visible through revelation of the surface. The space this time was the landscape—a potential landscape.

I tried to imagine how those white walls become a landscape. Were there vistas on them? Were they hidden? It could become a landscape, but at first it was just white and empty. Were the walls going to look like night skies, like the walls I worked with in 2003? Or would they look like something else? This was there to be discovered.

My work since 2003 had changed quite a bit; I had not done any other piece related to those frottages in all those years or with spaces per se. I was rather busy with spending time in natural science collections, with stones, fossils, crystals and optical instruments. What I did know by 2008 was that my interest in the issue

of landscape was deeply rooted in my system, in different forms and variations: the natural landscape as such, the representation of it, the samples that belong to it, and the display systems that have been used through history to store and present those elements.

Owing to this interest, I had a very strong intuition that what I was searching for on those walls had nothing to do with the walls themselves, but rather with a search for landscapes where they did not exist. I was interested in finding topographical aerial views in the walls of the exhibition space. I had the feeling that I was in a search of a landscape — a mental landscape.

I was clearly on the hunt for images that recalled topographical formations, such as aerial views of mountains, rivers, deserts, lava fields, and ice fields. I constantly imagined that I was looking at geography from above and at a distance.

I was also openly searching for a system — finding a program was also an aim. I kept thinking about Sol Lewitt and his sets of rules that would, when applied, have a visual manifestation. Bearing this in mind, I went for a very programmatic procedure. I decided that I was going to recreate the texture of all the walls of the exhibition place. The system for doing so would again be frottage, placing paper on the wall and rubbing it with a square graphite bar. I settled on using a graphite bar after a couple of try outs with carbon bars of different sizes and shapes, graphite powder, and instruments. I also decided on the kind of paper after several attempts with different types. It had to be transparent paper, but I was not sure of the thickness. I spent a few days rubbing different types of paper.

I planned to photograph the frottages, but this time the photographs would be printed on paper, thus enlarging the scale of the image. The size, paper, and printing quality were again a subject of search and experiment. The final decision was a matte paper, of 30 × 30 cm, which was four times smaller than the original paper (the paper size used for the frottage was very practical, in relation to the roll sizes available on the market).

Before reaching this decision I made several attenpts in different sizes and on different paper. The use of matte paper seemed to be the best solution for maintaining a some distance from pure photography, in that on matte the photographs did not look like photographs, but more like a silkscreen image or a drawing. The size allowed for the tight balance of the image — not too compact, and not too stretched.

I always began at the left, bottom side of the wall, moving in a row from the corner toward the right until the end of the wall, and then moving to the upper row, departing again from left to right, and repeating the same until the wall was done. First the papers were set (just one row), rubbed with the graphite bar, sprayed with fixative, and then taken down and piled. Then I would do the same to the upper row, using the same procedure. The paper was always the same size, and that did not necessarily coincide with the size of the wall, so there were areas on the paper that were white, which occurred when the wall ended but there was still paper left.

I decided to leave those white areas. I liked the random composition that started appearing as a consequence of the program: the random drawing in the frottage, plus the random composition on the paper given by the juxtaposition of the drawn and the white areas.

One thing I realized through this process is that when I do an obsessive project such as this, all the steps have to follow, and do follow, that same level of obsession. The job was meticulous, and can safely be described as obsessive. All my works are in one way or another obsessive, but I always try not to let it become the most relevant feature of the work, but rather to let it just be there, latent. The labour intensity somehow charges the pieces, but I do not want the pieces to be about labour, I do not want the public to enter and only talk about how laborious it might have been to do it.

One of the aspects I liked the most about this piece was the fact that the result was very light; it did not have the heaviness that it

could have had if it obviously took into account or displayed the amount of hours of work that were involved.

I did not make decisions concerning the patterns that would appear on the paper, but the patterns rather happened by default, as a consequence of the set of rules one traces for oneself. In cutting the roll of paper into pieces, taping the pieces on the walls, making the frottages, spraying the pieces, taking them off of the wall, and keeping them in order, everything became a rather a tedious job that I had to do and keep doing with an equal amount of attention and care in every step.

This stage of the process took something like thirteen days, if I remember correctly. The first, two or three days went a bit more slowly than the rest, as I settled and understood the scale of the endeavour; then followed by a week of more intense labour.

The process began by being fun, and remained fun until I managed to set up the system and really learned how to put it into practice. However, at a certain point it began to get tedious. After a week of rubbing the walls, I thoroughly understood the scale of the task I was attempting. For awhile I still appreciated the challenge in the endeavour but at certain stagesI felt a bit desperate. It took about a week before I started to realize the full scale and dimension of the project. I became aware of the fact that it was impossible to complete it in the given time. I had a time frame, in between an exhibition at the space and the next one, of two weeks, and after that I had to return the key. Everything had to be done before those two weeks ended.

The difficulties appeared in details that I could not have foreseen, for example in realizing that to place the paper on the top of the walls, in the corners by the ceiling, I needed four hands instead of two. There were both the physical constrictions and the time limitation. I realized I needed some help, so I started asking around to find someone who could assist me in the emergency. Nina was available.

Nina is a good friend of mine, a visual artist who at the time was doing the program at the Rijkskademie. I knew she had once helped a mutual friend of ours with the production of a piece, and thought about her when I realized I needed some assistance. I knew that she liked to get out of her own artistic head at times and do small assistant jobs, and I also knew that she was generous enough to engage in such tedious labour with total engagement, while maintaining a good mood. (Nina will make her way into the text again later, in the *Lévy's Flight* chapter.)

Initially I wanted to think of the gallery piece as entirely programmatic, and I thought I was creating a system that could be applied and enacted by anyone else, but when I saw how different Nina's results where from mine, I realized that that assumption was not the case. The pressure of a hand on the paper, the specific way of addressing the contours of the paper, the dirt residing on a hand, and other things, resulted in differences between my work and hers. Still, I was happy with both sets of results, and I knew that the differences were too subtle to be noticed by anyone other than me. It was a small caption in my notebook—an interesting note on the process.

Nina was great for this job as she had a natural tendency to be surprised by small details. It was also a good lesson for me, as she understood that it was a waste of time to spend six hours in putting tape neatly on the paper, or in other small obsessions, which could have delayed me for weeks. We had to be more effective given the conditions.

What saved this piece from monotony was the fact that the image that was revealed on the paper was different each time. It was actually a nice surprise every time, on every piece of paper—always a different landscape.

The procedure ran the risk of becoming tedious and boring, in that it was always the same process: cutting the paper, placing it with tape on the corners, rubbing the graphite against it, applying fixative, letting it dry, removing the tape, removing the paper,

putting the paper in the pile, numbering it, marking the number on the map. It was extremely mechanical, and it needed to be. If I lost concentration I would miss one of the steps, which could have been a small disaster in the program. The machine had to function; every step had to be accomplished. That kind of repetitive action might become seriously tiresome and dull, but there were surprises as well: in the patterns that were exposed on the paper every time the graphite bar was moved on the surface.

The program generated endless quantities of variations (as for example in the white areas on the paper and the different variations in the patterns themselves).

I kept thinking about this state of wonderment in which the action held us; we were continuously surprised by the patterns that the rubbing of the graphite would leave as traces on the paper. I tried to think about what this piece and the actions that created it were connected to and the first thought that came to my mind was the very old and childish memory of rubbing a pencil on a paper surface in trying to get the texture of a coin or a leaf. It was the memory of a very primitive sense of discovery, which somehow Nina and I still seemed to have while working on the rubbings.

I constantly had the feeling that my piece was not very original—and not that that matters, but I had the feeling that the very primitive sense of mapping one's surroundings that my piece was attempting had been explored before, not one, but by many artists. Digging not so deeply into art history, the first one I found using the rubbing technique and turning it into a piece was Max Ernst, who in 1925 started using this technique for capturing an ancient wooden floor. The results suggested mysterious forests peopled with bird-like creatures and Ernst published a collection of these beautiful drawings in 1926 entitled *Histoire Naturelle* (*Natural History*).

I had the feeling that an artist I used to see more often than Max Ernst used the technique too; I kept trying to remember who it was until one day I realized that it was Matt Mullican. He used in a very different method. He rubbed paper on his own sculptures and obtained a pattern that he used afterward as part of his installations, and that he sometimes showed as drawings. This is a very different use of frottage; quoting his own words: "There is a kind of fake history that occurs, because in my studio I have the master plate, the relief, and in the gallery you see the rubbing, but it is taken from another place. The relationship between the master and the print creates a kind of artificial history. The rubbing is not a painting, a drawing or a print, none of them and all of them. It is a retinal image in the sense of Plato's shadow. When I look at something, what my eye sees is the retinal image, but the world is not that. What the rubbing represents is what the eye sees, the relief is it." (1993, 116).

Where Ernst used the technique to envision images of something else, something beyond the texture in itself, Mullican used it to create a distance, a layer of filtration in between his reliefs and what the viewers see.

Where do my frottages fit within this scene? Presumably much closer to Mallican's, in the sense that they act as layers of filtration to create another history—but in my case I feel there is a double purpose, in that the frottages serve to create a distance, but at the same time to make something closer to the viewer, to render something more visible. And somewhere, even if only in my fantasy, they are also about envisioning a faraway vista, a topography of a landscape which does not even exist, but which might ultimately bring me closer (with a detour) to the impulse that drove Ernst to do those rubbings.

But now, I'll return to discussion of the room and the floor plan.

During my process of working on the piece, I started making maps of the paper pieces in relation to the walls. I created a small version of the space, with walls A, B, C, D and so on to V. This was necessary because the space was intricate—full of columns, arches, windows, and doors. The paper I used surrounded and rendered the entire wall space. I labelled each one, for example, A1, A2, A3, to V292.

My system of compiling and organizing the process was also set, as a map that would allow me later to reconstruct the space. Like a space puzzle, scaled one to one, consisting of 292 sheets of paper that recorded the entire texture of the exhibition space.

After a couple of weeks of work the frottage stage was finished. The next step was to take photographs of every page. I took the heavy pile of rubbings to a studio, and fixed a camera in a horizontal position. I selected a spot for each piece of paper to be placed on the floor, set the lights and a clicking device and spent a couple of days placing paper and taking photos.

I also renamed the image files on a computer, while checking to see that the puzzle was coming together; if one image was taken twice, much confusion would happen, including incorrect file titles which would cascade the mistake through many images and result in having, later, to locate the initial mistake.

I kept remembering during this process a text I had read.

The preamble of Georges Perec's book, *Life: A User's Manual* starts with a beautiful text on jigsaw puzzles. It is a short text to which I return quite often,. While working on the gallery frottage piece, and in the different stages of it, that text kept coming to my mind. There are a couple of aspects that drag me back to the text. One of them is the way Perec describes the art of jigsaw puzzles, and the other is the invisible dialogue he describes between the person who cuts the puzzle (in handmade puzzles) and the person who tries to assemble it.

His description of the art of the jigsaw puzzle is beautiful, as it describes the complexity of it, not as the sum of the parts that can be distinguished from each other, but as a pattern, in which the pattern determines the parts. In his words,

> Knowledge of the pattern and of its laws, of the set and its structure, could not possibly be derived from discrete knowledge of the elements that compose it. That means that you can look at a piece of a puzzle for three whole days, you can believe that you know all there is to know about its colouring and shape, and be no further on than when you started. (1987, 15).

The beauty of this is that an act of a person is required to make sense of it, and this recalls to me the idea of experimental history that is described in the methodology part of this text, in which I describe a need for an actor who embodies an action in order to make sense of components of a piece and thereby acquire the knowledge which is embedded in it.

Quoting Perec again,

> The pieces are readable, take on sense, only when assembled; in isolation, a puzzle piece means nothing—just an impossible question, an opaque challenge. (1987, 15).

Here again we have a question that will remain opaque and obscure unless we, as actors, decide to go into it and try to solve it and pull the constituent elements together—elements that are nonsensical if we look at them as simple fragments, but that together become a piece. It is difficult to connect these ideas to what I was doing with my collection of images from Outline. One image of all those, on its own, would not make any sense.

In Perec's text, he discusses how in handmade jigsaw puzzles, the process starts when the maker asks himself the questions that the he would have to solve to reassemble the pieces. This part offers a beautiful understanding about the path the eventual assembler of the puzzle will follow, a track which was foreseen by the puzzle-maker, a path which was full of intrigue, plotting, and manoeuvring. Perec finishes his preamble by saying,

> From this, one can make a deduction which is quite certainly the ultimate truth of jigsaw puzzles: despite appearances, puzzling is not a solitary game: every move the puzzler makes, the puzzle-maker

> has made before: every piece the puzzler picks up, and picks up again, and studies and strokes, every combination he tries, and tries a seconds time, every blunder and every insight, each hope and each discouragement have all been designed, calculated, and decided by the other. (1987,17).

Here again it is not difficult to make a connection to what we do as artists: we create a puzzle that will then be read and reassembled in one way or another by the public. As solitary as it might feel when we work on the pieces, there will, sooner or later, be one other who will look at them.

I was constantly under the impression that I was creating a puzzle that the viewer would have to reconstruct. Throughout the whole project I felt I was working on and playing with the rules of a puzzle game.

Now I will return to discussion of the process while I was creating the Outline piece. After the photographs were taken, the images were printed on huge sheets of paper, many of them together. Then the images had to be cut, one by one, organized, and finally taken to the exhibition space.

There was a grid applied to the space. The interesting bit was to observe how the patterns on the papers were all different: no one single piece of paper of the 292 looked like another (on close examination). The difference in the minuteness and how this space, which was just 'a space', got charged and filled via a variety of steps and filtrations (the frottages, the photos, the changes in scale made visible what was invisible. The white space was not white. It was charged with and full of all kinds of textures and patterns—just like maps, places looked at from above.

The results were drawings, all different from each other, each single paper different from every other. Those patterns depicted were not meant to be valued in terms of a 'good' or a 'bad' drawing. They could not be assessed under those terms. They were about the process of making something visible which was previously invisible or unnoticed, about revealing the nuances of the space, and about mapping and understanding something through the drawing. Looking at it along these lines, all drawings were good drawings, as the outcomes of a process.

The drawings were maps, or systems of references.

Here I would like to tell a small story as an aside, a beautiful piece of information which I came to know via my friend and colleague Mariana Castillo Deball. I learned from her that the first jigsaw puzzle was a map. In 1766, John Spilsbury designed the first jigsaw puzzle. Spilsbury was a British geographer, and is believed to have been the first commercial manufacturer of jigsaws. The maps were designed as teaching aids for geography classes. As pupils put the pieces together, they would learn how different countries connected to one another. And here I am, puzzling and mapping again in 2008 in a space called Outline.

This puzzle program unfolded naturally as a consequence of the fact that I needed to be able to keep the parts organized and wanted to be able to reassemble them once they were initially captured. If you observe the process material it does resemble an archaeological site, or archaeological methodology. Once more this is not the aim of the system, but the outcome of a commonsensical series of procedures, which had to do with the nature of the project.

Never in a piece before had I felt so much that I had set up a program that, in a way, I just had to accompany until the end, taking minute care in the steps which were required to bring the piece to its end. Once I established a system for this, the following steps were a consequence of the program.

I exhibited the photographs, displaying them on the same walls where the frotagges were made. The images were not displayed on the same spot as where they were generated, but I created grids on the walls reconstructing the wall, one image next to the other. In some walls this was difficult to do because the walls

were the same size or even thinner than the photos; this was the case with pillars, for example. Given the fact that I did all of the frottages on the same size of paper, sometimes the frottage area (meaning the wall area) was very narrow. The result of this was that I sometimes displayed a photo with very little pattern on it, but with lots of white; and then subsequently the photo was at times too big in relation to the surface from which it was created. I therefore had to negotiate with the number of images I had and the available wall space on which to hang them. I sorted the riddle on every wall differently according to what I thought would make the presentation more coherent.

I created a 'map,' a small plane of the space with grids and numbers so the viewer could trace which image corresponded to which part of the wall. That map was a folded A4 which the public could pick up and wander around the show with.

A good number of things worked better in this version of the piece, in comparison to the one I did in 2003. The most accomplished side of it was the fact that I frottaged and photographed the entire space, and then the viewer could engage with that space as well as with the photographs. This was facilitated by the hand maps that people carried. It made it feel that the public was decoding a hidden logic on the installation, following the steps of an archaeological search in which there were things to be discovered. The size of the images and the fact that they were printed on paper helped too. My 2003 piece, consisted of tiny images in negative film, but in 2008 the images were printed on 30 × 30 cm paper. The images were there to be seen.

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Did I manage to close a circle that I had opened up with the piece in 2003 when I was at the Rijksakademie? In a way I did. I had the feeling that the piece was finally what it had to be: a full space taken and addressed. A piece was rescued from my memory and process and was brought back into a form with which I was more satisfied.

But this reveals another problem: how do I do to take it out of the site-specificity of that one single place? After the show finished I built two wooden boxes, one small, one big (one 1:2.5 smaller than the other). I brought them to my studio. The boxes in my studio contained the papers from the show, one of them with the photographs and the other with the rubbings. The small one was taller than the other as the photographic paper is thicker than the paper used for the frottage.

They comprise a puzzle that can be put together. The question is: For what purpose? The patterns without the shape had become a pattern, a puzzle for the sake of puzzling and a map for the sake of mapping.

Would it make sense to do something with those images? I thought about it a great deal, and in my imagination attempted many tours and detours of various ideas. The material is beautiful—there is no doubt about that. The pile of photographs and the pile of frottages are beautiful, but somehow it does not make sense to assemble them together. I thought about turning the material into a publication, and I still sometimes think about it, but somehow I feel that publication is not the right solution for it, and would represent too easy a solution for a challenge like this: one makes a book, and thus gets the uncertainty out of one's system, then moves on to something else. As it is, I have those two boxes in my studio, annoying me, getting in my way even physically at times; those two boxes are like a question mark. I do not want to send them to storage; I keep the question mark close to me. At one time I thought I could reconstruct the space, as a proper puzzle, a space within a space, building the Outline walls inside another exhibition space and hanging the photos there. Again: For what purpose? It also crossed my mind to make a model of the space too, 1:2.5, and turn it into a sculptural piece. But the riddle could not be solved with this answer either.

The answer that seems to make more sense is that I gained a system out of this experiment. I learned a system. I can now apply the system to another space. The result will always be different, simply because the texture of a different wall will be always

different—there is no chance of mistake in that assumption. The proportions of the space will also be different, most probably, and it would be very unlikely to find a space with a floor plan exactly the same as the one in Outline. The proportion of drawn paper to empty paper will also always be different from at Outline. The pattern will constantly change. What I got, at the end of the exhibition, is a system that can be applied endless numbers of times, in different spaces, and that will always generate different permutations and variations of forms. And this seems to be what I had to learn from this piece—for now.

Scale 1:2.5

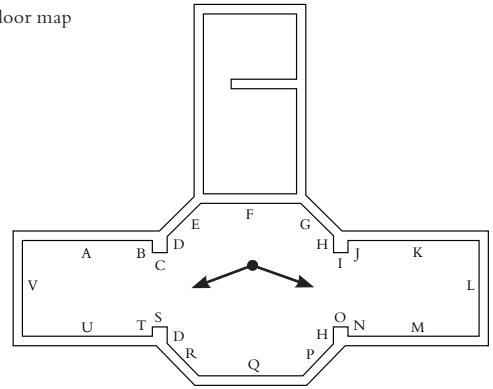
Outline Gallery (Amsterdam, the Netherlands)
September – October 2008

Scale 1:2.5 was a site-specific exhibition commisioned by Outline Projects, in Amsterdam.

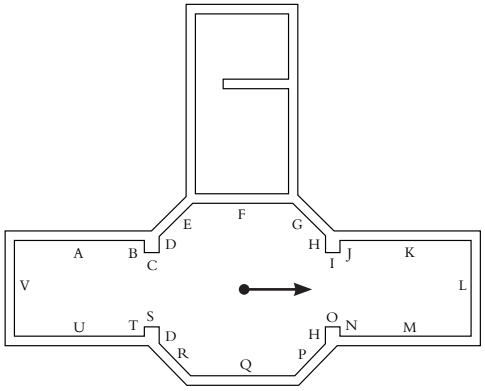
The first step was initiated during an interval between shows, when the space was not in use. I traced the texture of the exhibition walls on sheets of paper, sized 80cm × 80 cm using the technique of 'frottage'. A system was established where the papers were positioned on the wall from left to right (along the wall) and then from bottom to top.

The outcome of this pre-established system was that at times, when the wall space ran out parts of the papers remained blank. A pattern emerged where a half or a third of the paper remained blank while other areas showed the the graphite registeration of the wall texture. Each sheet of paper was numbered and maps of each wall were made in order to be able to reconstruct the puzzle that slowly emerged. Exactly 292 drawings were generated in this way.

Floor map



Drawings
H86 – 91, 189 – 200
L132 – 145



H91	H200	H198	H196	H194
H90	H199	H197	H195	H193
H89				H192
H88				H191
H87				H190
H86				H189

L136	L145	L144	L143
L135			L142
L134			L141
L133			L140
L132	L137	L138	L139

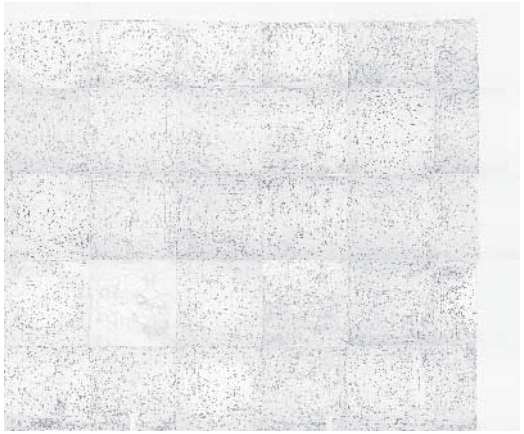
Scale 1:2.5 78

The next step was to bring the drawings into a photographic studio and make a photograph of each of the (292 drawings). The photographs were then printed in matte quality paper and were sized four time smaller that the original papers.

The final step was to install the photographs within the exhibition space, taking care to match the photographs with the areas produced by the initial frottage technique. Printed maps of the original position of the papers were made available to the viewers so that they could trace the relationship in between the photo-graphs and the space.

Drawings
K102 – 131

K126	K127	K128	K129	K130	K131
K120	K121	K122	K123	K124	K125
K114	K115	K116	K117	K118	K119
K108	K109	K110	K111	K112	K113
K102	K103	K104	K105	K106	K107



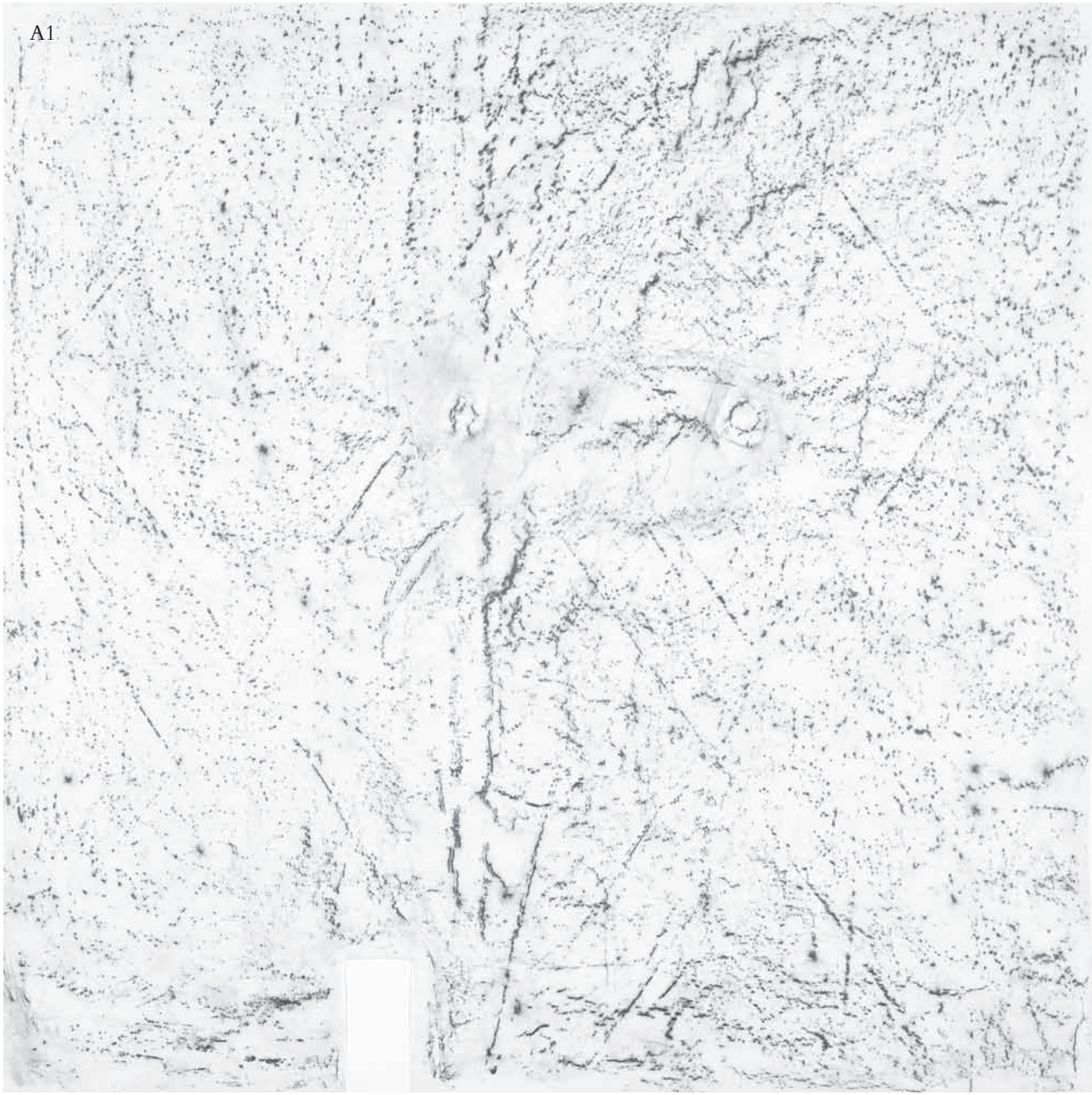

K112


K113


K106


K107

A1



Process

H196

Process

V282

Process

5
Lévy's Flight

✯

The title of this project comes from a mathematical formula called a *Lévy's Flight*.

A *Lévy's Flight*, named after the French mathematician Paul Pierre Lévy, is a type of random walk in which the increments are distributed according to a heavy-tailed distribution, which has an infinite variance. A random walk is a mathematical formalization of a trajectory that consists of taking successive random steps.

The project started to take shape in May 2008, when I applied for a production grant. I decided to apply for a project I would really want not one with guidelines and speculations about what the jury might or might not want from the artists. My policy was that from then onward I would only apply for things that would change my life and work.

For a very long time,I had nurtured the desire to work again in direct experience with landscape. This desire was fed by years devoted to the laconic exercise of collecting images, old representations of nature, and contemporary images of landscape via Google search, landscape magazines and so on—using any way to bring closer the illusion of being in one of those places with my drawing table, of sitting close to some of those textures.

For a long time, I had been collecting images of volcanic landscapes and lava formations. I remembered that one of the most amazing ones I had encountered was on the island of Hawaii, from a volcano which was still active, growing and forming. So for the grant in question I proposed that I to go to Hawaii for a field trip, make drawings, collect images, and reconstruct bits and pieces from the landscape once I was back in my studio.

Since 2002 I had been negotiating and renegotiating with different ways of working without access to the real physical source of a natural landscape. I referred to studio walls, stones, stains, natural science museum collections, images in plates in old books and so on—but all were permutations of a subject I was longing to be closer to. but for those years never was—at least not with a working plan and in a working context.

I was wondering what it would like to have direct experience of a natural landscape after having been detached from such for about six years. In those years I no longer dreamed about working with landscape, as it was so so far away from my experience that I could not even conceive the idea or the desire. I thought, during all those years, that my work had changed focus, and that it was not about landscape any longer.

But, slowly I found myself collecting landscape images in folders on my computer, and daydreaming about them. My curiosity had returned. I realized that the landscape need not necessarily be the landscape where my curiosity began (in Cordoba), but it could be another landscape. And I wondered, which one. and how do I choose it. I started with an easy criterion, and old dream of drawing lava formations. I was curious about working with a landscape that was not the Cordoba landscape, with my personal history attached to it, but rather with a landscape with which I did not have any emotional relationship or history.

A few months later, I received a lucky phone call, informing me that I had received the grant. I could go to Hawaii. I had budgeted also to produce a piece after the trip, and a show at the museum called Montehermoso in Vitoria, Spain (which was organizing and giving the grant). I planned logistics and few months later left for Hawaii.

Again luckily, I learned that my friend Nina, who is from Hawaii, had been brought up on the very island to which I was heading—the island of Hawaii itself (the big island). Her parents are still living there and sweetly she offered that I stay with them during my trip.

I had met Nina not long before, at the Rijksakademie in Amsterdam, while she was doing the residence program there. She was there long after me, but we had friends in common and we became friends smoothly and easily. I knew she was from Hawaii,

but I had no idea from which of the islands. Altogether there are eight main islands. The group of islands is an archipelago in the Pacific Ocean, which is part of the United States, but which is physically very far from the mainland of the country and from any other continental land.

For what I understand as a neophyte on the subject, the islands were formed due to volcanic action that came from under the ocean, from a magma source that is called a hotspot. What seems to happen is that a tectonic plate moves under the ocean while the hotspot remains stable, and that process results in the creation of new volcanoes. The volcanoes in the older islands are inactive, and in the newer ones are active. Hawaii, the big island, has five active volcanoes, and one of them (Kilauea) is one of the most active volcanoes in the world.

My friend Nina was from right there. The island with the active volcanoes…

She told me a story that influenced the trip. The story was that there is a myth on the island about a goddess called Pele. She is the goddess of the volcano and she becomes terribly angry if volcanic material is taken away from the island, and she punishes horribly those who do. Stories circulate about people who took a stone, and who are punished when they reach home. My friend told me the story, laughing about it, as it is a story everyone over there knows, and she was sceptical about it. I pretended I was too, but I knew that I would not dare to take samples from the island because of the story. Whether because of superstition or not, I made up my mind that it was a good restriction to have: not to be able to bring samples back with me.

Nina also told me that there are animal and plant species that exist only there. They appeared one day on the island and never left, and kept evolving, sometimes because without predators, into softer versions of what they were. I was looking forward to seeing those creatures.

I arrived in Hawaii after a very long chain of flights; Nina's parents picked me up at the airport. They are the sweetest people on the world and they live in a house that is simply paradise. It has a garden full of different fruit trees and flowers, and a view of the ocean—faraway, with no access, but with a view that you see when you wake up and even when you shower. I was happy to find that my friend grew up in a paradise. but a paradise with very little artistic culture, which made me realize how much work she had had to do to become an artist; this reminded me of my own history of growing up in a place without artistic culture (Cordoba, Argentina).

The day after I arrived, I rented a car and started my work. Nina's father (Chris) had previously worked in the national park (Hawaii's Volcanoes National Park) there, so he was able to guide me to places to go. Nina's mother (Noelie) is a painter and loves lava, so she also showed me spots that she thought would be interesting to me. One of the first things she told me, over our first dinner together, was that there are two types of lava there: "Pāhoehoe," a smooth, unbroken lava; and "Aa," with a spinose, airy surface. I realized that I had been searching for "Pāhoehoe" without knowing the name of it.

The island is nothing like the stereotypes people have of it. It is quite large—the largest of the islands. It can be traversed, but it is not that simple and takes quite some time as some roads are not good. It was winter when I went, so it was getting dark around six o'clock p.m. and days were short. Some areas looked like many places in the United States, with highways, Starbucks, McDonald's, and gas stations. Some areas are tourist resorts. And very large areas are a vast, uninhabited landscape.

I felt at times that I was in a weird movie. Some areas are resorts, some areas are residential, and some are beautiful landscapes. The island has a side which is desert and where the fancy hotels are (I saw it only one day out of curiosity), while the other side is tropical—very tropical, and it rains almost every day. The island measures about 150 km long and 120 km wide; I drove across it

mostly lengthwise, and during my drive the weather and landscape changed dramatically. Nina's parents are on the tropical side, which is rainy, but so beautiful and with amazing flora.

The first day I drove to the Volcanoes National Park. It was about 90 km from the house.

The landscape within the national park changes a lot, as there are areas with older eruptions and areas where the eruptions are still going on. In the areas that have older eruptions, the lava is crushed and growing greenery is visible; in others, with more recent eruptions, the lava is just beginning to crack and is black and shiny. As the volcano is still active, the lava keeps flowing and building terrain toward the sea.

I wanted to see the volcano from every possible angle: from eye level and from an aerial view (from a helicopter); I wanted to see the flow, the source, the old lava, the new lava and the older volcano (which gave origin to the island)—everything. I wanted to walk through it, drive across it, and fly over it. I wanted to grasp every possible aspect of that landscape in every possible way.

When I had applied for the grant, I had collected a series of images to look for. I thought it would take me days to find something like them, but on the first day I found them. Thus I soon began drawing, and began thinking about many drawings and sculptures. I have to say that it was most unexpected to find so easily what I searched for. The forms were there, in a way very similar to the images I had found on the Internet. What is it that makes it so special to make the drawings there, physically in front of the landscape? One thing is the fact that I was confronted with the decision of: what? What to draw? Also, there is a time/space frame: *x* amount of days, *x* distance from where you stay to the landscape you draw, *x* hours of light in the area, and *x* heat that the body can take. Plus, the landscape that feels as if it is of another planet: not heaven by any kind of standard, as it is too rough for that; but awkwardly beautiful.

I wonder about what it is that in some types of landscapes ignites the human imagination. Volcanoes certainly do. Is there something in the landscape itself that is exhilarating? During the trip, I read *The Volcano Lover*, by Susan Sontag. I settled on this book for an obvious reason: it most probably talked about a volcano. I like to read books that are close to what I see and experience when I am in a place. It was a novel, a nice one, a good story, about which (predictably) I mostly remember the descriptions of the volcano and how the protagonist related to it, and how he felt dragged and attracted to it, going further and further toward it and almost into it. I enjoyed the feeling of reading it at night, after returning from being close to such a place myself.

I realized that what I wanted to draw were the crusts of the lava fields. These are huge fields, not smooth and full of variations but still more like 'one thing.' It is hard to isolate something from there to be drawn. But there are fragments sticking out and those seemed approachable to work with.

The national park is huge, and it was impossible to explore it without a car. There were kilometres and kilometres of fields: lava fields with other fields, lava fields with ocean, lava fields with low valleys, and lava fields with greenery; different variations of an out-of-this-world place.

It all felt a bit nostalgic; I had an (impossible to fulfil) desire to stay there, looking at the landscape forever. I tried to remember the last time I had heard the word 'nostalgia,' and I realized that it was a word that perhaps I had not even said since I had a in Amsterdam. It seems an underrated word on that side of the universe, in contrast to where I come from—where nostalgia is almost a national pastime.

Everything is beautiful and every form different, and wherever my eyes land I find a form that would be beautiful to draw. I have to decide which one. The procedure becomes as absurd as parking the car and walking in one random direction until something

calls my attention, at which point I sit there and draw.

I decided to spend half of the days doing drawings in the areas containing landscape that I was more or less sure was suitable for drawing, and the other half, trying to find other sources, for sculptures or potentially something else. I would drive, walk, find spots, and sit there with my portable drawing table, paper, and pencils. Then I would drive again and go to a different part of the park, leave the car, walk, take photos, write notes, and so on. Some days I went to different parts of the island, and one of my favourite parts was one that was very close to where the lava flow meets the ocean, a place called Kalapana. There the lava was incredible shiny—it really seemed like a fictional landscape.

Needless to say, the lava, as black as it is, gets very hot and it is not that enviable to be sitting there in the middle of the day. I could not do more than one or two drawings at a time. Every drawing took me about hour and a half. I did manage to do some quite detailed ones.

I found lava mounds, quite large, maybe around two meters high and sometimes higher. I thought those pieces had a lot of sculptural potential and I decided to take very detailed photos of them, in order to be able to reconstruct them later if I wanted to. I took them bit by bit, systematically, tracing a mental grid of few of them, such that I could put them together later and replicate details of each part.

I never work from photographs; the process of drawing or modelling from the direct observation of the 'motif' is where the learning process lies for me. I like to confront the model, establish a hierarchical system for selecting the important features of it, and try to understand its qualities and how it forms. Working from photographs seems to erase those steps, as one sees a flat image, the filtering is being solved by the camera and there is no space for deconstructing and reconstructing the scene in a different way. In the case of the lava project, however, due to the scale and conditions I did not see any other solution. And I trusted that the images, along with the experiences I was immersed in, would settled in my system and helped me out when the time of making the sculptures came.

The landscape is so tactile that I could only imagine the further steps in the project as sculptures, as an equally palpable surface. The physicality of it is tri-dimensional. I wanted to touch every section I saw. If I had to choose the sense with which I could grasp this landscape, itwould be the tactile. I thought the most logical way to work on this project would be to turn it into works that could replicate the physicality of this place, works that would relate to the tactile experience of it; and that would work too with the tension of those surfaces, with the energy that created those forms.

Drawing is a way to be with and in the landscape here and now, to get into the internal logic of it. Thinking of taking this experience into another stage, I could only think in terms of textures, which form the quality of materials.

In the older eruption areas I found some parts where the lava had cracked. There were amazing patterns; I recorded them by photographing them with the idea that they could work out for a piece. It was quite amazing to find this natural puzzle in the middle of nowhere.

Ultimately, I will not be able to recall exactly the beauty of the place and it does not make sense to try to rescue what I saw or did day by day. It is impossible to describe the feeling of being there, the notion of being there, and then going back to Nina's parents knowing that I left behind this thing that was alive and bursting.

The first day I found the area I was searching for, and the second day I found another. I knew which drawings I could do in those areas and I knew what to record for the potential sculptures in the same places. I started alternating the certainties with the uncertainties, a morning where I knew what I could get with an afternoon in a new area, with the hope of finding something new with the potential for some new artistic endeavour.

Some days I dared to go somewhere else altogether with the expectation of encountering something completely different. For example, one day I went to the volcano (Mauna Kea) that gave birth to the island. It is a volcano more like we are used to seeing and imagining volcanoes than the others on the island — it is a mountain-like formation, with a lot of earth on top, quite dry. This one is extremely hard. I went up with some people in a four-wheel-drive car. The place is really beautiful but quite different from what I was searching for. It has several observatories in the higher part from which it is simply amazing to see the sky.

Also, One day I took a helicopter tour, as I really wanted to see the lava flow from above. It's incredible to see a red river flowing thorugh the middle of those black lava fields. I could not even take pictures as the helicopter kept vibrating. It is one of those images that gets imprinted in the nervous system, and much later I realized that the way I dealt with colour in the paintings came from that image — the red lava flow appearing and being hidden again in the darkness of the lava field.

On one of those wishful walks, I found parcels of fragmented lava — cracked lava. Inside the national park there are different areas where different eruptions of the volcano have taken over the years. There are areas that are still erupting, areas that erupted many years ago where the greenery has already grown back, and areas in between, where the lava is quite old and already cracked, but where the landscape is still very dry and with no greenery. Those in-between areas called my attention hugely; the landscape was much less stunning than in areas with more recent eruptions, but quite beautiful in different way, like old traces of the history of the place, semi-forgotten, not on the main trails that tourists would visit, semi-hidden yet still there. The surface shines less, has been exposed to erosion for a longer time, and is the oldest. The tension of the land there was completely different, as it ceased — it had basically broken. I carefully documented fragments of that area, bearing in mind the thought that I would probably do something with it.

I returned the car having traversed more than 2,000 kilometres in about ten days. But I had not had enough of the place. I could imagine continuing to drive the car to the volcanic fields again and again and sit there with my drawing table. At the same time, I was aware that I was saturated from the experience and that if I stayed, most probably, I would struggle to find a way to renew my energy and concentration levels. There is a moment when the experience starts to repeat itself and concentration has been exhausted, and it is not productive to keep going. That moment had happened for me. It is hard to describe, but it is an experience I can recall in my work on many other projects and it leads to the knowledge of when a process of this kind has finished. The quest itself is unsolvable, no matter how many drawings I make or how many days I stay; the premise per se will not define the amount of lava forms to be drawn. The task itself can be a lifetime issue to explore. It is by default an infinite process. So I have to decide when to stop. There is a moment when I do not learn anymore from the experience, when my concentration levels have been saturated and the possibility of learning from that experience has been exhausted. It is a moment atwhich, if I continue, the process will become mechanical, and therefore uninteresting for me.

I left with about eleven drawings with which I was happy, many photographs, a bit of writing, and a very powerful experience.

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The 'field trip' was finished, and the experience was in one way or another successful, but the project was not done. I was going to have a show with the outcome of the project the following May at the Cultural Centre, Montehermoso.

I visited the space and it was huge. A huge space with eleven A4 drawings would be doable if need be, but would not be very interesting or generous to the public. Much deeper than that was the fact that I had the urge to explore the possibilities of the project further, to filter the experience into something else. Once I was back in Amsterdam, I sat and looked at the drawings, notes,

and the hundreds of photos I had taken. There were many images imprinted in my head, and I could not stop seeing lava forms; I was going to sleep with those images in my head, and even, now, as I write, it is very easy to go back to that mental space, to the smell, the heat and the way in which the sunlight reflected on the shiny black of the lava.

I was quite satisfied with the drawings and had quite a clear idea about making a series of reliefs which would be reconstructions of those lava crusts that I had seen in the field. I had a slightly more vague idea about a puzzle that would be a one-to-one reconstruction of the old, cracked lava fields. I had an idea of doing some paintings.

I started with clay. First, I had to decide on the material. I went to talk to the person I always talk to for this: the head of the clay department at the Rijksakademie, Pieter Kemink. We have worked together for many years and he is very good, not only technically, but also at identifying the materials I need to achieve what I want. I wanted to make (besides the reliefs) a 'puzzle piece', a reconstruction of a fragment of those old lavas I had found in the trip. I wanted something that would look quite natural; I wanted black, shiny black, and I wanted two different types so the reliefs and the puzzle would have different qualities.

We started trying out different types of clay with different pigments and in two kiln temperatures. We learned that we needed to overcook the clay so the black would become blacker and in one of the compounds the material would become porous.

Meanwhile I did tracings of the possible pieces that I wished to do. I was quite sure about them. I decided on sizes and printed the drawings in scale.

Once I had decided on the material, I set up work at Pieter's workshop. There were lots of clay, tables, scaled photo prints for the reliefs, the printed drawings, and wooden tools.

I started by learning what to do. I have worked in clay, but never on this scale, and I am not trained as a sculptor. I do always need guidance, and in this case I needed it more than ever. For some reason I trusted that it was going to be all right and that I would manage.

I started with what I had envisioned more clearly: the reliefs.

Lesson number one for me was that I needed something called a "shrinking plate," or a flat tile of the same clay which goes underneath the piece and which measures about a centimetre and a half. The function of this is that it dries with the piece and they go together to the kiln (with a piece of special paper in between them). Both will enter the kiln on top of a special tile. What happens is that the surface of the tile has a different shrinking tension from the clay; this would very possibly cause the clay to crack when those two different shrinking tensions start working in the oven. What the shrinking plate does is crack, instead of your piece. The shrinking plate has to be even, which is accomplished with a wooden round stick.

Once this had been created, I started building up a basic form, which is a little mountain with walls inside to support the form. Lesson number two (which this time I knew) was that the piece could not be solid because it would, or very possibly would, explode in the oven if it contained air bubbles. There must be breathing space for the material and that is accomplished by creating a layer of clay with the basic form which is sustained by walls.

After this I had to wait, allowing the clay to reach the right consistency to work. Then I transferred the drawing. The way this gets done is by a very old technique which used to be used to transfer drawings to a wall for frescos. The drawing is passed onto a thin piece of paper (already in scale), then placed on top of the clay, and then the artist goes over the lines with a needle, making holes that go through the paper and marking the clay, in a manner following the lines in the drawing. Then the paper is removed, and the drawing is on the clay.
And then the modelling started.

By then my head was only thinking about materials. It was sweet to feel the transition in between a long process of thinking and planning to a very concrete way of thinking about and with the materials. It started to be about the forms, about getting the forms there. It is important to do this before the clay dries, and it is not about the exhibition's deadline but rather about another very concrete deadline, which is the day in which the consistency of the clay can no longer be altered. I went to sleep knowing that the chemistry of the clay was working, that the material was working, drying, compressing, and settling.

I worked on a few of the reliefs at the same time, at first two, and then three. When I finished the first one I started the fourth one. I worked on them in parallel to allow them to rest and to wait for the right consistencies because, even knowing that the clay dries and I had to keep my speed up, I also knew that I could not hurry it or force the process.

It was surprising for me to see that the forms did come out well from my hands. And that was not because I am talented, but because the forms settled into my head like layers of sediment for a couple of months. I was there, observed, sweated, was afflicted with it, selected, observed it again—sometimes still, or by walking around it, or from on top. I got into the materiality of it, and somehow I understood the logic of its formation.

It is impossible to describe all the steps in the process, as there are many and many of them are a rather mechanical. There are many loving details, like covering the clay every night before leaving with a sheet of thin paper, and wetting it with drops to put just the right amount of water on it, and covering it with a plastic sheet afterward, and smoothing each piece with a little sponge, all over every form and fold, once the form is ready.

Somewhere in the making process of the reliefs I started to work on the puzzle component of the project. By then the idea was clearer, and I made many tracings of different 'natural puzzles,' thought about which forms could work, compared them, sized them, formatted them, and finally chose one of them.

The try-outs of materials for the puzzle were done at the same time as the try-outs for the reliefs. I was thinking about it at that stage already, but I was aware of the overwhelming nature of this piece and I was hesitant about it for a while. At one point while working on the reliefs, I decided that it was time for the puzzle as well.

I printed one that was 220 × 220cm. Once the drawing was there the action started.

The puzzle's scale was one-to-one with the original landscape. The reliefs were reduced in scale in relation to the original pieces. The pieces in the lava field were larger than me; the relief scale was shrunk into a scale that was related rather with logistic decisions. I wanted the pieces to be built in one piece, one chunk of clay, with no gluing or assembling whatsoever. The oven in the workshop could hold 80 cm maximum. By pure and simple mathematics, the larger of them would measure 80 cm and the other ones were diminishing in proportion to their scale versus the original landscape.

I needed helpwith the puzzle. The scale, weight and technical intricacies of this piece were more than I could handle alone. After a few conversations with different people I came across someone who was perfect for the job: Camilo Barreto, a young artist from Venezuela whose father was a ceramist. Beside the fact that he is a nice person, and apt for the job and crazy enough to trust that we could do it in the given amount of time, it was also wonderful to watch and think with him, as he was an example of the famous idea of embodied knowledge. Camilo grew up in a ceramic workshop and I felt that it was almost in his genes. He could feel the exact moment when we could cut the clay or when we had to let it rest.

We had to do a huge clay tile of the size of the final piece: 220 × 220cm. There is a device (like a press), which makes smaller tiles of about 40 × 70cm. I had to produce many of them and assemble them afterwards on a large table, overlapping them and pressing

them, first with my arms with much force, until they become one. Then I had to smooth the clay with a huge round wooden stick, or rather a large metal tube that we both had to hold. We passed it over the surface, pressing it so the surface became level. And lastly, I smoothed the clay with the largest spatula I could find.

This annoying and relentless process has a reason and that reason is that if the tile is not even it will crack in its junctures, and that is the last thing I wanted. Working with separate small tiles would mean different drying times and cooking times in the kiln, and that can become problematic.

Once all these were done, a similar process as with the reliefs started. The print was positioned on top of the clay tile, the dots with the needle marked, the paper removed and the dot's line left as a trace to follow. We left the clay for a few days to reach the right consistency, and started cutting the pieces with a knife. It is boring to describe every bit and impossible to remember it, but finding the right knife was also an issue, one that was thin enough and long enough, sharp but not pointy, flat but not too thin, and thin but without any protuberances. As stupid as it sounds, these things can make or break a piece.

We kept cutting every day, all the surroundings of the form first, taking them apart from the main tile, numbering them at the back. Then we woukd wait for the right consistency of the clay in the inner areas of the tile, cutting again, separating, numbering… and weeks passed with drying times, creating a system of storage for them to dry, going to turn the 1112 pieces (the puzzle has precisely 1112 pieces) every two days so it would not curve to one side, and so on.

Meanwhile, the reliefs were slowly drying too, and we kept on going with kiln temperature try-outs, at Pieter's workshop, at the Rijksakademie workshop. It was difficult to get the exact colour and texture that we got during the first round when we started trying larger pieces of clay. We tried different heat, different kilns, and different holding temperatures until we got it.

After the piece went into the kiln, I could only pray for few days. And after it was fired, I had to wait two or three days until the kiln cooled down, otherwise the difference in temperature would break the piece when I opened the door.

It was an unforgettable feeling to see the work of months go into the kiln while being aware that the full piece could go wrong in a second. The first round came out well, but I wanted them darker, and for that I had to overcook the pieces, which meant putting them in the kiln again at a higher temperature. One of the reliefs cracked in the process. The image of that piece with a crack in the middle is one of the most painful ever for me. After months and months of caring for and babysitting that piece of clay, there it was with a fracture down the middle.The material tension that the piece held had ceased and it had collapsed. It was a very hard situation to digest, and I had to think about how little distance I have from my work, considering the strong bond I create with the pieces as I am making them. It was not a distant feeling by any standard—I was sad, as I have been very few times in my life, with the total consciousness of the absurdity of my feelings.

Quite awhile afterward I came across a fragment of a book (*The Craftsman*) which helped me to understand a bit better my semi-dramatic reaction to that broken piece. Richard Sennet discusses something called "being as a thing". He writes about Maurice Merleau-Ponty's description of "focal awareness," described using a very simple example of what happens when one is hammering a nail and not feeling the hammer in the palm, but rather how its head strikes the nail. In Sennett's words, "we have become the thing on which we are working." He then kept expanding and stretching this idea into other issues that he describes as, "corporeal anticipation." I kept reading this while thinking and remembering the image of that clay piece with a fracture in it. That fracture felt as if it was right in my stomach.

But why describe all this?

A potential answer to this is that it might make some sort of sense to describe an experience, the experience of making a piece, however difficult it is to describe. What is it that makes a piece so

difficult to do? What does one do with all the material traces and thoughts that are involved in the process: the pondering around a subject, the tightening of it, the logistics and facing and working with materials. What one learns and thinks in all those steps that cannot even be dissociated clearly as steps. The excitement of embracing an idea, or even before, just being able to clinch a desire, a strong one, to do something—and everything that follows, how do you describe it? And, what about afterwards? And the 'when' is not easy either. Learning and talking about the process might be one way to keep regenerating the desire, grasping the basics of something that would hopefully lead one into the next artistic wish.

Throughout the process tons of beautiful material appears. The prints done to scale of the reliefs were nice drawings, and the paper I used to transfer the drawing to the clay and that had many little holes and stains of clay on it was also nice. Even the back of the shrinking plate, once it come out of the kiln, and the graphs to check the kiln temperature, and so on, all have value. What does one do with all these materials? Should it enter the exhibition? If I state that the process is the important thing, why do I not show it? I kept thinking about it and documenting that process material while working; I kept archiving it when I did not need it any longer; I kept caring for it and thinking about it throughout the process. It was not the first time that I had had this question in mind: where does the most important aspect of the work lie? Where is its strength? In the end I have always decided to let the piece talk by itself, with the hope that all the intensity of the process is charged in the materials—that all those hours of caressing and processing the work would somehow be embedded in the materiality of the outcome.

I decided to leave traces of the hand-making in both pieces. The reliefs are quite obviously handmade objects, but the puzzle can be perceived as broken clay, or as found—I decided to leave the traces of the knife-cutting, and of the holes that marked the drawing. Again, in that Sennett book I came across something that helped me to understand that decision.

> He talks about something that he describes as presence, and he talks about it in the example of the brick makers: "Maker's stamps on metal, wood, and clay evidence a second category of material consciousness. The maker leaves a personal mark of his or her presence on the object. In the history of craftsmanship, these maker's marks usually have carried no political message, as a graffito scrawled on a wall can, merely the statement anonymous labourers have imposed on insert material, fecit: 'I made this', 'I am here, in this work', which is to say, 'I exist'." (2008, 130).

The puzzle came out of the kiln, all the pieces apart and the numbers and sectors all mixed up. The oven measures about 90 × 90 cm, and in order to fire all the pieces of the puzzle we had to pile up layers and layers of shelves (of a fireable material) with the puzzle pieces spread on them. We needed, as well, to optimize the space in the kiln, and then we started using every little corner of available space on the shelves. All the pieces had to fit into one round of firing, otherwise we ran the risk that in the two different rounds there would be some small differences in the kiln which could lead to a disaster—for example with half of the pieces having a different texture or colour than the other half. In that process of firing the pieces their order was completely jumbled.

The big table was assembled and we spent a couple of days working out what corresponded to what. The first occasion was the most difficult one, and then I worked out a system to store and transport them more or less in place and also, funnily enough, I seemed to have internalized the forms and developed some kind of understanding of what could go where.

A couple of weeks after the clay universe was finished, I started the paintings for the project. The paintings were probably the most capricious part of the project, in the sense that they did not follow a logic that I can describe very clearly. I cannot really track back the path I followed while making them, or what guided me

to make the decisions I made. It was clearly the most intuitive part of the project.

It was, for me, quite a shift away from a very systematic way of working (especially with the puzzle) into more intuitive terrains. With the puzzle I felt I accompanied the piece in every step until it was out there, fired and ready to be installed,. That kind of a system did not seem to be suitable for the paintings. Painting is for me a space in itself, a surface I deal with within its own logic. I cannot imagine how I would force it into a grid of a programmatic procedure. I can set a few boundaries, and I can foresee in which way I will deal with the surface, the colour range; but then something else must happen, and it has to happen by the internal logic of the canvas and my dealing with it.

Some parameters were set, in that the images were going to be close-ups of the drawings, zooming in on certain areas of the drawings I did in situ in Hawaii. The form of the canvases was going to be round—I will not enter into the technicalities of the difficulties of stretching a round canvas and the nuances of finding the right preparation of the linen. The round form was recalling an old illustration book I had found in the library at Teylers Museum many years before on petrography (a branch of petrology that focuses on detailed descriptions of rocks)—the book had beautiful plates with microscopic representations of the inside of stones. I decided to reference the palette used in those plates as well.

Another image I kept in mind was the aerial view I had seen from the helicopter of the lava flow opening up and hiding in the lava field.

I started to realize how memory operates afterwards, in the post-in-situ. Whatever I had seen and thought and lived during the field trip had stayed and settled in my system. Not all of it was going to have a directly visible impact on the work, but a lot of it made its way into the process at an almost unconscious level. The memories of the lava flows from the aerial view stayed with me and played a role when I did the paintings. The tactility if the lava stayed with me and played a role when modelling the pieces, and even when choosing the right materials. The process of making these pieces in a way gets diluted over time, but in a way also stays, in the material memory of the piece. Perhaps there is no need to keep telling the story of the process, but rather just to trust that the traces were left and imprinted in the piece.

The piece was finished. The process of making it was rich and intense. Time is passing and the memory of the making process is slowly diluted. Distance is growing between me and the process. What reminds me of it now is the occasional sweet recollection of a moment, some thoughts that the piece generated, leftovers that I keep: the shrinking plates that served as a base for the reliefs, beautiful underneath; all the papers with holes that served as a technique to pass the drawing into the clay; and even the large cloth that was underneath the puzzle while making it and where all the marks have remained. They are material traces of a path that I followed to construct the piece—another puzzle. They are visual and material fragments that might eventually become something else, parts of another project.

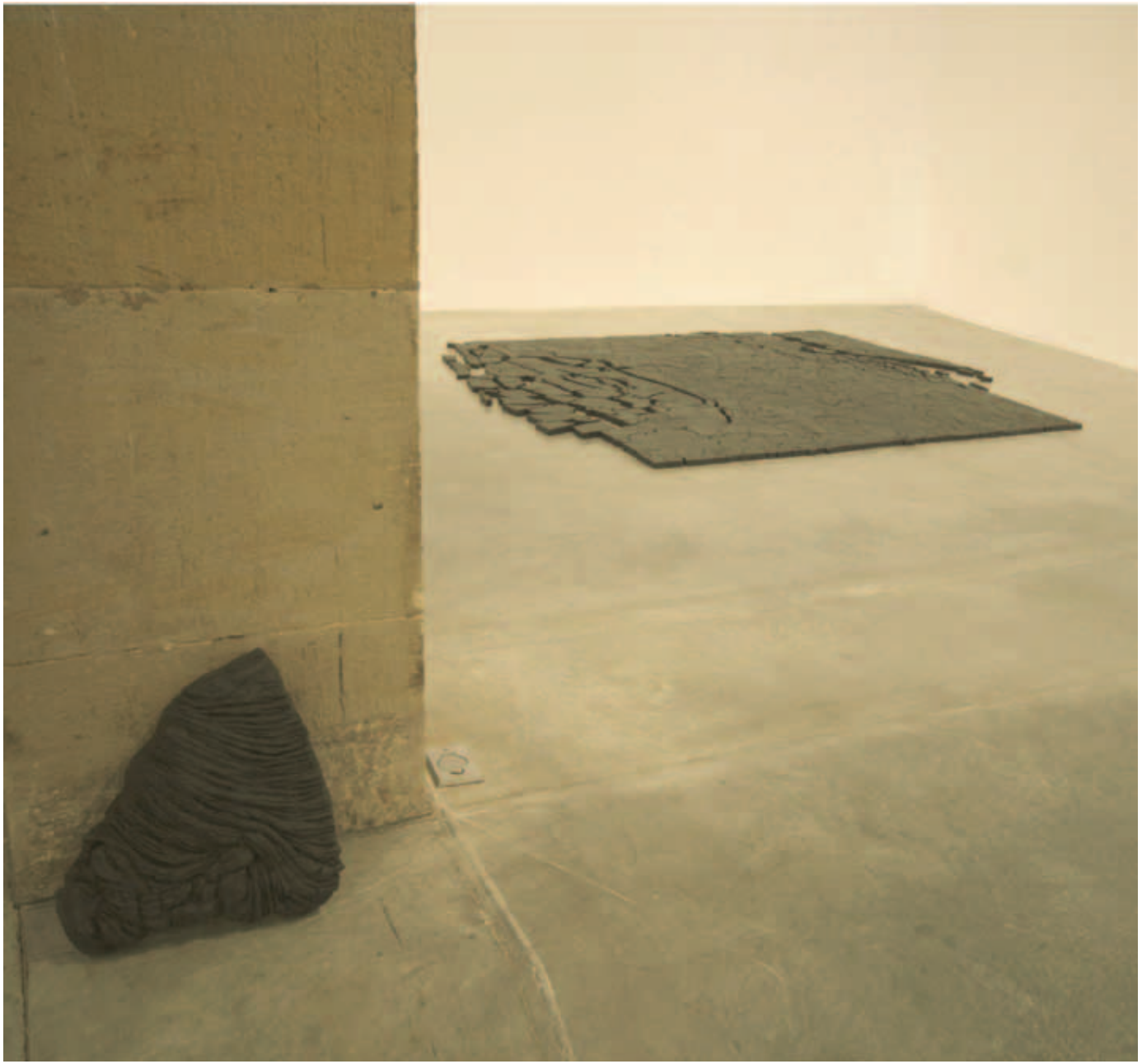
What surely remains is the piece, four clay reliefs, a 220 × 220 cm clay puzzle, six paintings, and eleven drawings of pencil on paper. They are properly packed and travel, not so often, but often enough, from one exhibition venue another, while the distance in between them and me keeps changing, widening, growing.

The Lévy's Flight

Montehermoso Cultural Center (Vitoria-Gasteiz, Spain)
May 2009

The *Lévy's Flight* is an installation which took form alter a research visit to the "Hawai'i Volcanoes National Park" in October 2008.

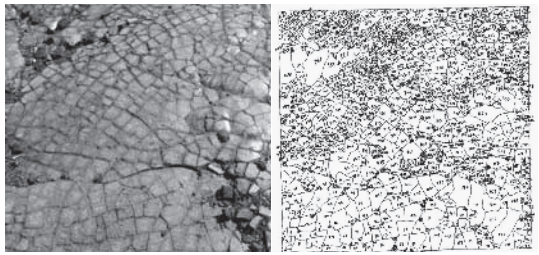
During the visit I realized a series of drawings, sketches for a series of sculptures and a huge number of photographs. Back in the studio, the material underwent a series of conceptual filters till it reached the form in which was presented at the Montehermoso.All the pieces had as departing point elements of that landscape.

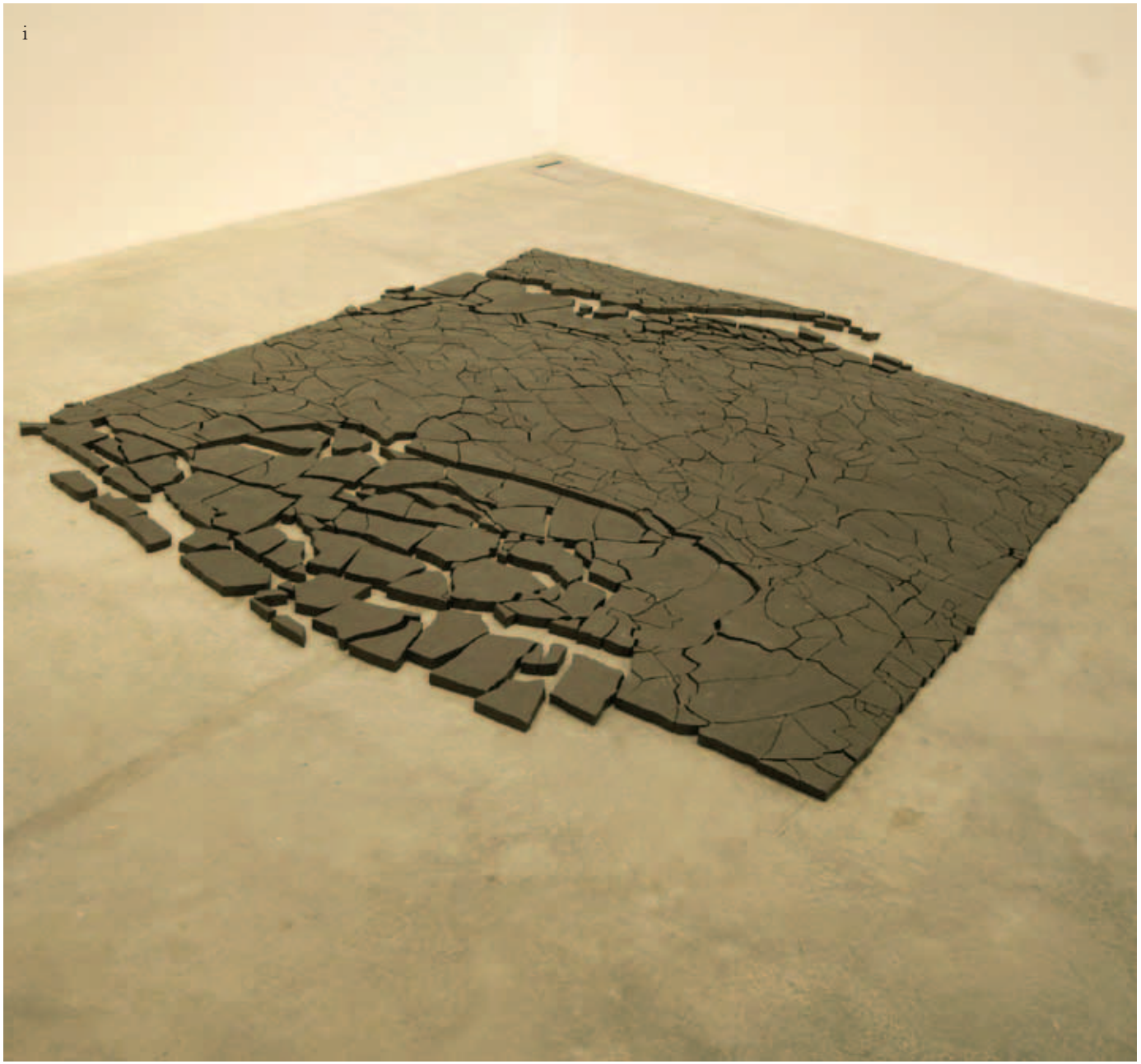


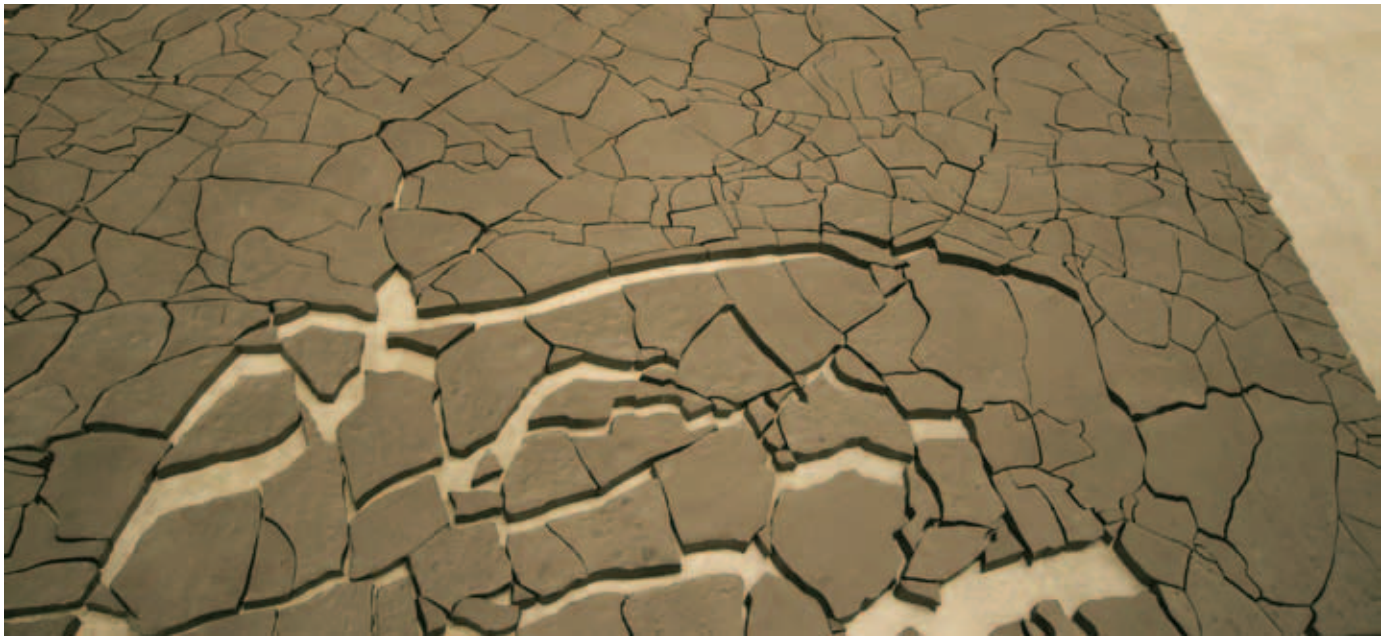
i
Puzzle Piece
Technique: clay with pigments
Size: 220 × 220 cm

The Puzzle departs from the tracing of a fragment of the volcanic surface, where the lava is older and therefore cracks and breaks.

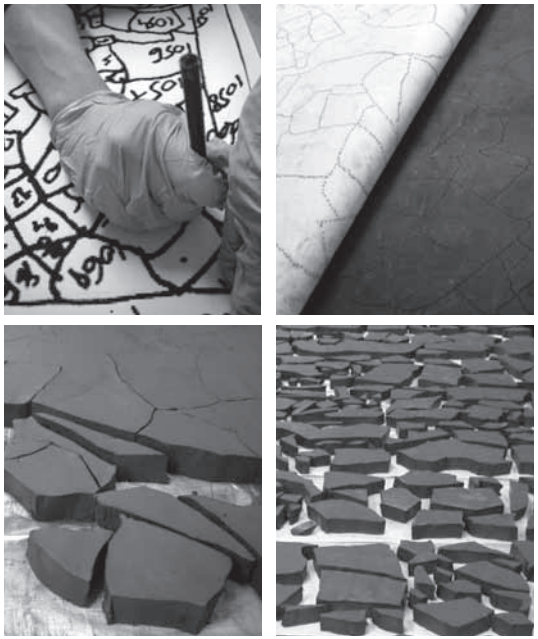
Original landscape (left)
Drawing with numbers (right)







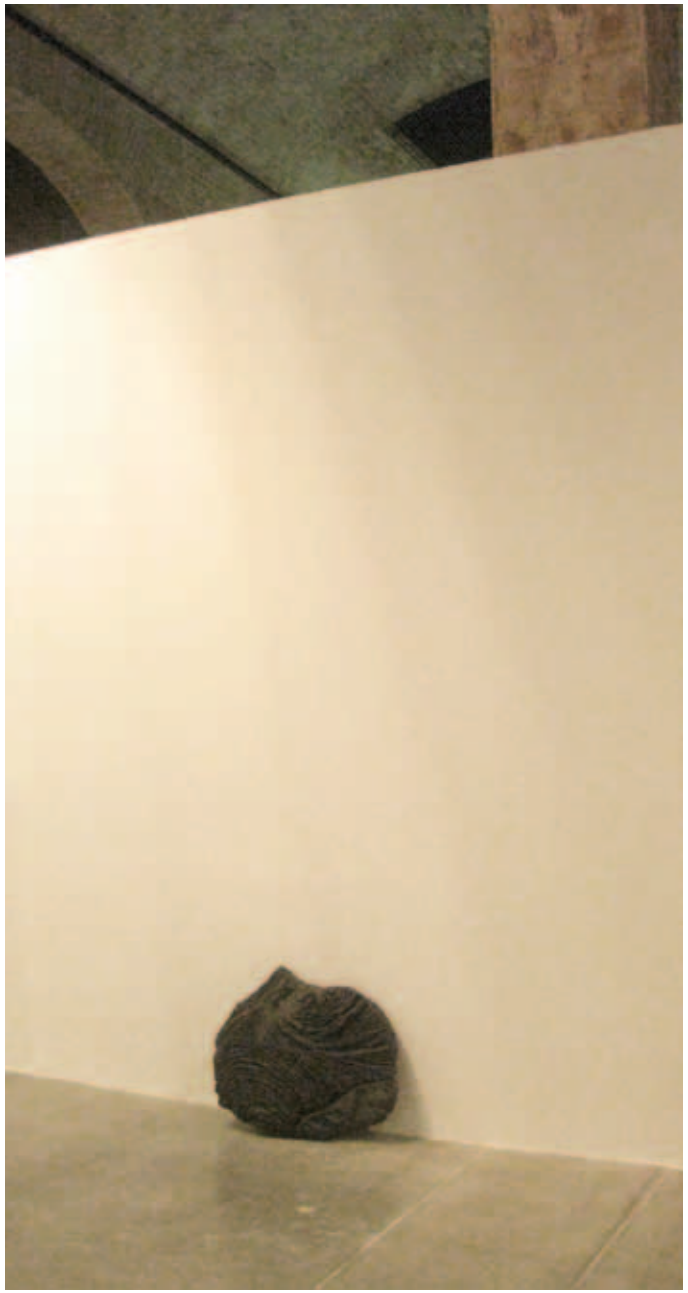
Process



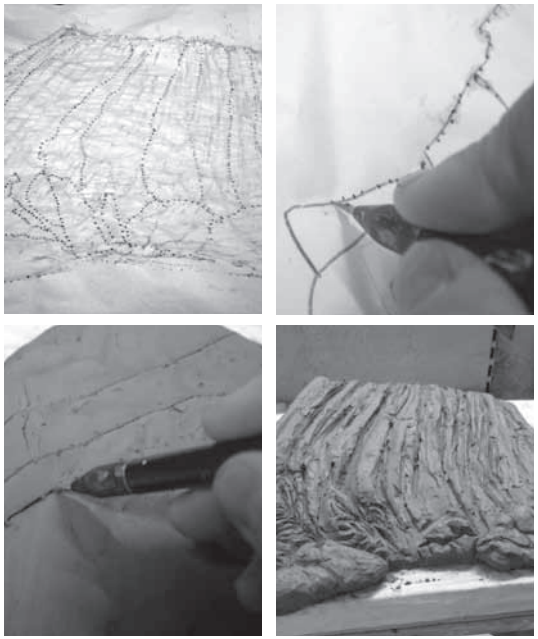
ii
Reliefs
Technique: black clay
Sizes: variable (smallest: 10 × 45 × 10 cm, largest: 80 × 70 × 12 cm)

The reliefs reference fragments or crusts which stick out from the usually flat volcanic formations.

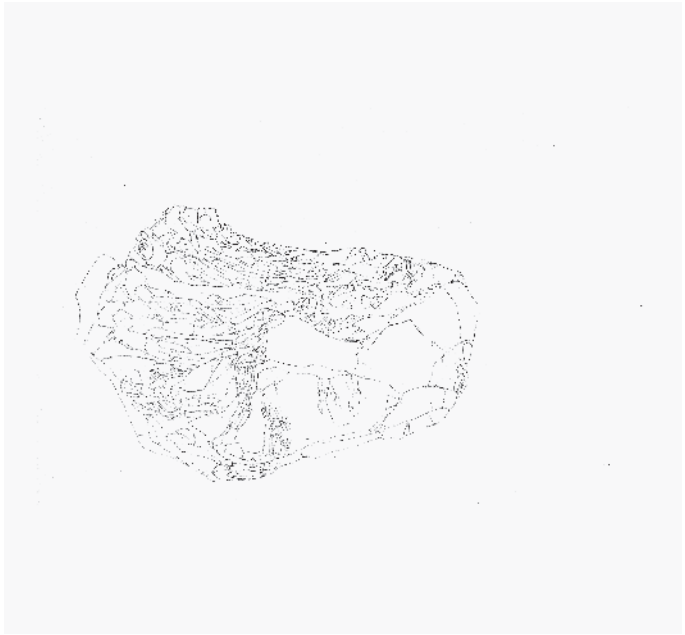
Original landscape

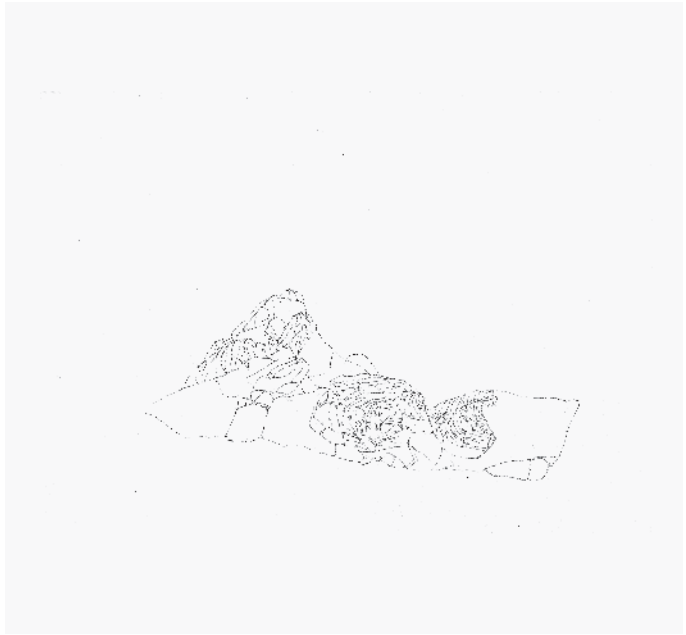


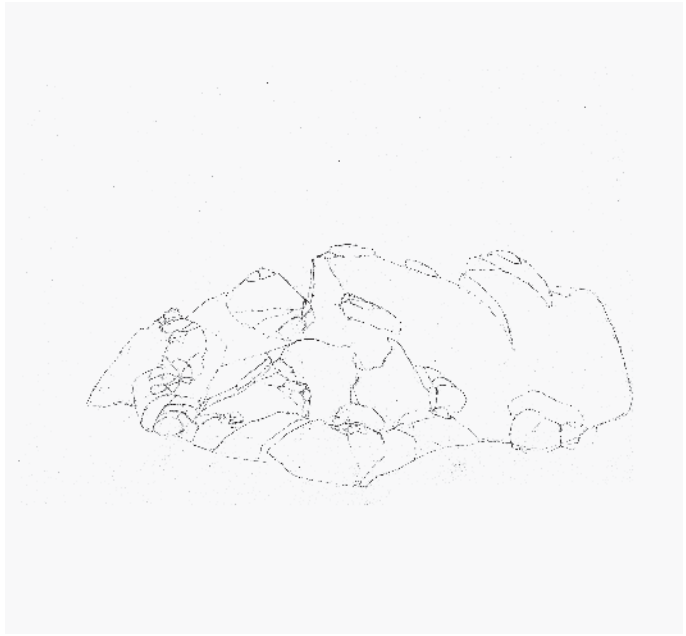
Process



iii
Series of 10 drawings
Sizes: 29 × 21 cm







iv
Series of 6 paintings
Size: 50 cm diameter

From *British Petrography* by J. J. Harris Teall

All the pieces (i–iv) attempt to trace back something of that landscape in an almost romantic attempt to comprehend it. This strategy recalls the travelers from past centuries in their attempt to represent, organize and bring back to their homeland discoveries made of far away territories.

6
Meditation Piece

✯

At the end of 2008 I received an invitation to take part in a project which would work around Allan Kaprow's scores and in it would take place in Egypt. It would entail at least two stages: a research trip and an exhibition.

The project was curated and organized by Mai Abu ElDahab and Philippe Pirotte. Mai Abu ElDahab (b. Cairo, Egypt) lives in Brussels, Belgium, and has been director of the nonprofit art space, Objectif Exhibitions, in Antwerp since Fall 2007. There, she has organized solo exhibitions and commissioned new productions by an extended group of international artists. Philippe Pirotte (b. Belgium) lives in Bern, Switzerland, and is an art historian, critic, and curator, in addition to being the director of the Kunstalle Bern.

The name of the project was, "A Fantasy for Allan Kaprow" and the proposal to the artists was to look at Allan Kaprow's scores (lists of procedural actions constituting a 'happening') and re-interpret them. The interpretation did not have to be literal but rather each artist would search to find ways to connect their individual practices with one or more of Kaprow's practices within the contemporary scenario, taking into account that is where we are, and the show would be in Egypt.

The idea was to start with a research trip which would be followed a few months later with an exhibition at CIC (Contemporary Image Collective), Cairo.

Since receiving and reading Kaprow's scores I had become interested in the *Meditation Pieces* (*Meditation Pieces* – 1981). It found the level of absurdity that those acts entail attractive and also to tried to imagine how those acts would affect the actors involved. What kind of thinking process is activated by the act of replacing dust or leaves? How is perception affected by the act?

Kaprow's *Meditation Pieces* consists of two pages with two columns of texts. at the top at the left, in between brackets, it says 'inside'; on the right in the same position, and in between brackets, it says 'outside'. In both columns there is a description of few actions in both columns there are the same actors: a sweeper and a watcher.

On the left side the action consist of 'the sweeper' sweeping dust together, standing still for a while, replacing the dust, standing still again, and sweeping the same dust together and again standing still. Meanwhile 'the watcher' is only at the first action watching in a mirror and in the end listening and not watching.

On the right side the actions are the same, but the sweeper is replaced by a raker and the dust is replaced by leaves.

From then onwards I started thinking about what would be for me a meditation piece for me and how to create a situation for a meditation piece today, in a contemporary scenario.

I thought that one way to do it would be an experience with and in the landscape: to open a space of isolation and contemplation within the daily experience. I therefore organized a trip to the White Desert (known as Sahara el Beyda) during my research visit to Egypt. The desert became that space of isolation and a place to experience a very peculiar type of landscape, where the limits are completely blurred and the horizon dissolves further and further away each movement forward.

I organized traveling across the desert for three days, 2, 3 and 4 February 2009 by car, with a guide.

The landscape is beautiful, in a weird, harsh way. My first idea was to make some drawings there. I also wanted to collect stones from the desert to bring back to my studio to work with.

During the trip I went across the desert, up and down through the dunes. The landscape kept changing, contradicting the preconception I had of a flat endless landscape with no variations. The days passed in sitting in the 4 × 4 in a dream-like state of mind, encouraged by the movement of the car in the sand. I kept

wondering what was it that made the driver turn right here or left there at the hidden landmarks on that sand ocean. After hours and hours we would stop at some point for lunch and many hours later to camp. We did this for two nights and three days, sleeping under the open sky at night.

I made three drawings, all of them from the first camping spot, two the first evening, made during the few hours of light in between when the car stopped and the night fell. The other drawing was made the following morning in between sunrise and when we left. None of the lunch breaks happened in spots where I could draw, nor was the second camping spot suitable.

I realized that what was suitable for drawing were the protuberances that come out of the flat land in some areas of the desert; formations which would stand out from the rest of the landscape. I came across two of those areas during the trip, as I said, in the first camping area and on the afternoon of the second day.

On the third day, as the guide had seen me collecting black stones wherever I could find them, he took me, on the way back, to a field filled with those black stones.I collected about thirty small stones, which I thought would be suitable to draw.

A few questions remained unanswered and even difficult to formulate clearly. I kept thinking about the traveling accounts and the detailed drawings with which explorers used to return from the XVIII and XIX century scientific expeditions: the scientific expeditions by James Cook, by Alexander von Humbold and the detailed illustrations and descriptions that were gathered on those expeditions.

In 2004/2005 I spent hours at the library of the Teyler Museum (Harlem, the Netherlands) looking at the atlases which were published in those centuries. I was interested in the systems of representation, which were used to depict nature and the natural world. I found amazing images in that library where I went every Friday for a year and sat the entire afternoon browsing old atlases, hooked on those images, trying to understand what was in them that was so appealing to me. Marijn van Hoorn, was the librarian who lead me through the labyrinth.

There I was in 2004 with a collection of hundreds of images on the quest of trying to understand what it was that attracted me so much to that imagery. I registered the images with my camera, took notes and made drawings that represented the patterns that the forms were creating on plates. I tried to identify how the drawings where made, how the descriptions were organized.

One of the first books that impressed me was Jean Charles Chenu's illustration of shells. He tried to make a catalogue of all the shells that might possibly exist. His *Illustrations Conchyliologiques,* 1842, is a catalogue of four volumes containing 85 parts and a total of 842 plates. Chenu had intended torepresent every known molluscan species but, like many great chronological iconographers before and after him, he could not achieve his ambition. It was just amazing to have discovered these plates. The representations are extremely beautiful and I never stopped feeling surprised by the level of obsession that Chenu and other iconographers/ scientists possessed.

In 1800 the theologist and physician François Auguste Péron (1775–1810) who (typical of his time) was also interested in the natural sciences. accepted a post as a zoologist for an expedition to New Holland [nowadays Australia].

Peron having returned to France in 1804 with about a hundred living animals and an assortment of plants that were unknown in Europe, died soon after.

Often these researchers had no formal qualifications as we would understand them today; as was the case with the Scotsman diplomat William Hamilton (1730–1803).

Together with his friend Pietro Fabris, he made numerous sketches of every stage of the eruptions of Vesuvius which they were able to observe. He collected various types of lavas, ashes and minerals produced by volcanism in the Naples vicinity. This research, which he published in two volumes, one with illustrations

and the other with the explanatory text, was typical in the XVIII century.

For example the 19th century book on eggs by the German scientist F. Baedeker gives a great deal of aesthetic pleasure. They are representations of eggs, numbered and classified under a certain category, but they canbe appreciated almost like abstract paintings.

And the list could continue for many, many pages.

All this process carried an internal fight of contradictory forces. There I was, carrying the historical anger of someone coming from a colonized country and at the same unavoidably attracted to those images—the traces of that period. Often I thought about the film by Werner Herzog, Aguirre, the Wrath of God. The story is based on the trip that the conqueror Gonzalo Pizarro made in the Amazonian jungle on the search for a city called El Dorado. This was before the Enlightenment period but the very beginning of the process of colonization in Latin-America: the XVI Century.

While watchingthat movie, again and again I kept thinking about the fear that those people might have experienced: their hunger, infections, the heat, the animal bites, the fever, the hallucinatory states of mind. These thoughts gave me a slightly different perception of the historical events—which would not affect my ideas on the big picture of that period in history, but did affect them on a small scale, in the way I think about what happens on the human scale, what people lived through, feared, and experienced during those expeditions.

While traveling across the desert I had all those images in my mind and they accompanied any attempt I could make to represent the space I was immersed in. Some centuries later, there I was, making, in a way, a similar journey, but with a completely different aim. And then also, of course, with much less time, much less patience and tolerance to the climatic conditions.

How could I apprehend that space? Kind of an impossible task… how could I grasp it? I thought: perhaps by taking with me little fragments of it. I collected few stones among the infinite amount of stones on that vast landscape. Black stones

With the residual side effect of the trip I came back to Amsterdam and to my studio. I choose one of the stones. The one I thought had enough textures, forms and variations to keep me busy for a month.

I decided that I would draw that very stone from the same point of view, every day for a month.

I wanted to experiment to see whether I would see (and represent) the same stone differently each time; if it is the observer who changes even though the object of perception remains the same. I wanted to observe how the experience affected my understanding of that very form of the stone, if I would perceive something more each time I drew it,if there was any kind of understanding which increased with the repetition of the experience or if the repetition cancelled the learning experience.

The drawings would be 24 × 24 cm. Pen on paper.

I created a set up in my studio where the stone would remain in the same position during that month. A light was set on the side, a chair positioned in a place from which it wouldn't move. The paper was all cut into the same size. 14th February 2009 was the first day.

After few days I realized that it would make sense to start writing a few notes and thoughts on the experience during the experiment, before or after making the daily drawing. I trusted that the process of making the drawings would reveal some specific type of 'reflecting on drawing', which would not otherwise be accessible to me.

Perhaps I should briefly refer here to the fact that this "trust in the making process as a tool for understanding" is not a new element in my practice, but something that I have kept developing more or less from the beginning of my work. To give an example, in 2005 I did a project at the Geological Museum in Amsterdam, there I replicated (by observing and modeling) a series of fossils from the collection. The replicas where done in porcelain, on a scale of one to one with the originals (which measured between 1 to 5 cm). I started by identifying which collection I would work with, then I set up the premises and the system: I would replicate the entire collection, by hand, in porcelain, no matter how long that took. It was not that clear to me why I wanted to do it, but I knew there was something there to learn about.

During the eight months that it took me to accomplish my mission, I did learn a lot about the pieces themselves, about the fossil formations, about how the material change, from the original to the copy, affected the perception of the form and so on. But I did not only learn about the pieces in terms of form and representation but also about the project itself. The eight months of undergoing the experience made me realized what it was that the project was about. It was about time, about the era of the fossils in contrast with the present time of my reconstructions; it was about the idea of models and the gap between the original and the copies, about the absurdity of an artificial hand trying to replicate (and of course failing) a natural formation.

The list could expand and go on about things I learned or knowledge I acquired during this process: about the pieces, about the project and my practice in general. In this way the work w or can became 'a tool for understanding'.

In the case of the *Meditation Piece*, I wanted, again, to get closer to the sample itself (the stone), to the process of drawing the stone, and at a more general level, the specificity of drawing as a system of representation.

✯

Following, I transcribe the notes I wrote just before or just after making the drawings.

Working Notes

20-02-2009

The stone is there, the chair is there, the light in the same position, the paper the same size.

How to address today? Where should I start? By the proportions? I'm supposed to know them by now. Today I see few angles here and there which I haven't seen before; I see the continuation of some lines which I also haven't seen; some forms seem to continue from one side to the other. There is a part which is always outstanding, a little plane, more or less in the middle, it shines more, the light reflects more there. I like starting by drawing that part, in the center, and then organizing everything from there.

Yesterday I tried to start on the right side, and the drawing become chaotic and fragmented.

The coordinates are the same and nevertheless the drawings are very different every day. Can I see more every day? I think so. I also lose my patience by the end of the day. I'm a fifth of the way through the experiment and it's already driving me insane.

Yesterday I started with the fragments building up to the whole. Today I started with the whole: a quick sketch underlying the entire thing and the shapes after; adjusting details- as I learnt in art-school. Perhaps it worked better.

I try to be very objective every time I sit in front of the white piece of paper. I never look at the drawing I made the day before. Nevertheless every drawing is so different from any other.

21-02-2009

The question is: if there is certain amount of progress in the process, would the last drawing be the most accurate one? Am I learning more about the stone every day?

Yesterday I thought I did, today I think not, the drawing today is more chaotic and lacks detail.

Where is the deconstruction happening? Not only the drawing is not the same as the others, but also I, as an observer, never observe the same.

The drawing changes every day even if I try to draw it with the same concentration every day. Would it be the same with scientific drawings? Weird if so, but more than possible.

22-02-2009

Today is the first day that the drawing is what it has to be. The proportions of the parts are what they have to be, nothing is forced to be connected with something else, but organically falls into place.

I wonder with what it has to do: maybe only the fact that I went swimming before sitting and drawing? I wonder if, even beyond my will or desire, it's related to my state of mind, or moods?

Today I started drawing from the fragment to the totality, I started at that fragment in the center and from there the drawing began growing to the sides. I didn't even throw the proportion lines or general angles. I have no idea if it has to do with this that I made a better drawing, maybe it is simply a better working day.

24-02-2009

I am a third of the way through. Perhaps a good question is: when does the repetition become negative or invalid? When is the moment when itis no longer interesting to continue with the experience, when there is nothing else to learn from it, when it is not even annoying anymore and the becomes kind of a job?

Is it when I have already learned what I have to learn? Then, also, what about the others? How many drawings does the viewer have to see to understand the point?

At this moment it is a bit boring to draw the stone. It has become very far from been exiting; just something which forces me to calm down, and look and put the pieces together and draw.

I feel I 'know' the stone by now

Idea for future: draw the stone by memory when I finish.

26-02-2009

For a few days I think that I know the stone better every day. It doesn't entertain me to make the drawings, it doesn't make me angry either, nor restless, nor even bored.

It's now about the process of knowledge of the stone and to renounce the idea that 'I know' what the stone is.

And then, every day, again, I don't know.

Drawing is to organize where the parts are and how they relate to each other.

For several days I started by drawing the parts and the fragments were leading me to the whole. The problem comes at the end to see the relationship in between the parts and the distances between them.

Today I wanted to get back to the system of beginning by the proportions, direction lines and the relationship in between the parts, but I realized that the most minimum form of each part is what affects the general directions.

I concluded that the method wasn't useful for me.

In the end, I combined both methods, I started with a fragment, the fragment which called my attention the most. After that worked around the fragment till I completed the totality and then adjusted the details and kept dividing the parts into the smallest parts: from the beginning to the left, or to the right, or below (the area I control the best) and then I started losing tconcentration. The parts I draw at the end are always the least sharp ones.

The drawings are much better when I manage to concentrate on them and not on theorizing about what I do. Drawing, drawing and that's it.

I still lack many details to know the stone in detail, but I do believe that I can see more every day.

The most formative aspect of the piece consists in the fact that the action modifies me, it modifies my understanding of the stone and my days, it anchors me or it drives me crazy, but the day is definitely not the same if I have or have not drawn the stone. Am I going to miss the exercise after the 30 days? I'm not even half way done, hard to imagine that day. It would be beautiful to draw the stone by memory after those 30 days; to see how I remember, if I remember the same every day, or if I keep forgetting by the day, one day a line, a fragment, an angle.

Idea: draw the piece by dissected fragments. When? Now? When I finish the 30 days?

03-03-2009

I do think I understand the nuances of the form better every day; I see more and more details on the rock. Still, I represent them differently each time I draw. I don't know why. I really try to.

A lot is affected by the side at which I start. The first area is the most defined and then the rest follows and gets less and less detailed.

The scene is there, nothing changes, the same little rock in front of me every day.

This discipline is quite weird too, especially when having to wake up at 6.30 to fit 'the drawing exercise 'into my agenda. And still, when I'm in front of the rock I like to be there, in front of the same problem as yesterday: a friendly feeling for the mind. How do I go with this today? The rock is the same, I'm probably not. And then, agin there is this notion of time. I was in a rush today and thought the drawing would be a disaster, but it is not, my brain just connected the elements faster. I'm wondering again how the aspect of time influenced the traveling accounts. Today, it's just impossible to sit days and days in front of the same landscape.

04-03-2009

Would the drawing today be the most unfocused drawing ever?

10-03-2009

I elaborate a lot on the right side of the drawing, thus enclosing that area and then work towards the lower part and the upper part, trying to maintain the proportions.

The combination of what I know, remember and see startsto be fruitful. It starts helping the logic of the form.

I remember that with the "reconstructing piece" at the end I realized a similar thing—I started to understand the logic of the fossil formations by the process of remaking them.

15-03-2009

Might be only four or five drawings left to be done. In fact I think only three… Tomorrow I'll count how many are left.

This it what I know from the daily process: no matter in what hurry, mental space or mood I am, I will do the drawing. Okay, cool down, this is the stone, you have to draw it even if you are going to arrive late for your appointment. Time has to stop and what I have to do is to sit and draw the stone. Everything else moves

and changes but the stone is there, in same position, with the same light, and the same muteness.

It takes about an hour to draw, sometimes a little less.

Every day I feel I know it better and I can feel in my body when I'm forgetting to draw a fragment here or there.

I think I know it better every day and the last days, every time I draw it, I think I draw it correctly, nevertheless the drawings are still different every time.

19-03-2009

Tomorrow will be the last drawing.

It's very frustrating, but also somehow very calming to sit in front of that little stone every day. The same lines, the same curves, the protuberances, all the same and then your brain tries to organize it into a drawing. On the final days I always started by the middle. Those three elements which stand out and are some kind of land mark to organize the rest around.

The important thing is not to go too far from the center and back, but construct all the areas around it.

For two days I couldn't do it and it felt as if the learning curve went backwards; but it was a nice moment two days later to find the little stone still there and waiting

I really wonder how this image will get imprinted in my brain.

20-03-2009

End of the exercise. Feels weird.

Today, while I was drawing, I felt that something was missing, I controlled the drawing and found all the parts there; after a while I detected a mini-formation which was missing on the border, at the top, there was a little area which I had forgotten.

The proportions, the lines, the distances at the end were 'incorporated' (embodied?).

A system too: what to draw first, what after, what to do or not to do in order make the fewest wrong moves.

"The piece of forgetting" — that might be the next step.

✭

The combination in between what one *know*s and one *sees* becomes more and more accurate throughout the experiment. At the beginning 'to know' a priori was working against the drawings, it prevented me from observing, as I assumed I already knew. By the end,' to know' was what anchored the drawings and gave me space to know more and adjust more; it gave me the tranquility that the drawing would work anyway, that I knew the coordinates and for the rest the eye could concentrate and explore more in depth.

To draw the same thing over thirty times has a fundamental, radical differencefrom any other making of drawing. To draw is always (to me) a way of thinking, a way of establishing relationships, a way of understanding and even a way of finding a ground or a bridge to my work. When I draw something which is almost the same as something else, but not hundred percent the same (like butterflies from the same species), the attention and the eye focuses on the small tiny differences between the samples. Where is that spot in this one? It looks larger, or more off center; that line is 2 mm shorter here or there, the shadow is more diffused. The micro differences are micro, but are still there and that is what keeps you awake, alert and learning.

Now, if I am going to draw the same thing, over and over my concentration goes in the direction of how to find the most accurate system to represent it, thus trying different systems. Then, in tracing the balance between me and that little object; given the fact that the object is always there, immutable, if there is a difference in the drawing, the difference is generated obviously by me.

How can the same elements in a piece of paper be organised every day? Even if I always want to do the same as before, it comes out differently again and again. The idea of objectivity is a great fiasco. The drawing is affected by the mood of day, or if I am tired from a bad night or fresh after a good one.

To know and to observe. That little dichotomy stayed along the entire process, the components almost fighting against each other, sometimes with one on top, sometimes with the other on top, and by the end existing almost congruently.

As it can be seen in the notes across the exercise, many thoughts arose in the process. Many of them were related to representation:how do I draw this? And then how, again and again.

To represent makes me think about representation, as simple as that, but this statement leads me to another issue which is relevant for me and this is: what is it that we do as artists which makes us do this or that type of work and have this or that approach to the work? In other words, how does the action affect the thinking process?

If I sit in front of my computer goggling at information or if I sit in the library for so many hours a day or I travel in search of a stone to draw, or if I find the stone in the neighborhood when going for an afternoon walk or if I spend time drawing a stone or I spend the same amount of time doing something else; all and any of these actions will shape my thinking procesess in one way or another, and will impact not only on one specific project but also on the entire practice, on the body of thought and works.

How do I decided which actions I want to follow in order to lead the work one way or the other. How does it make a difference to read about subjective representation or to have the embodied experience of how subjective representation works by setting myself the task of drawing the same piece thirty times?

The knowledge of the stone grew throughout the exercise and my eye learnt more and more about it and my hand responded. This gave me some hope on this learning curve and some idea that I could acquire a skill for observing and representing. The awkward side of this is that the learning curve does not and will

not stop; it has the inherent potential of growing ad-infinitum, which throws me again into the question of when one of these type of process ends or has to end. This reminds me of a story I heard when I started visiting the university museum in Utrecht quite a while ago; one of the first stories I heard there. And it is the story of a small microscope from Leeuwenhoek.

The story is that Antonie van Leeuwenhoek (1632–1723) was one of those scientists who went into looking closely at things. As well as being the father of microbiology, van Leeuwenhoek laid the foundations of plant anatomy and became an expert on animal reproduction. He also discovered sperm, blood cells and microscopic nematodes, and studied the structure of wood and crystals. He developed a way to grind powerful lenses, and made over 400 microscopes to view specific objects.

He invented a very special microscope, a tiny one that was controversial in his time because none of his contemporaries could see what he was able to see through it. The reason for that is that this microscope had an extremely small lens with a very short focal distance. The entire device measured about four centimeters, with the lens being in a tiny hole of about one millimetre. The person who wants to look through it has to hold it in his or her hand and with the other hand has to hold the slide. The microscope is then almost leaning on the person's eye and the slide has to be very, very close to the device. The observer has to adjust the focal distance by manually adapting the distances, from the eye to the lens, and from the lens to the slide. Needless to say this microscope is a completely different microscope to the ones we are used to seeing. To use this microscope a person needs to have (or learn) either skills or perceptual abilities; otherwise they would simply 'not see'.

It is already a fascinating aspect to notice, once more, how perception is such a subjective and individual experience. Also fascinating is this issue of being able to acquire or inherently have skills to observe. I thought about this many times throughout the making of the *Meditation Piece*: especially every time that I felt that my observation opened up more due to the insistence of drawing the same stone so many times.

Drawing is a way to organize information and put it into perspective, to comprehend what we observe and systematize it; even perhaps to control it.

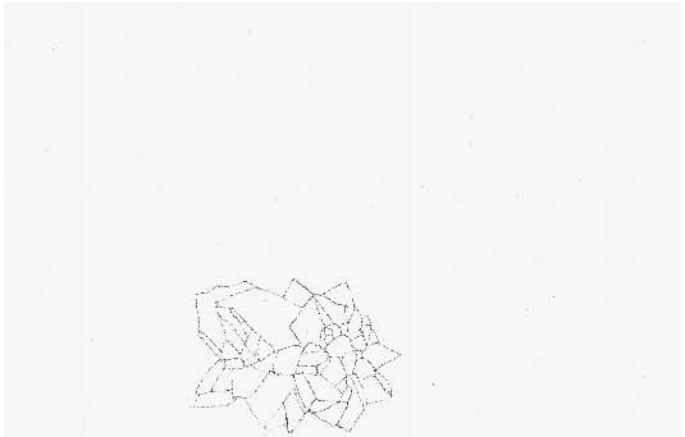
But then doing it again and again and proving that there is no way or even a possibility of doing it in one way shows us some kind of impossibility of representing. It deconstructs the idea of drawing as a tool for objective representation. Even so, drawing still seems to be an accurate system to acquire knowledge, to comprehend the thing. At least for the one who does it.

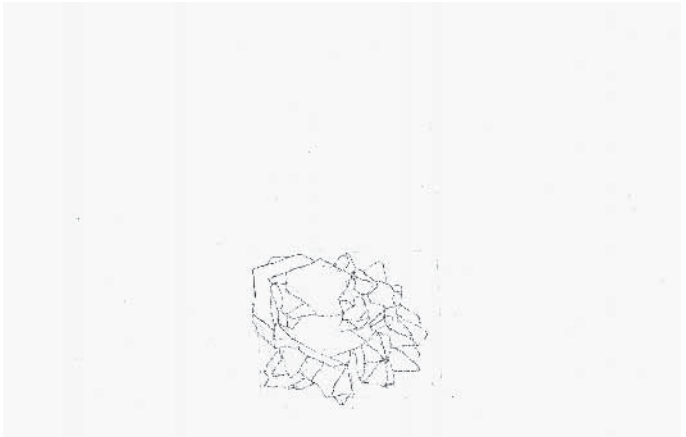
Meditation Piece

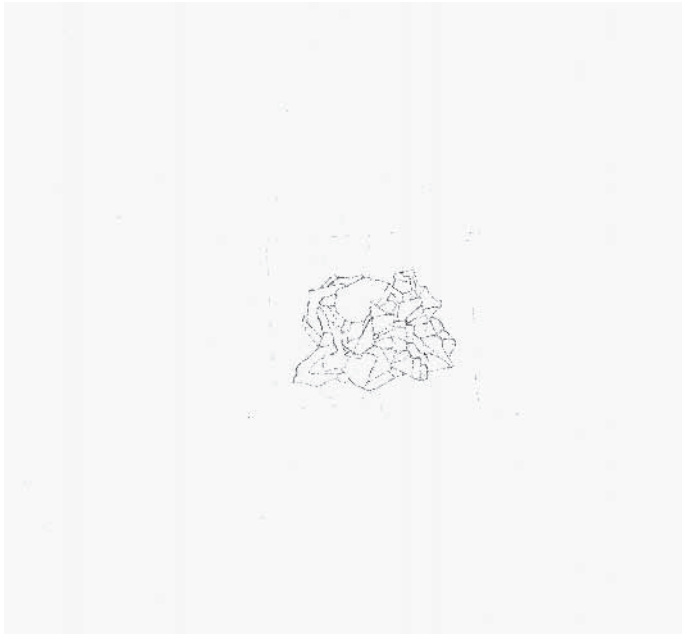
CIC (Cairo, Egypt)
May 2009

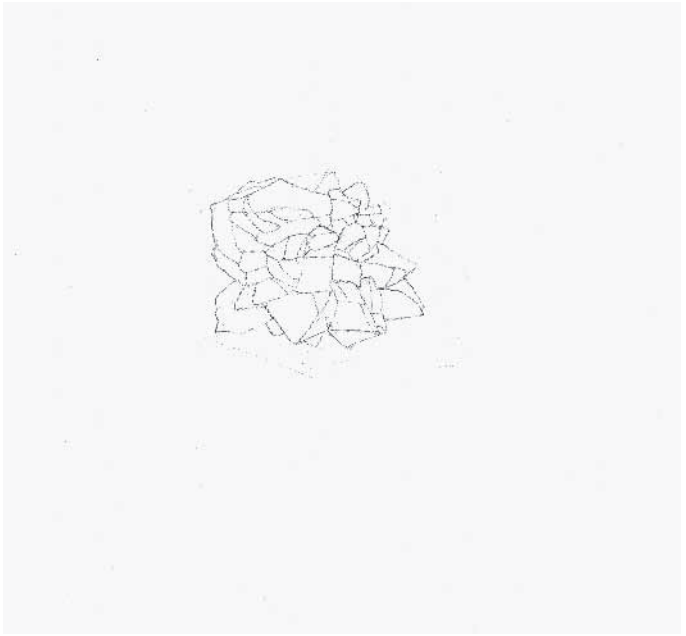
Meditation Piece
Series of 30 drawings
Size: 24 × 24 cm

In the context of the exhibition "A Fantasy for Allan Kaprow" and based on Kaprow's *Meditation Pieces* (1981), I travelled across the White Desert in Egypt and finally chose one stone from there which, on returning to my studio, I drew repetitively every day from the same angle for over a month.

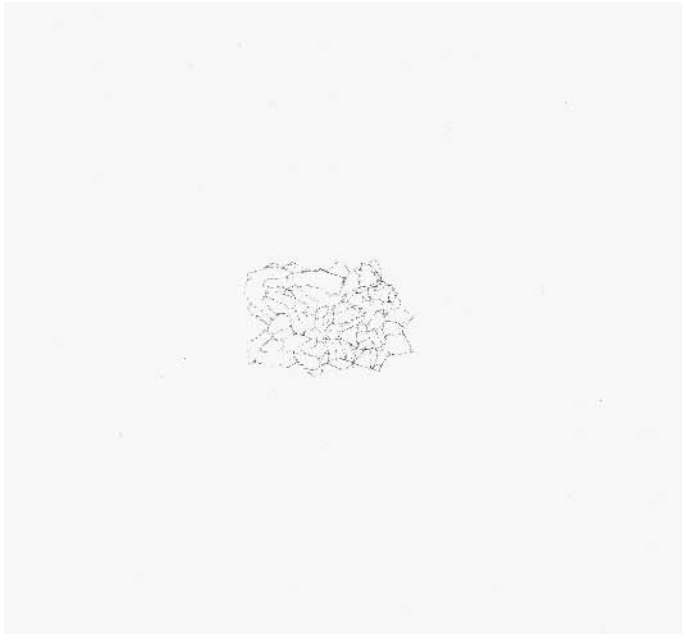


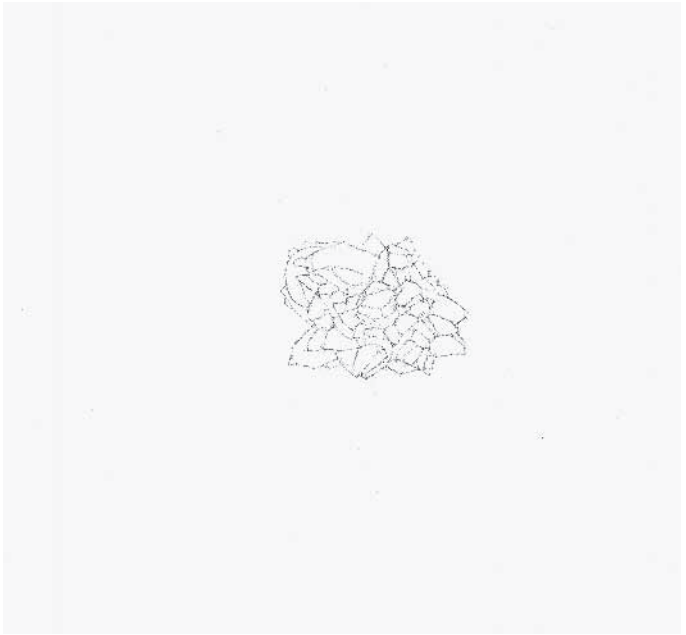


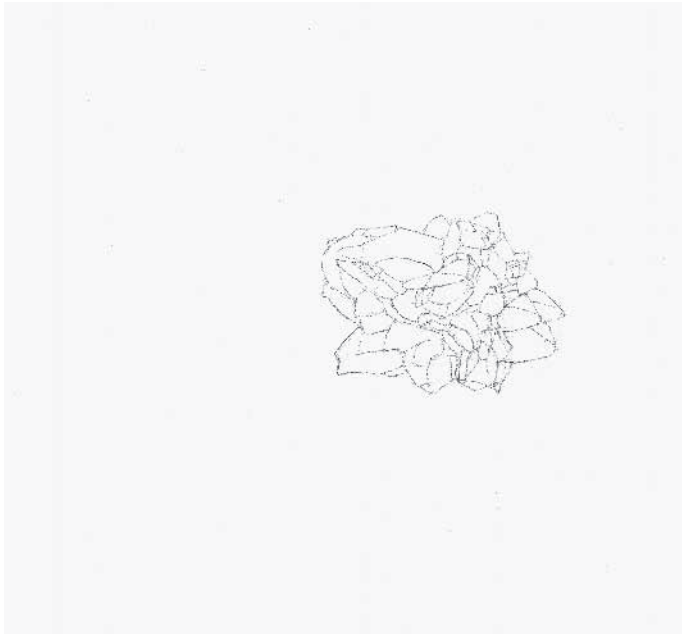


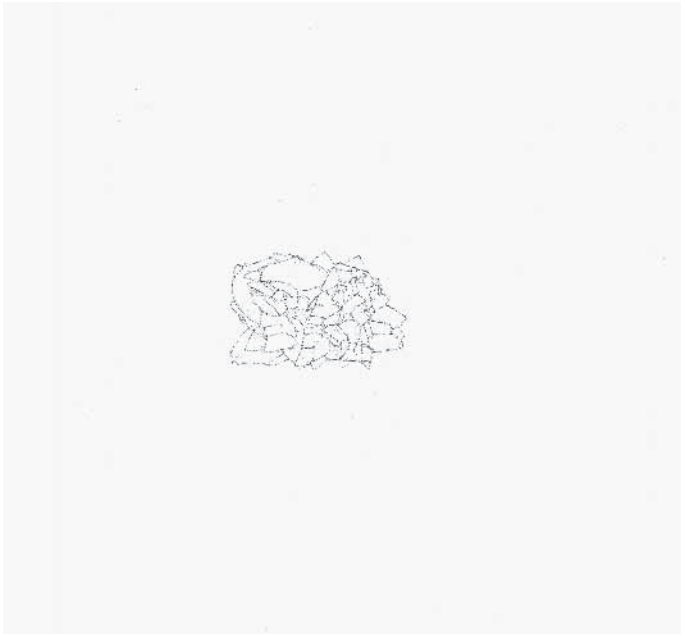


White Desert

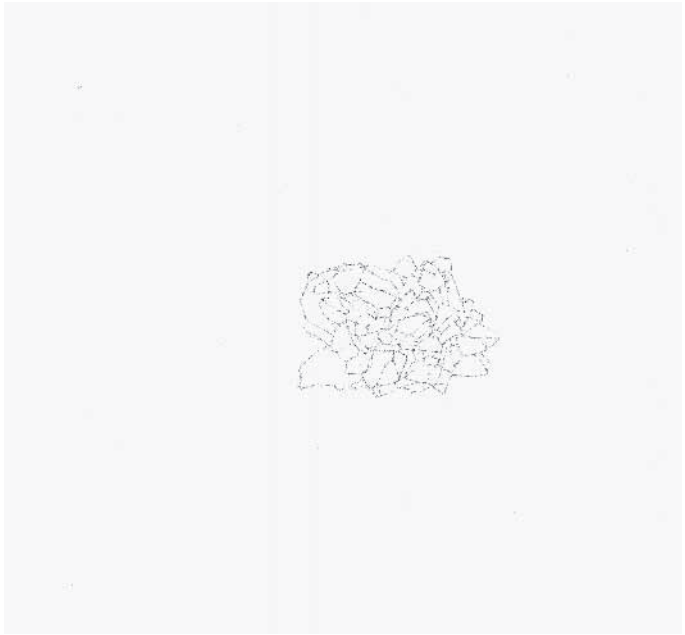


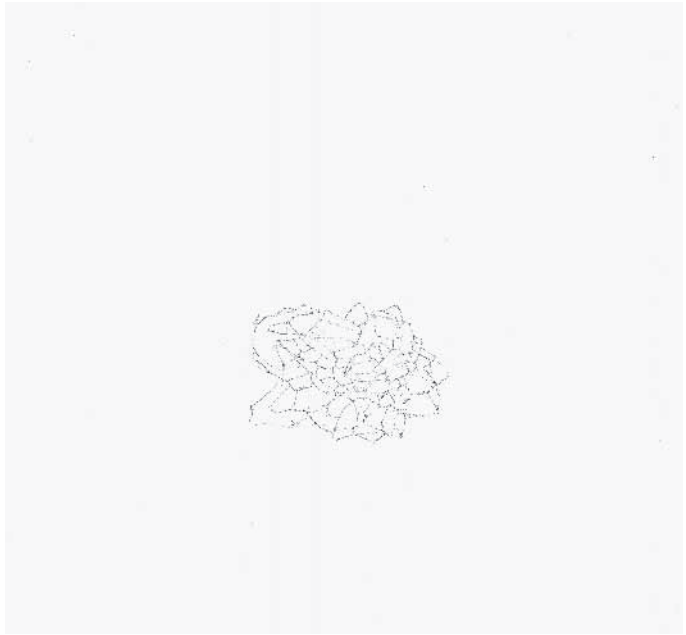


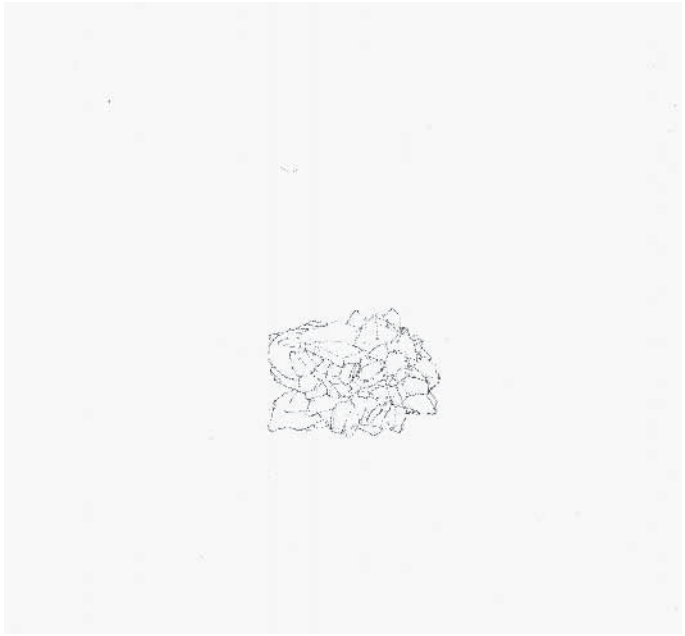


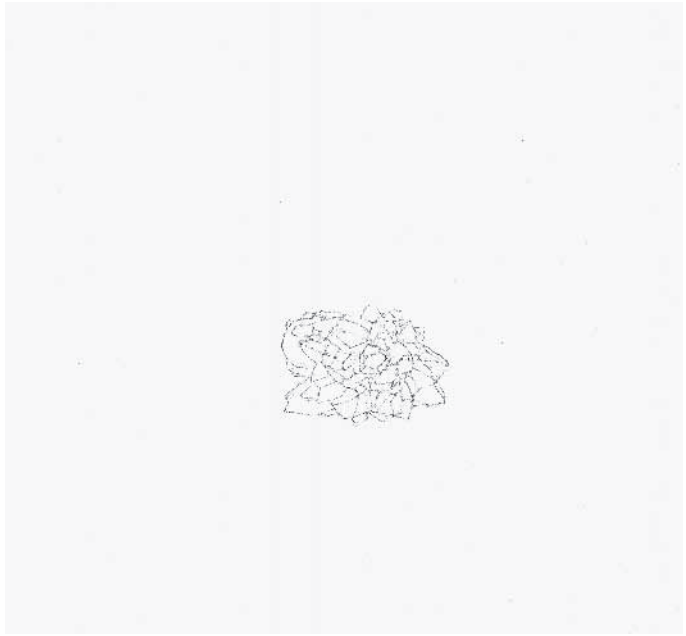


Stone and set-up for drawings









7
50 Metres Distance or More

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I nourished for years the desire to make a trip like the one described in this text; it was a dream I had had since I was a teenager, or maybe earlier. It was one of those little bubbles people have sometimes in their heads that keep growing over the years. I never thought it would happen until one day I heard about an open call for a project called, "Dream Project." The cards seemed to be in place… I had to go for it.

By March 2009 I knew it was going to happen. I could do the trip. I had no idea what the logistics would be but the funding was there and the opportunity.

I started thinking about how to do it, and I started, as always, by asking around and talking to people. First I asked in Argentina, as I thought the connection with the Antarctic was stronger. A friend of mine remembered someone whom I always knew as an artist, but who is also a biologist, and his area of research is the Antarctic. This person, Marcos Tatian, is a researcher at CONICET (Consejo Nacional de Investigaciones Científicas y Técnicas) and professor at the UNC (Universidad Nacional de Cordoba) at the Faculty of Exact Sciences. He started helping me with thinking of possibilities and guiding me to people I could talk to.

My original idea was to go to a research base and stay there for a month or two. The logistics of that are quite complicated as the research places on the bases are very limited and already difficult for scientists to get into. While seeing possibilities, trying them, and seeing them fail, months were passing. I started getting anxious, and in one of our email communications, Marcos suggested that I go on a sailing boat. He said that might be a better way for me to travel as sailing boats are flexible in terms of schedule and also because they can travel to many of the small places to the east. Knowing the area and my work expectations, he thought it would be better to go on a boat instead of being stuck on a base, with no possibility of movement. He also suggested a sailing boat he knew of from when he was working on the Jubany base; he thought that there were interesting people who might be amenable to an art project involved with the boat and luckily he stiil had their address.

I contacted them: Cath Hew and Darrel Day.

Before letting any voyagers join the trip, Cath and Darrel talk with the travellers about their backgrounds and likes and dislikes in order to try to ensure that a group of individuals have had some adventure in their background and they would be able to live with and enjoy the experience.

I was let into the group. Logistics were set. There were some medical requirements, forms to fill and lists of gear to be bought. I thought about the logistics of working there. I would need a small drawing table, drawing blocks, pencils, water colours, mixers and a folding chair that I could use for sitting outside gloves with no fingers. I had to think about every little detail before departure as nothing else would be possible to get once the voyage began.

Which book would I want to read on shore? I settled on Moby Dick, by Herman Melville. I wanted a sea story and a long story. I took some theory books in case had a chance to get into them, and some short stories for breaks.

I had no idea what to expect from the trip: what it would be like to sail, or what a trip of this kind would entail. I only knew that I was departing from Ushuaia and that I was going to be back there after twenty-six days.

In terms of work, my idea was to make landscape drawings during the expedition. I departed with the goal of drawing icebergs and glaciers that I would hopefully see during the trip, via the observation of the landscape. For years I had collected old representations of landscapes, among them the Antarctic landscape and other icy landscapes. I had that in my horizon of expectations. I knew that the National Geographic images were not was I was going after. I almost decided not to take a camera. I did end up taking one, but I knew it was not going to be a relevant tool for me.

I started wondering a bit more systematically about the tools that might have been used historically in these kinds of drawing expeditions. I came across the camera lucida as an answer, and I started talking to Tiemen Cocquyt about reconstructing one. I have worked with Tiemen in one way or the other for many years. He helped enormously with a project I did with Uqbar in the University Museum in Utrecht when he was working there as a curator of the instruments' collections. Since then small things kept coming back, whether I would call him for a lecture or ask him to give a workshop. He is an expert in the experiment history field issue, and has been very good with materials and reconstructing instruments. He is also a very lucid mind and is someone to whom I always enjoy talking. I had the camera lucida idea and I had something else in mind: a device I had come across not so-long before at the Boerhave Museum when I went to talk to Tim Huisman (conservator and curator) about drawing devices. This one was called the Claude Lorrain Mirror. The "Claude Lorrain mirror" is a convex black mirror that reflects the landscape as if it were a romantic painting; artists used it in the nineteenth century to look at the landscape as if it were already a painting. I worked on the reconstruction of one of these mirrors (as they are not available any longer but are a rare museum item) with Tiemen Cocquyt.

Tiemen suggested that I buy a camera lucida, noting that we could find some of them in good shape in antiques' shops. He was willing to accept the challenge of reconstructing the Claude Lorrain Mirror. And he did manage to do it. He also helped me find a camera lucida. The camera lucida is a much better known device than the Claud Lorrain Mirror. It is a nineteenth-century instrument that performs an optical superimposition of the subject being viewed upon the surface upon which the observer is drawing. The draftsman sees both scene and drawing surface simultaneously, allowing him, the observer, to duplicate key points of the scene on the drawing surface. I departed with both of them in my bag.

Concerning the work I would do during the trip, I did not have preconceived ideas of what the drawings should be. I was aware of the fact that the experience was going to be a surprising one. Knowing myself, I was almost sure to return with some drawings. I thought as well that the journey would be a great opportunity to be thinking about drawing, and probably only about that for a while. Internet access was by satellite and very expensive, phone was the same. Very few distractions could be expected during that month.

On 6th January 2010 I departed from Ushuaia, Argentina, toward the Antarctic territory in a vessel for eight people. The sailboat was called *Spirit of Sydney*. The trip lasted twenty-six days all together.

The owners, Cath Hew and Darrel Day, were in charge of sailing, while the rest of the crew and I were meant to help in the daily duties and needs like cooking and cleaning—also helping with sailing chores - small tasks for the ones who did not know much about sailing and larger tasks for the ones who had sailed before. The rest of the crew was comprised of John Bankart, Barry Johnson,Taryn Naggs, Rory Costelloe and Ludovit Zakissanka. John Bankart is a New Zealander based in Australia, who owns a sailing school in Australia. He has extensive experience in sailing, but it was the first time he was sailing in cold waters. Barry Johnson, an Australian businessperson, has land that has produced olive oil and other such products. He was attended a sailing course with John Bankart and got seduced by the trip. Taryn Naggs is an Australian gynaecologist, who had travelled to the Antarctic before and also on another sailing trip to South Georgia. Her body could not take sailing very well, but she loved the landscape so much that she went on doing it. Rory Costelloe, also Australian, and busy with something like urban development, had some experience with sailing and a great deal of experience with adventure tourism, paddling and so on. Ludovit Zakissanka, a Czechoslovakian traveller, was travelling in Latin America for a while and decided to make the trip to the Antarctic when he was in Paraguay. He began driving down to Ushuaia on his motorcycle, but in Buenos Aires realized he was not going to make it, and left the motorcycle and took a plane instead. He arrived one hour before departure.

Below are the notes I kept while doing the trip.

Working Notes I

Day1 – Leaving Ushuaia

It is a relief to feel the desire to draw as soon as I get onto the boat. It is raining; I feel tired. I decide to wait until tomorrow before I begin drawing. Perhaps I will start after crossing Drake Passage, an infamous stretch of open sea. I remember now that I had already planned to write on board; to reflect on the act of drawing while drawing to contemplate its specificity. Fortunately, I am eager to do both.

For what other reason, if not drawing, would I decide to keep my eyes on the same mountain for more than three seconds? I doubt anyone would do so for a different reason. Surveying the mountain with my eyes is already a way of drawing, a process of scanning, fixing it in sight while imagining it on paper. Do I see things as I wish to draw them?

The first day is for outlining the system. A factor to take into account: the movement of the boat. What will I be able to draw when the boat is in motion? How long will it take to pass a mountain? How much can be done in that lapse of time to convert the image into lines? A potential for a parallel series: drawings in motion/drawings in stillness or outlines of the snow accumulated on the mountain ridges, along with its material tensions.

At the top of a mountain draped in snow is a dark horizontal line. This narrow, snowless border stands out against the sky, forming a wafer-thin line, the barest of lines. The direction of the snow on the rocks, its tensions; the centrifugal and centripetal movements of the mountains' folds, convergent and divergent; massing snow — or none at all, according to the shapes. The variations of light blue and the blue of the mountains, one behind the other, like a monochromatic rainbow. The peaks, cut outs, wedged between other peaks. This shifting, mountainous horizon, beyond which another appears, wants to become a form.

I can already imagine a very simple painting.

Day 2

Establishing a system is the most difficult — what to draw and how. Should I think in terms of lines, or in terms of chiaroscuro? How to frame the mountain on a page? What to do with all the details that, however marvellous to the eye, get lost in the general view once they are represented as part of a whole? Even if I wind up making the same drawings as when I was 23, I still like to think that I don't know how to approach this, how to confront the blank sheet, how to represent this landscape.

The good thing is that oncel find my 'subject matter,' everything else falls into place. There have been places where I had to search for it, summon it up from the landscape. Here, I don't need to — it's everywhere I look. Once I'm in front of something I want to draw, I can't help but draw. Even when I'm tired. When I'm in front of a mountain, I want to survey its contours in an almost sensual exercise of scrutinizing the shapes with my gaze.

Has my understanding of drawing, of the landscape changed over the years? Do I position myself differently in front of the paper and the mountain than I did ten years ago in Córdoba?The understanding is more or less the same; the appreciation of being here in front of this landscape, however, is not. The hills are no longer three hours away from home. I need to search for them, plan for them, long for them. Now that I am here, I become conscious of the singularity of the moment. What I desire is right here in front of me, and I can hardly believe it's real.

Another consideration is the way of filtering representation I have developed over the years. My way of looking coincides with multiple layers of looking at representations of nature throughout history. When I see the mountains, I also see those drawings; I remember old plates, ways of resolving the image, the shapes, the planes and the distances.

It's as if different stretches of time are overlapping. First was the time in Córdoba, when I felt for the first time that drawing the mountains was like apprehending them. I remember the forms of those first mountains as if they were mine. For years, I used to ramble through the countryside, all the time sitting down to draw. Then I moved to Europe. The landscape I knew vanished; it became a mental space, a utopia, a landscape of longing. During my time in Amsterdam, I was thrown back on representations of nature in old books and a desire to be in those faraway places.

And now this feels like a re-enactment of an old forgotten habit, something that I never expected to find its way back into my practice. It seems to me that the idea of 'apprehension by drawing' is not utopian. Far from it. Drawing is a way of embedding shapes into the nervous system.

Just now I started drawing on and with the movement of the boat. I try to capture things that disappear just before I can grasp them. The limits are the seconds they take to cross my view. I want to continue drawing, but the landscape I'm looking for has already disappeared. It is receding into the distance.

Day 5 – Deception Island

Hard to tell the exact date. During the last few days I thought I would have a lot to write about, but now that they are over, it has become quite difficult to summon it all up again. Nevertheless, it was a beautiful experience to cross the open ocean. I was really sick, which has blurred my thought process and memory. Now that we're in quiet waters again, sitting in the sunshine, it seems as if it was very easy.

We crossed Drake Passage, a stretch of open ocean between the southernmost parts of Argentina and Chile, and the Antarctic. It's where the Atlantic and the Pacific merge. Cold currents meet warm currents with a clash. The entire way you can feel the boat swaying — it is just eighteen metres long by three-and-a-half metres wide.

There are eight of us altogether. Three of us had to stay awake for three hours, the others for five, and we had to continue doing this until the boat completed the crossing. It took us somewhere between two and three days. When you're awake, you're outside on the boat, 'on watch' — watching for things that might harm the boat: giant cruise ships, icebergs, and the like. When I was not on watch, I was asleep. There is quite simply no energy left for anything else. Everything is moving, and sometimes the boat is at a sixty to seventy degree incline. I could not even get to the toilet or out of 'bed' without falling.

I got seasick. It was very exhausting. For some reason I went on doing the watches and couldn't bring myself to lie down. Yet lying down is the only position in which I didn't feel sick; I was genuinely relieved every time I did so. I guess it was the desire to see the ocean that dragged me out of bed, each time hoping I'd feel better.

Luckily, the second day I did feel slightly better — still weak and unsteady, but at least in one piece. However unpleasant, the experience was especially interesting for its cyclical rhythm, which made me lose myself and any sense of time. I lost count of the hours and days, a fact which is only accentuated by the fact that there is hardly any darkness. Sometime between midnight and 2:00 a.m. it gets slightly darker — that's all.

Everyone kept telling me to look at the horizon to recover my balance, but as hard as I searched for the horizon, it was never there; just a wavy line against the sky. It never stops; it refuses to stop. Even so, it is very impressive to feel the power of the water. Luckily I didn't feel afraid and luckily I didn't feel claustrophobic. I mean that as pure luck, by having some chance genetic disposition, the same disposition that determines whether I fell sick or not.

Anyway it's over now and I finally have a chance to sift through the thoughts I had in the midst of that experience. We are anchored in a beautiful bay, a former whaling settlement. Remnants of metal structures contrast with the stunning landscape, like on a movie set. On the open ocean, I was reminded of the accounts of early explorers.

I realized that, to me, this was already close to being unbearable — even knowing that statistically accidents rarely happen, knowing that it would be over in 48 to 56 hours, knowing which winds were expected, knowing what we would find at the end of this trip. Despite all these certainties, I still felt left to my own devices. I couldn't stop thinking about those people, centuries ago, who couldn't rely on those certainties and still plunged ahead, onto the ocean.

Another thing I remembered was the representation of monsters encountered at sea, Ulysses Aldrovandi XV, and the understanding of those monsters as a product of delirium and fear. I can say from my own experience that I could easily imagine three-headed animals rising up from those fathomless waters. The sea is pounding mercilessly, ceaselessly, and it feels so powerful, so massive; it is very hard to describe. The boat just keeps on going, along with the cadence of the water, a tiny vessel in the midst of it all, carrying us, not even fearful, just wrapped up in all of this. (See Note 1 at the end of the text for further details about Aldrovandi.)

Day 7 – Teflon Bay, Deception Island

Yesterday I had a small revelation about the specificity of drawing. Photographs don't do the same for me. Why not? Simply because they don't allow me to choose any frame other than a rectangle. If that which I want to draw is behind a mountain, then what do I do to erase the mountain in front? How do I get the image I want, without all the rest? When drawing, I can make disappear what I do not want, and bring closer what is too far away.

I don't know yet how I'll handle other weather conditions. Yesterday was sunny; I had no problems. Today is icy cold and windy. I will draw what is visible from the deck of the boat, using the transparent shelter, where it's cold, but bearable. Now that the boat is at anchor, it has started rotating. It continually obstructs my view. I have to wait until it spins all the way round before I am offered the same view again.

The timing with which the boat stays at the site and veers off again, the wind, the cold, the gloves — all of this, these restrictions are part of the project. That I know. But I'm still not sure whether I should piece together a system or, rather, continue making a strategy every day based on the conditions, monitor how that evolves and allow my thoughts to be led by the process.

I am worried about the discomfort of using the camera lucida and the Lorrain mirror due to the weather.

Day 8

Art history, fourth year at university. The aesthetic understanding of the landscape. Looking at the landscape in terms of beauty is not a given. It hasn't always been this way. It is a legacy of the eighteenth century. (See Note 2 at the end of the text for further clarification about my relationship with the concept of beauty.)

My experience is an extreme case of perceiving the landscape as something pictorial. I see painting after painting: white on black, black on white, whitish whites and yellowish whites. Minimal landscapes: duotonal. At times there are spots of light. It is hard to identify the source of the light; all is grey, then suddenly I see a puddle of light somewhere. Suddenly a mountain flares up, as if belonging to another landscape. As I'm trying to take it all in, I am as yet unsure what will come out of this. I do know that this is the most beautiful sight I have seen up to this point in time and the most radical. White on petrol blue. Black on petrol blue. That's it.

We've been on the move the entire day; I've been trying to draw while the boat was afloat. The difficulty is that my 'subject matter' passes by before I can manage to draw it. In the end I partly tackle it. When I think about it, I hope it will be the precise quality of these drawing that they have registered the tension of the moment, the cold, the movement — the attempt coordinated by the eye and the hand to grasp at least a few shreds of the landscape while passing in front of the mountains.

Day 9 – Tied to a wreck, Enterprise Bay

Each drawing is what it has to be and what it can be. Today's drawings resulted from an increasing desire throughout the day, a desire for the snow to end. It was a compressed and accumulated longing, leading up to one hour — or less — in which it was possible to go out, between one snowfall and the next, before my fingers froze.

I make three swift drawings with a perceptible urgency to represent what is possible, knowing that the time I am granted will soon have elapsed. When concentration ends, the drawing ends too it is the time when the anxiety of the day reaches its height: one hour, one hand, the narrow slot of snowlessness — what remains is a small drawing in which all those elements are condensed.

Perhaps I should abandon the idea of a system. Perhaps every day will have its own system, defined by weather, whether or not the boat shifts place, where it anchors and what the view is.

Day 10

The time factor starts to become frustrating every. I wish I could stand still for a prolonged time in front of each form. All of them are marvellous and distinct, and they multiply incessantly. I wish I could sit with every form that appears whenever the boat moves. There is not enough time. I just hope to take it all in and, if only unconsciously; that the images will stick on the retina.

Day 11 – Presidente Gabriel González Videla Base (Waterboat Point) and Paradise Harbour

My first two or three hours of solitude in nine days. I am definitely not used to such intense company. Eight people on a boat of sixty square metres feels like a camping trip with strangers. The space I occupy shrinks after a few days. In the beginning I thought I wouldn't survive with so little of it, but after a very short time I got used to compressing myself into it. Now that I'm alone for a while, I become aware of the degree of disorientation it entails for me being around people all the time.

The engine is silent. Things hardly ever remain still. Either the boat is moving, or it snows, or the fog comes in, only to dissipate again. I need to take full advantage of the intervals I am permitted to work in. I decide to set up the camera lucida. It is difficult to get the pencil to coincide with the image projected onto the paper. After a few hours I have managed

to get that part to work — to some degree, at least. The trick is to see the projection of the landscape and the pencil drawing at once. But the device only projects a very small portion of the landscape, and then I have to shift the camera just a tiny bit to get to see the next portion. I still don't know how to work my way to the laterals of the image once I've traced the portion that was visible. By that time, I've lost my sense of the totality.

The restrictions are manifold, almost too many. I realise I've started feeling anxious about not being able to establish a working system. But then, it is impossible for me to devise such a system, since I never know what I will be faced with the next day, or how, or where or how much time I have until the boat veers off, or the wind starts blowing. All the while, the beauty of this place is indescribable, hallucinatory in the strict sense of the word: the density of the snow, the amount of accumulated matter, the light haloes that appear in the mountains beyond the sense of perspective emanating from the many icebergs floating around, innumerably many, and filters of fog on the slopes behind the halo.

There is something peculiar about my spatial perception of the mountains. They look like cut-outs, almost as if stencilled. It might be because of the light — maybe that is why I haven't had any sculptural ideas so far. It doesn't feel like a 'quiet' landscape. That might be due to the mounting pressures in the ice, which can break at any given time. There's a sense of impending disintegration, a slumbering force that will inevitably alter the landscape.

Yesterday I let Darrel have a peek at what I was doing. Until then I had sort of kept quiet about what I was doing. The others have very different reasons for being here: they're fond of sailing, adventure, travelling. It's a very different way of engaging with the landscape. Darrel instinctively realised that I needed motionlessness and solitude. We agreed to start watching for suitable spots so he or Cath could take me ashore in the Zodiac, our inflatable motorboat, and leave me there for a few hours. Today, we found a spot in front of a huge glacier. Darrel dropped me here along with my drawing tools and a radio.

I found myself on a small stone island of about ten by twenty metres, surrounded by icy water and in front of an awe-inspiring glacier. There's a small bird pecking at something — my sole companion. Sitting here, I'm again faced with the question of what I should draw when every speck deserves to be represented. For now, I opt for the upper part of the glacier, which is shaped extraordinarily. Masses of snow are packed together, solidified. They produce a constant noise, coagulating, breaking, falling. That structure is definitely alive.

It is fulfilling to notice that the eye 'opens up' when I wait long enough. It seems that everything in this task has to do with anticipation: waiting for a usable view, waiting for something that could potentially become a sculpture, waiting, as I am now, for the snow to stop so I can bring the paper out and draw. It's all about finding a way to wait, long enough to figure out how to go about it. It turns out the proper way to wait is, in fact, to keep drawing. The process only unfolds itself through working.

It almost feels as if frustration has become my subject matter: frustration at not being able to grasp the beauty, as I have neither the capacity nor the conditions at my disposal. But most of all it is my own lack of skill — or anyone else's, for that matter — to get this down on a piece of paper. For this place is more than anyone could possibly record.

At the very least, a drawing made on weathered rock while hearing the sound of the living ice is definitively a different drawing than one made in my studio.

Day 12

Does an artist ever go on holiday? Not that I have a choice. An atrocious wind is keeping everything from view, making it impossible to go outdoors. The first part of the day we navigated through blizzards with zero visibility. After we anchored, we had no choice but to stay inside. Like a Sunday in winter.

Day 13 – Port Lockroy, overnight at Damoy Point Hut

There are times, surely, when I wish I were on a holiday… By now I have grown tired of so many restrictions. Or rather, I'm losing my taste for the poetics of restriction. I was told there was a beautiful mountain here somewhere, but the fog doesn't allow me to see it. Anchored in front of a glacier, I attempted to capture it, but the boat starts rotating again, obstructing the view every five minutes. So I positioned myself on the highest part of the boat, where the spinning around doesn't affect the view, but then it starts to snow, and that part isn't sheltered, and so on and so forth. It is getting close to impossible to do anything.

Then there are my own shortcomings. It is genuinely difficult to draw a glacier. I'm reminded of an exercise from my first year in art school: to draw a piece of

cloth with its endless number of folds and creases. In trying, the eye adjusts, and starts seeing a bit more.

Another interesting issue is that of scale: at which scale, and on which paper size, should I represent what I see? Cut-out pieces or small fragments: small paper. When there's more distance: medium-size paper. When the landscape is very near: larger paper.

Watercolour seems suitable for representing this. It's an issue of gradients, rather than lines.

I wonder how to improve the method in projects of this kind. Maybe the only option would be to travel on my own, or with a group of other artists, or, to just accept working with the restrictions as my subject matter.

Day 14 – Port Lockroy

To return, and stay on land for a month — or two, or three…For the next round, I will need a device to protect the paper from getting wet. It could be a drawing board with an acrylic protection on top. Maybe the height of this 'roof' could be adjustable. I'd like to have one of those telescope devices as well — the one that's a mix of a telescope and a camera lucida. Not to be forgotten: fingerless gloves, patches for warming hands and feet ('hotties') and an outdoor chair like the one they have on the boat.

There's an image I like a lot. I've seen it quite a few times lately. It is when the mountains appear between the clouds: a very sparse image, delicate. Delicacy is the noun most applicable to this landscape. I have never seen anything of such magnificence.

Everything is teeming with marvellous detail, any patch you observe. It's simply impossible to stop thinking in terms of aesthetics; everything is like looking at a painting. Yesterday I even felt visually fatigued from being presented with so many images, that is, from my own reflex to perceive them as drawings or paintings. There are moments when I would like to take a leave of absence from my aesthetic gaze, but it doesn't seem like I will ever be granted some time off.

Day 15

Yesterday I decided to focus on the splashes of mountain emerging between the clouds — small scraps intermittently visible and invisible within the white current. It led to the most minimalist watercolours of the entire expedition. Watercolour feels like the method of choice at the moment, as lines seem to be too coarse for the delicacy of these places.

It finally feels as if the landscape has entered my eye. Every day I see smaller and more subtle details; minuscule lines, minute differences between figure and background. As I write this, I realize that 'figure and background' are very nearly nonexistent — it's all figure. The cloud, which ought to behave like the mountain's background, is in fact as animated as the mountain itself. The white snowy mountainside, which could be an anchor for the eye, is instead receiving isolated light beams that render the surface lively. This place is truly dramatic, unimaginable, something which has its own power. The strangest thing is that it's a quiet force; contained, calm, but intense.

As I try to imagine my next step, the only thing I can think of is to return here.

Having to move has proven to be the most distressing part. All I wish for is to be able to stay, to be present in every corner — or in one spot, long enough to see it change. For the landscape is constantly transforming: the light fluctuates dramatically, the clouds tighten and clear out, particles of ice and snow rain down, it all happens at once when I'm sitting in front of my 'object of study.'

The idea of returning with a stack of drawings after a trip like this is something to look forward to, but at the same time it scares me. The scale of the project is too grand in comparison with the thirty to forty drawings that will remain. The experience is epic, the outcome anything but. Maybe that is just something I need to come to terms with. In any case, I don't consider any of the sculptural ideas I have had to be worthwhile. I have been unable to find a system, and I don't suppose I will yet find one. It is much rather like a daily negotiation with the given conditions: the weather and the time I am granted on site. It sounds obvious when you sum it up, but when it comes to working it is radical.

I've barely had a chance to use the devices I brought. I am so anxious about achieving at least a small number of drawings each day that I'm inclined to start drawing from the naked eye, only to finish because of rainfall, parting, or exhaustion. Next time when I'm on solid ground I will practice with it.

During the trip, the collective effort invested in my endeavor was a true help. The crew built me a shelter against the wind, allowing me to work outside the hut we slept in. The wind was hideous, the cold almost unbearable. How a wall of wooden planks can make such a difference, is amazing. It was like the day

before, when I was fed up with the rotation of the boat, and Darrel simply dropped a second anchor to keep it still. They are making sure I can do my work. I'm infinitely grateful for that. Maybe artists are the most useless people in the world.

Day 16 – Hougaard Island

Yesterday has simply destroyed me. It kept pouring and pouring. First, while we traversed from one spot to another, the clouds completely blanked out the view. Cath and Darrel kept assuring us of the sheer beauty of whatever was behind the clouds. Here, they said, we could have seen this, and over there was the highest peak — but to us, all was blank.

From the moving ship, I tried to draw fragments of glaciers. I often do that exercise; it is a fulfilling way to engage with, and submit to, the things passing in front of my eyes. As the boat advances, the object of study rapidly disappears, changes its angle, and finally recedes from view.

When we arrived at Hougaard Island, the boat dropped anchor. Clouds obliterated all the views. It was raining hard, so the prospect of being dropped ashore for a good view turned out to be a false.

Cath took Taryn and me for a cruise in the Zodiac. We went to see a site called the "iceberg graveyard." Even though it was raining quite hard, it was a thrill to be outside among those forms. Taryn had brought her camera, and managed to take some beautiful photographs. I fantasized about documenting the forms for the purpose of reconstructing them later in my studio. Cath was patient enough to circle around several icebergs at an equal distance, occasionally stopping so I could take photographs from every angle. It was beautiful. The light the icebergs absorb and reflect is simply enchanting. They seem to be from another world, unearthly. And yet, I don't think they would work as sculptures; to imagine them as such feels like creating a caricature. They are perfect the way they are. I really wouldn't know what to add, or how to make sense of them.

The restrictions don't feel like a challenge any longer, but rather like an obstacle, an impenetrable block. The only thing to make me happy is the drive I have had: there hasn't been a single day that I did not wish to work. What's more, I didn't feel so insecure any more about the places being too beautiful for my hand. The drawings are what they are — and that goes for my hands as well. (See Note 3 at the end of the text for further notes on beauty and landscape.)

I like the idea of seeing less in order to see more; that I can actually see some things more concentratedly by staying where I am and not going out to explore. No hiking, no kayaking, none of those things; just sitting in front of one view for hours on end.

A few thoughts:

One. Is method only possible when there is repetition? Here, where the landscape and conditions are different each day, I am not able to create a system for working.

Two. The one thing I need to decide on when working with landscape is scale. How am I going to make that vastness fit onto my piece of paper?

Three. I find myself wondering again and again about travel accounts from the nineteenth century. I have come to realize that it's all about time. Just time.

No devices. No tricks. It's purely a different notion of time. You've got to be capable of waiting for ten rainy days to have one proper working day, and then more rain may still come. It is similar to climbing: you're bound to wait for the right moment.

Draftsmen used to have a different notion of time; furthermore, their work was needed. Drawing was one of the grounds for embarking on an expedition; their production was incorporated in the entire plan, and as a consequence everything was organized around it.

Day 17 – Vernadsky Base

My object of study is highly animated… too animated, almost.

I've spent four hours drawing, and the view must have changed dramatically at least ten times. An iceberg was rotating all by itself — it caused the perspective of the drawing to change continuously as I was making it. At first I thought my observation was failing; my brain wouldn't admit that the iceberg was spinning. I had to verify it three times before I could accept that it was happening.

Twice, entire ice structures got submerged; on both occasions, they formed the background of my drawing. It is really estranging to draw a view which is, literally, in flux. Technically, I would begin by setting up the 'whole,' then focus on detail. That method is useless here. Once I've finished representing the whole, the parts have already changed position.

The arrangement of the icebergs is changing minute by minute. It is puzzling to imagine that such masses can be modified with such speed. It's even a little scary to be here alone in the middle of the nothingness with those creatures in constant motion. Whenever the water level rises, a fear creeps up on me that it might bury my small stone island. I cannot predict how high the level of the water would rise if one of the icebergs were to sink. I guess some drawings were made with a rush of adrenaline.

The inability to put into words the liveliness of this place is not only a figure of speech, but also a very concrete reality. It is equally indescribable and hallucinatory: the constant shifting, the light appearing and disappearing in different areas, the sound produced by the tension within the ice and the dimensions. It is a living organism, but it is slumbering. There is no violence to it, not even when one of these ice monsters disintegrates. The tensions cease and the masses fall, sink, spin — but only mildly, without forcing the panorama. The elements simply get reorganized. They move away, or get closer, always very gracefully.

At the same time, this is a highly pictorial landscape. I cannot discover any sculptures. Everything I represent, I represent in planes; I think because of the dimensions and the distances. The distances are huge, incredibly huge, and I always observe things from the water, as if from the outside. That is why it becomes bi-dimensional and, indeed, pictorial. It's as if there are only two materials: snow and stone. Consequently, there is only one pair of base colours — in an infinite number of gradations.

It is very difficult to think about other subjects to work on after this. Will landscape be my only subject matter? The objects in the wild, and their enclosed counterparts brought together in the museum: they somehow overlap. On the one hand, here it is in a 'natural' state; on the other, there's the studied version, classified for research purposes, or yet to be classified. It all comes together; one does not sit and look at a landscape anymore without being conscious of all the landscapes seen before in history, as well as all the mental concepts of landscape — aesthetically, scientifically, with the knowledge of what was discovered when. That which I've learned in museums and that which I am seeing here now: it offers me another glance at what I saw when I was drawing the hills in Córdoba.

Day 19

For two days now, a shade of pink has appeared on the horizon at sunset. It is bewildering, almost shocking, as the eye has grown so accustomed to the monochrome. Yesterday was sunny. Blue also set in, almost flattening the sky. Strange. I've seen many whitish-blues these days, but yesterday it was a flat blue of a different intensity. It altered the landscape. That shook me, too: to realize that the landscape could be so different from what I have taken it to be.

I am working toward the end now. I am left with today and tomorrow, then comes the return voyage. Who knows what that will be like? I should make an attempt at using the devices today, at least for one day, or half a day. Thus far, it has been easier for me to work from the naked eye — due to habit, perhaps.

The familiar 'problem' — what to represent if everything is like a painting — has become particularly tiresome. It cost me a fair amount of concentration. I wish I were able to stop thinking about it. Beauty, in a way, is tiring; too much of it leaves me overwhelmed. What always manages to captivate me is the distance of the landscape from the boat. It is like being outside the place and being part of it at the same time.

Now that I have come to realize the need for coming back, I feel a more at rest. In any case, I have no choice but to surrender to the fact that the result is what it is. It will be like this anyhow; no matter how stubborn I get about it. I will return with fragments of things, attempts at some unfinished watercolours, thoughts about how I should draw this or that. This has been more like fieldwork than a project in itself; only now I've learned what I need to do. The ideal point of departure would be to stay at a base, any base. One with geologists would be best. Or on my own, as Darrel suggests. But then I think the immobility would be too intense, maybe even counterproductive.

One of the weirdest things about being here is that it feels as if everything is the present. You never think about the past, and it is hard to think about the future. Everything is now. It might be due to the intensity of the place and the experience, or because I am rarely alone.

Final afternoon of working. It might be the coldest day since arriving here. I'm sitting on a little hill with a beautiful glacier in front of me, still, immobile, as if it is going to stay there forever. By now, I know it will not in fact, it may collapse at any moment. But it feels immobile nonetheless.

Darrel lent me something called ‘hotties’: small squares that warm up when they’re exposed to air and warm my hands. A miracle of technology.

I have chosen the pencil for this last afternoon. The maddening cold leads me to produce the most frozen drawings of the expedition. The line is different, without a doubt. I guess you need to believe unconditionally in the concept of “experience” to be sitting here today.

How do you cut out the landscape?

How do you mark it on the paper?

Two questions that have to be answered every time I sit like this.

Day 20 – Palmer Station

The coldness passes and the drawings remain. Yesterday’s concluding thought. This morning, though, I received a present: another hour and a half of working before our final departure. It feels like a chance to properly say goodbye. This place has anchored itself in my mind as cloudy and two-coloured. It’s strange to think that other people have a different image of it. I depart with disjointed fragments. It is the way it is.

✯

After I returned from the trip I felt the urge to establish a dialogue with romanticism via landscape painting—large and in oil. This was some kind of necessity for establishing a discussion with the tradition of landscape paintings through making the paintings, through thinking about painters like Willem Turner and Caspar David Friedrich. I tried to deny for a while that urge, being aware as I was of the amount of work and stress that such a venture would entail. The desire kept building, and I managed to leave open a few months to explore it.

The idea was to turn some of the drawings in a series I did during the trip into large paintings. I started by asking Arend Nijkamp, the head of the painting department at the Rijksakademie, for advice. I never painted while I was in the academy, but I had worked with Arend making moulds for sculptures and many small material experiments. I had kept in touch with him over the years after I finished at the Rijksakademie. And I have gone back to him every one of the scattered times that I have had ideas for making paintings.

He loves talking about painting and I enjoy that.Arend gave me advice about which oil brands to buy, which medium to use, and which type of white he would use for what he imagined I wanted to do. And, very importantly, advice about how to prepare the canvas, also considering the size of it and the fact that I surely would need to roll it in order to be able to transport it. Arend suggested that I do some small pieces in order to get familiar with the palette and technique and to decide how to deal with painting in general, exploring which kind of resolution I was aiming for, whether the images would be built up by transparent layers or solid surfaces or a combination.

There were many decisions to be made. I acquired the small canvasses (70 × 40 cm) and overhead projector to pass the images onto the canvas, and I started. I tried different preparations for the canvas, and different ways of applying the colour: totally transparent, semi-transparent, and flat, different ways of creating the background, by a flat colour and by layers of transparency. I learned that waiting time with oil painting is an issue to deal with.

I ultimately settled on building up the background by transparent layers and a flat solid that was almost white. The colours would be flat, and the palette whitish, bluish-whitish. I used the waiting time imposed by the material to make decisions concerning scale. I used tape on the wall and projected the images in different sizes and settled on quite a large format of 420 cm × 200 cm—landscape format. I decide to make three of them.

After I ordered the canvas I realized that my studio was too small for such a venture. So I took care of all of the logistics of renting an extra studio for that period, acquiring easels than can hold the size of canvas I was using, and making a palette for working on that scale (I designed a palette/table) with wheels so that it could move around the space. All kinds of details were settled in order that the paintings get done. At one point, the frames were too big to fit through the door, and the company that sold them disassembled them and reassembled them inside.

Finally, the canvases where all there, sitting on their easels, with all the colours around, waiting.

And they were so so big…

Work started and endless thoughts and questions bounced around. The game opened up again. The complexity of the process called again for a diary—a work diary, an attempt not only to register, but also to understand what I was doing through the notes.

Following is the diary I kept while working on the paintings.

Working Notes II

25-08-2010

The most difficult thing is the transition into the material universe and getting totally immersed into it; to lose myself into: the degrees of absorption of the canvas, the amount of turpentine for the precise transparency, not to be scared about it, just to relax in the universe of matter.

I do remember that in the Antarctic diary I talked about the fact that there was no figure or background in the landscape. I'd like to bring into the paintings the same feeling.

They should be atmospheric.

How can I explain the whimsical nature of the colour decisions?

I wonder if the feeling of that landscape might be sediment somewhere in my brain and if that is what comes onto the canvas.

Colour: the plane's colours might need to have a percentage of the background colour.

Background: layers?

27-08-2010

At which stage in the process do the decisions start to be from another order?

I made a selection of the drawings — but now, while seeing the technique, the canvas and the materials, I think the right drawings are others. Just others — with no rational input in the shift. Why? Difficult to say… maybe, maybe, because of the shapes and how the background colour would interfere in the plane's colours — and then imagine this in scale.

03-09-2010

What does it imply in the painting's universe? How to understand the parameters in which I move when painting?

To think in terms of colour, palette, brushes, superposition of textures… And these are all worrying me these days.

How would it change the brush scale when the canvas will be eight times bigger?

05-09-2010

Try to evoke the colour depth of the icebergs when the time to prepare colours comes.

To evoke the landscape.

To go into the canvas's texture and colour — and let that be it.

Probably within the way I work it'd make sense to apply colour with a system, a program.

But somehow it doesn't make sense for me — not for painting. I prefer to follow some kind of intuition with colour — plus the memory of the place.

09-10-2010

Which drawing in which canvas? How many layers of colour should I make underneath the white?

How many layers of white do I need to make in order to be able to see the colour background but at the same time to cover it enough that it won't be disturbing for the eye?

Some days I wish to have been a painter by guild, to have painted for years and be able to know if I'm doing it right.

To work with media I don't really handle is in the end more than stressful.

07-11-2010

What makes me define which colour, and which goes where, is a very difficult experience to describe. At this time I do feel it has to do with intuition.

How many layers of colour behind the white will define an atmosphere?

I decided that I would treat the layers underneath the white differently in the three canvases. In one of them it will be heavier on the bottom, in another heavier on the top and in the last one heavier on the right lateral side and on the bottom.

I was interested in seeing if those decisions concerning the background construction would reflect in the atmosphere after I applied the last thick white layer (and they did).

I don't know why painting is so nerve-wracking for me. I think it might be because I have to make decisions constantly, there is no stage when the work becomes mechanical, I have always to be "there" in every decision.

The chemistry of the oil works, even when I go to sleep.

The various background layers were done with an expressive attitude (to which I'm not used at all) — it was fun not to have control of the material and see how it reacts, absorbs, expands, and accumulates: the waiting time in between layers, the intuition of one of the layers being the last one, the almost white one — and thick, a longer drying time for that one.

To pass the drawing to the canvas: to which scale? Where?

Distances and spaces

And start tackling the colour — but how? From what point? Slowly trying to get familiar with it, and with the palette:the small planes first… days feeling that I couldn't deal with the canvas. Easy to guess that it is due to the scale.

I'm aware that I know how to paint, I'm aware too that I had never done it on this scale and that I had not painted in oil since art school. I couldn't imagine any other technique as these paintings are immersed in a tradition of landscape painting — a tradition that is in oil painting.

I went to Paris and saw a huge Monet show. That is an example of mastering painting.

I'd like it if my paintings are beautiful.

To associate colours on that scale, to try to imagine them in relationship to each other, was very difficult for many days, r. I do think it is to do with intuition, or I would like it to be about intuition — but it is not always there.

After several weeks I started falling asleep with colours on my retina, and I started dreaming with colours organizations. I started, then, thinking that I was in charge of the paintings.

08-11-2010

Today I started systematizing the use of colour — not while applying it, but in registering how the colours are compounded and behave. On a separate wooden palette I started putting a bit of the colour, with notes on how the colour was made and how it behaves in the three different paintings.

The pigments in the background layer are different in the three different canvases and that makes colour react very differently in the three of them. Actually they react crazily differently, especially in one of them, where the blues turn into oranges when I apply them. I don't realize clearly yet what's happening.

I start seeing them as finished; I start to visualize them. I think I like them. They are like creatures.

If I started them again, I think I'd leave fragments without drawing in between the forms, I would let them disappear more, dissolve more, not by transparencies but by fragmentation. Might still happen…

If I started again I'd be more systematic in registering which colour I applied where and in how it was prepared: maybe a drawing with numbers next to the painting and a palette with the notations (as I started doing by the middle of the process).Not because someone would ever be able to use that system but because I'd understand better what I do while I do it.

Still is difficult to be systematic when you need your antennae awake for the colour.

The beauty of painting is the relativity of the variables.

Colour is extremely relative. There is only what is there, defined by comparison to others and in relationship with them. That is what keeps me awake and alert.

11-11-2010

The paintings are about calibration, and my skill seems to be the one of calibrating colour.

17-11-2010

Yesterday I tried to 'correct' a colour, meaning apply a second layer of colour in an area where I thought I had made a mistake. It didn't work, I had to wash it. I could feel in the texture that it was a layer on top of another layer. It didn't work…

I am trying to think why I realized that - it's because it's about creating an equation: blocking zones of colour and calibrating in relationship with them. Negotiating.

If I started again I would have a canvas equally prepared next to the big one where I would check how colours function before applying them to the canvas itself.

Perhaps I'm actually lying. I do think the stress of not knowing keeps me alert and makes it work.

I feel I am able to grasp the palette by now. I wonder what it would be like if I started with the paintings now, rather than before, without this knowledge.

✯

After finishing the paintings, of course, I experienced the well known feeling of emptiness and questioning regarding what would be next. After spending a few months only doing those paintings and thinking about them, I did not know very well what to do with my energy. I had to let them dry, and oil paintings dry very slowly—and even though I used a fast-drying medium I still had to give them a full month to make sure that rolling them would not harm them. Rolling them was the only way I could take those huge canvases out of the studio. The frames, assembled, were too big to take through the door.

When the paintings were finished, some thoughts that I had during the making were sinking into my system; I could not answer all the questions that making the pieces generated, but at least I could think about them under a different perspective.

What is painting for me? Answering this is the maximum aspiration I can have for understanding painting; trying to cover in the entire history of painting would require a different text than this one, an entire text about painting. Painting does not seem to be for me an objective in itself, as my work is not only about painting: painting is not the aim, or at least not the only one. I can only talk about what painting is for me and in the context of my trajectory.

I can address certain issues that have to do with painting, as I did get seriously engaged and involved with the painting process, and I did enter an internal dialogue with a little fragment of the history of painting—the romanticism. I thought about those paintings.Why? Because the entire Antarctic endeavour triggered it: the light, the scale, the atmosphere and the feeling of being too small and too fragile in front of the immensity of the landscape. I needed it to establish a conversation with that about which I kept thinking during the entire trip: painting. It involves scale, and how to translate the atmosphere onto a canvas, and the nuances in colour. My paintings were a consequence of a thinking process, an inquiry I needed to do via painting—and it could only be processed by making the actual paintings.

Another interesting question that kept coming back to my mind was how to look at landscape after minimalism.Since my thoughts were almost constantly referencing the nineteenth century, this was an interesting thing to consider. I became aware that quite obviously my paintings were heavily influenced by, for example, Agnes Martin. It was a most natural connection, when looking at the paintings, to think about Agnes Martin rather than about Caspar David Friedrich. No doubt I cannot look at the landscape or at landscape art without acknowledging more than a century between Caspar David Friedrich and me.

The drying month passed, the canvasses were rolled, the frames were disassembled. The rolled canvases travelled to Mexico, the disassembled frames were moved to my official studio, and the pieces with colour tests ended up in my studio as well, as I hoped that they might be used again one day. The gigantic easels and the designed palette on wheels went to storage. I remained half confused—but maintained hope that the twists and turns of my conceptual paths would lead me again into paining.

Note 1)
Ulysses Aldrovandi was a scientist who published, in the sixteenth century, a scientific encyclopaedia of thirteen chapters, including one devoted to monsters. The book catalogues monsters that were supposed to exist in some exotic country in Africa. The most interesting part of the story is that the images which are represented in the book were reconstructed by collecting narrations of travellers who had visited these very lands.

Note 2)
As I remember from art school, seeing nature as beauty was a legacy of the Enlightenment. Those lessons from the art history classes I took in my fourth year of the university are quite well imprinted in my head. Over the past few years I began reading bibliographies on landscape and aesthetics, and encountered those arguments again and again. The last one I had in my hands was *Paisaje y Pensamiento (Landscape and Ideas)*, a compilation of essays edited by Abada Editores and by Javier Maduero. This volume is a part of a collection produced by CDAN, Centro de Arte y Naturaleza (Center of Art and Nature) in Huesca, Spain. Reading the second essay, *Estetica del Paisaje: formas, canones,intencionalidad, (Landscape Estethics: forms, cannons, intentionality)* by Raffaele Milani. On page 71 I find a very clear description of the issue of landscape understood in terms of beauty in the Enlightenment. The author starts the paragraph by saying that as it is well known that nature is read by Emmanuel Kant according to the feelings of Beauty and the Sublime. The natural beauty autonomous, quoted before, implies now by itself a purpose. The sentiment of the sublime,to the contrary, is the result of a contrast between reason and imagination, and therefore is, in terms of form, inadequate for our faculty of representation. Milani explains that nature thus appears as an spectacle, and demands participation from the viewer. The clouds, the lightning, the tempests on the ocean, the deserts—all constitute scenes that deserve to be depicted.

Note 3)
In whichever book one browses on landscape and art, or on landscape and history, one finds the same reference as a milestone to the understanding of beauty in the context of landscape: most thinkers refer to the ascension of Petrarca to the *Mont Ventoux* (in 1336) and the feelings of enthusiasm and agitation that the contemplation of the view from the top of the mountain caused him. That seems to be the first moment in history when someone described the landscape in aesthetical terms. This type of written appreciation of beauty was an isolated event that emerged sporadically during the following centuries, until the Enlightenment, when the landscape began to be seen in terms of 'beauty.'

50 Metres Distance or More

Labor (Mexico City, Mexico)
January 2011

On January 6th 2010 I departed from Ushuaia, Argentina towards the Antarctic territory in a vessel with eight people. The sailboat, named Spirit of Sydney was specially outfitted for polar research. The voyage lasted 26 days.

The idea was to make drawings of icebergs and glaciers that I would hopefully see during the trip via the direct observation of the landscape.

Over the course of the expedition the light, the atmosphere and the sense of distance made me think of the tradition of landscape painting, specifically Romanticist painting. Upon my return I felt a strong urge to establish a dialogue with this tradition and created a series of 3 large paintings. These were painted in oil on canvas and are a core part of the show. (i)

i–i
Painting I
Technique: oil on canvas
Size: 415 × 200 cm

i–ii
Painting II
Technique: oil on canvas
Size: 415 × 200 cm

i–iii
Painting III
Technique: oil on canvas
Size: 415 × 200 cm

ii–i
Serie I
22 drawings
Technique: pencil on paper
Size: 30 × 21 cm




Weather and space constrictions were an intrinsic part of the project. Cold, snow, rain, the boat drifting, the boat changing locations, the impossibility of going onshore alone and at will and so on all become part of the process of the project.

Process

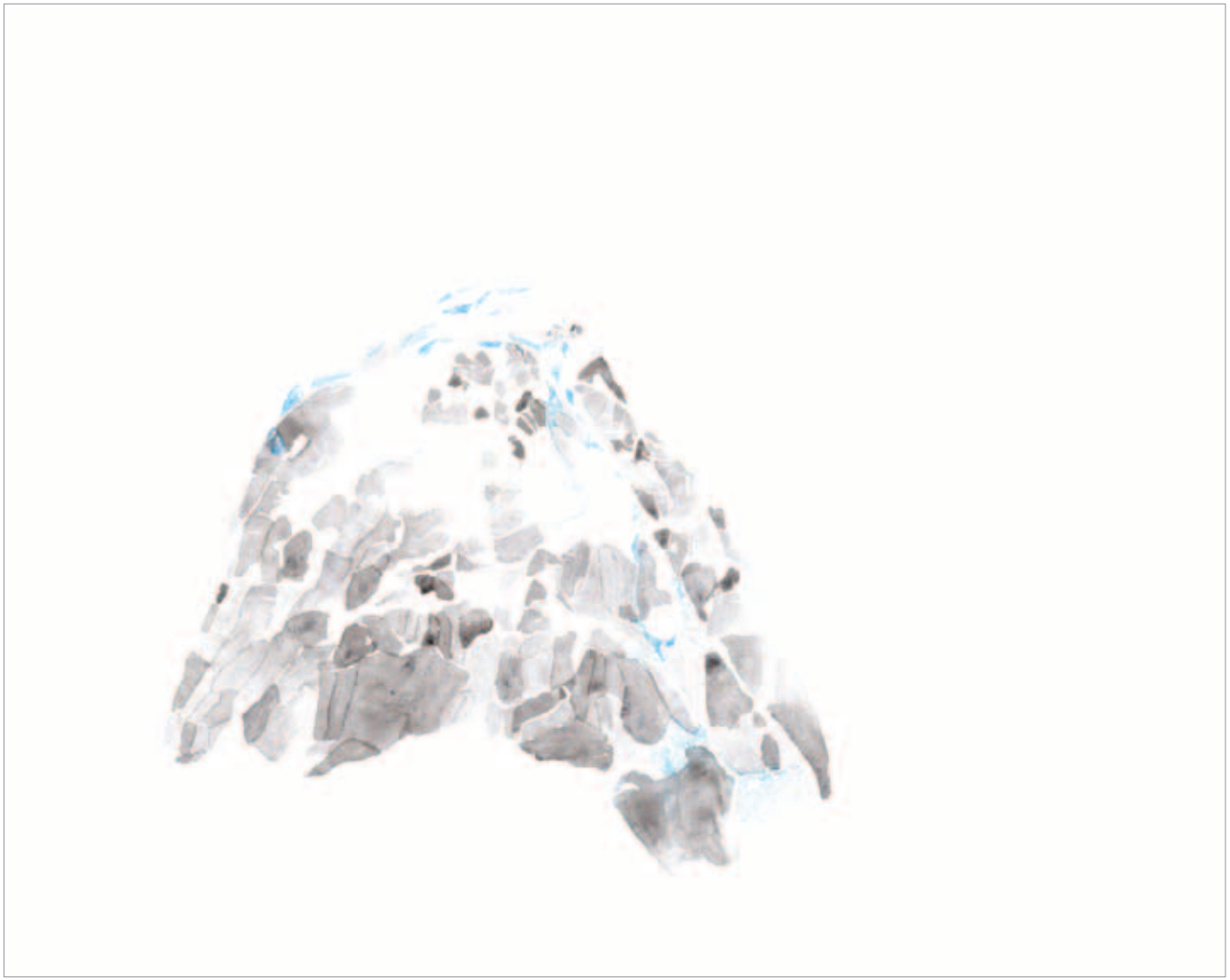
Landscape

ii–ii
Serie II
28 drawings
Technique: pencil on paper
Size: 21 × 15 cm






ii–iii
Serie III
4 watercolors
Size: 30 × 24 cm



ii–iv
Serie IV
5 watercolors
Size: 24 × 18 cm

iii
Book *"50 Metres Distance or More — Notes on Representation Vol.4"*
Publisher: Roma Publications
Size: 21 × 28,5 cm
Pages: 120

I returned with a series of drawings, pencil on paper, and a series of acquarells. These drawings have two lives. They are part of the exhibition (ii) and are also part of the publication *50 Metres Distance or More*; that is diaristic and forms an integral part of this particular expedition. It was released on the occasion of the exhibition (iii).

8
Conclusion

Finally to conclude with an image — an image that has appeared throughout this text, though enigmatically silent. It appears for the first time in the text just after the table of contents and before the introduction. It is an image of a flower, or more precisely, small parcels with flowers. Those images have a story too and that story dates from the very beginning of my time in Amsterdam when those flowers were the only image I could recognize as a familiar image. The flowers were the very point of connection that I was able to make in between where I had come from and where I had arrived, in 2002: Amsterdam.

These images made their way into the text as a silent presence, a symbol of the one element that remained constant and familiar after crossing the Atlantic Ocean. They are wild yellow flowers, common in Argentina called 'diente de león' and technically called 'Dandelion. It is a flower that is typical in the countryside around Cordoba, and grows in gardens. It is a flower seen so often that it is hardly noticed. It's a flower that is very much part of everyone's daily surroundings. I assumed that that the flower was from Cordoba, a yellow flower, rather small, of about 2 cm diameter — that appears all over the landscape and the cityscape. Then I moved to Amsterdam and I started to see the same flower, everywhere; that little flower grows even in the cracks in cemented gardens. It makes its way everywhere.

It is hard to conclude a text of this kind, as it is hard to conclude a reflective process that keeps going on. Therefore an image is here to assist me. The image, which is a symbol of a new beginning and which proposes a new process: an upcoming piece — a photographic collection of those flowers — which, I have discovered exist in almost every landscape I have visited and which I slowly started collecting.

In my introduction I described my background (in Background I). I considered this relevant because there would be no other way to allow the reader to understand how it is that the working process responds to the methodological system that it does.

I described, in Background II, the nuances of my working process when changing into a new context. I could not begin discussing my practice without explaining the adjustments that the work underwent when changing the context. I have talked enough with artists who share this type of international and inter-cultural trajectory, in order to be aware of the fact that it is something we all experience in one way or the other and therefore it has to be mentioned when talking about artists who have chosen to displace themselves from their native countries.

After this contextualization of my background, I described in great detail the five artistic projects that I have done during the Doctoral project. Every project emphasizes different elements of the process, particularly the most outstanding element in each case. *UBX Expression* emphasizes the process of working with natural science collections; *Scale 1:2.5* stresses the process of working in a programmatic manner; the *Lévy's Flight* project describes both the direct experience of observing the landscape and also the deliberation over materials and the procedure of working with them. The *Meditation Piece* focuses on the nuances of the subjectivity of observation and the process of acquiring knowledge by drawing. And *50 Metres Distance or More* puts emphasize on notions of representation of landscape from direct observation, and then how the process transpires into the further production of paintings.

I made my life slightly difficult by choosing projects that do not focus on one problem. The idea of this was to open a scope as broad as possible within the set of topics with which I dealt.

The reason for this decision is that artistic research is, for me, about a reflective process: a reflective practice as a kind of voice-over that constantly murmurs the question: why you are doing what you are doing? I purposely decided not to deal with the text as an academic expectation of a research question that has to be answered throughout the text — requiring a clear hypothesis, then proof and verification. Instead, I attempted to describe and

reflect upon the elements that constitute my practice, and I tried to be truthful to it. I departed from the belief that the text and the Doctorate should never become an artificial system imposed on the artistic practice, but that it should rather be one more organic element in the reflective process.

Every artist is unique and in this case we have been reading about how an artist, in this case me, creates situations that open a space for the generation of ideas; how an artist, in this case me, chooses situations, systems and materials to make works exist.

The way I have attempted to recount the working method is by telling experiential stories and procedures. Working with existing collections, working with other artists and practitioners from all kind of fields and in constant dialogue with them, are the references and context of the practice.

Didactically: what did I learn in this process? I learned enormously: I gained writing as a new tool. I had never written before, but I do write now. I gained writing, not only as a product or outcome that can be used for communication, but also as a tool for thinking. I learnt that by writing my thoughts in words, they do become clearer and therefore communicable. To a certain extent, in the same way, drawing exists in my practice, as a way of thinking.

I also came to understand that where my work had its origins is more relevant than I had imagined. Which does not mean that I cannot live and work anywhere else, but it does mean that I have to be aware of the implications of working in another context where all the parameters are different and not always possible to be transferred from one place to the next.

I gained the understanding of the work as a political practice in the sense of creating parallel structures that allow me to reflect critically, yet constructively, on what makes sense, how and when. It is the issue of the power to define and describe the context and the concept that are at play in my practice. The alternative collaborative projects that I co-create with colleagues, *Uqbar* and *RN3*, and even the current Doctorate, are attempts to create umbrellas that will allow me to develop a practice on its own terms, not always having to respond to external requirements. That doesn't mean that I refuse to have contact with society or different levels of art-systems, but that I can create spaces for reflection within it.

I comprehended more clearly than ever that my practice is process based, and that is not because I like process, but because I think in and through an ongoing process. I cannot imagine a better scenario for it than a Doctorate to discuss the notion of a practice that serves the thinking process.

Running the risk to sound too self-involved, I also recounted what I gained during this process. For whom is this valuable beside myself? A self-reflective practice undoubtedly creates more productive work—if I know what I do then I know where to find it and how and I fight harder for it. I did not attempt to acquire knowledge in the positivist sense of knowledge but rather tried to open up new mental spaces. It is not knowledge that I would be able to recount, it is knowledge that will help me (in the best case scenario) to open new questions and new inquiries.

Who will it benefit: the next person who finds similar problems and contradictions in doing work and a doctorate thesis within an art academy structure. I am satisfied if upcoming generations could benefit from this text and if the issues raised here are discussed further within the small community of artistic research.

And here it ends, my humble contribution to the short story of artistic research, finishing with the hope that it might be true that the particular transpires into the universal.

9
Epilogue

As the reader has probably noticed by now, this text focused on the experience of making art, the process of it—a part of the story that nobody but I can tell. The pieces are there; they exist on their own. The paintings, the sculptures, and the drawings are shaped and materialized and can be seen and read by anyone on their own terms. I am not interested in manipulating or indicating the way they should be read. I made them, set up the parameters, and installed them. And the rest is for the viewer to reconstruct and project at his or her will.

One of the things that shook me the most when I came to Europe was to hear my colleagues at the Rijksakademie describing their work in terms of 'pieces' and 'projects,' as in, "I'm working on this project." I was shocked and confused, wondering: Are they talking about their work? Is that a project? I could never have conceived or imagined my work as a scheme, an organized unit of work. Art making was for me a much more organic practice, something very very close to my life and beliefs. Words such as 'project' or 'pieces' seemed to me rather detached from people's life experience. Now, to a certain extent, I have become used to it, and I can even say it now: "I have a project in Peru. Serious stuff."

However, some other terms I still have not become used to, and I probably will not. And that is simply because I do not want to get used to them. As an example, I cannot grow accustomed to the idea of describing my work as creating a 'statement,' of actually stating that my work is a certain idea. I refuse to believe that someone's work can be defined in fifteen sentences. It is much beyond my intentions to set the rules for the viewer to see that the work in a certain way. The pieces (hopefully) will carry the histories of their creation. I have done my bit, and it is the job of the viewer to decide what to do with the pieces and how relate to them. This doctorial trajectory has been a trajectory of the making. It is my part in the story: the backstage.

As stated many times in my text, the story had to start from somewhere; it presumably must finish somewhere as well. But I cannot finish the story, because there is no end; the end would the beginning of the next story.

No so long ago I realized that I surround myself with people who tell me stories, and that what I enjoy the most in the company of others is their capacity for telling stories. My colleague and friend, Mariana Castillo Deball, is a great storyteller, and my husband is too, as was my father; and I would kill to hear my brother tell me a story now. In my case, I hope I managed to tell a few stories throughout this text.

My father was a surgeon, operating on the heads and necks of people with very serious illnesses. I often remember the times, when I was a child, of him coming back after an eleven-hour surgery, sitting on the dining table and telling the stories the doctors were telling during the surgery—they were jokes, some even dirty ones. I always wondered how the doctors could do that: they had someone cut open on an operating table, and that person might die, and they were telling stories. Now, it's not that hard for me to understand. I have realized that the stories helped the doctors' release the tension and turn that energy into something else.

There is an amazing anecdote that the Spanish author, Enrique Vila-Matas, brings into a scene in his book *Bartleby and Company* (2001). The book talks about writers who stop writing, the writers of the *no,* as he calls them. He brings up the story of Juan Rulfo; a brilliant Mexican writer who wrote a beautiful book entitled *Pedro Paramo* in 1955, after which he did not write again for thirty years. People kept asking him why, having had such talent and such success, he did not write anymore. And he answered: "The thing is my uncle Celerino died, and he was the one who was telling me the stories."

The stories behind the creation of a piece are countless. When I try to recall or envision a line of progression in my practice, it seems that my work and its trajectory moves in the direction of finding the geographical unknown—and the unknown always seems to move a little bit further away. This provokes another family memory. A village somewhere in Argentina called Moises Ville, which was the first Jewish colony in Argentina, is located in the province of Santa Fe. The village is where my parents were born. The village is tiny, with something like 2,000 inhabitants, consisting of a few blocks of buildings and then kilometres of farming lands. The unknown territory for us (my brother and I) was "el Bosque" (the forest), an area of something like 400 square meters populated by eucalyptus trees. This was the dark zone in Moises Ville, for two children—for two city children like him and me. We used to go and explore "el Bosque" in a state of panic and excitement.

Where is "el Bosque" now? The unknown seems to have moved a little further, beyond "el Bosque." What is the next unknown for me? What is after andbeyond the Antarctic? The unfamiliar seems to be the drive which impels me to do works – and then the process is to try to get familiar with it, to get to 'know it'. what will be the next place, the next image, the next story?

There are thousands of factors impacting my work: people who tell me stories, people who ignite my imagination, and my own fantasies, to name a few. And they always contribute to the constantly moving 'unkown' that informs my work. When I was about twenty-three years old, I had a friend who was crazy enough to cross the continental ice sheets that divide Argentina and Chile with a group of friends. They walked across the ice for approximately twenty-one days. When I met him, that trip had passed, and I saw the amazing images he took with his camera. At the time that I met him he was trying to restore a ship, and I do not know where the ship was berthed, or how he had access to it, but I do remember that he it was repairing it in order to go to the Antarctic. I never heard from him again, but the idea of going to the Antarctic obviously stayed in my head. And after I went to and returned from Antarctica, I asked some friends who know a friend in common to try to find his email address for me, as I wanted to tell him that I had made it to Antarctica. My friends sweetly looked at me and told me that they could find it for me, but that he did not care about the Antarctic any longer.

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Colophon

The Molyneux Problem
Five backstage stories — and a map of why and how

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