

Katrin von Lehmann: Drawing with Rules

A Conversation with [Peter Tepe](#) | Section: [Interviews](#) | [Drawing Between Science and Art](#)

Abstract: In this interview, Katrin von Lehmann outlines the many scientific references in her graphic work.

Which science/sciences are relevant to your artistic practice?

Natural sciences, philosophy, and the history of science.

Natural sciences fascinate me because they attempt to explain the ostensibly chaotic phenomena of life with logical coherence. For this, they develop models that are discussed as if they were a further reality. Natural scientists enjoy experimentation. Scientific discoveries prove to be valid until a new experiment disproves them. This can lead to an entirely new approach.

Natural sciences almost have a monopoly on the question of how life is explained. I see this critically, it implying that only the measurable exists. In the terms of natural sciences, what cannot be measured doesnâ€ t exist. A lot of public and private funding flows into scientific research.

Iâ€ m interested in philosophical questions that elucidate how everything is connected, but I have never engaged more deeply in philosophy.

I got to know and to directly appreciate the history of science during my residency at Berlinâ€ s Max Planck Institute for Scientific History in 2012. I became captivated by the precision of the questions developed around specific topics. It is more important to ask clear-cut questions than to provide immediate answers. That reminds me of my artistic practice. What was new to me was that science historians are critical of their own methods. For instance, I have read with great interest Hans-JÃ¶rg Rheinbergerâ€ s texts on experimental systems.

Which are the theories/methods/results of these sciences that you refer to in your artistic practice?

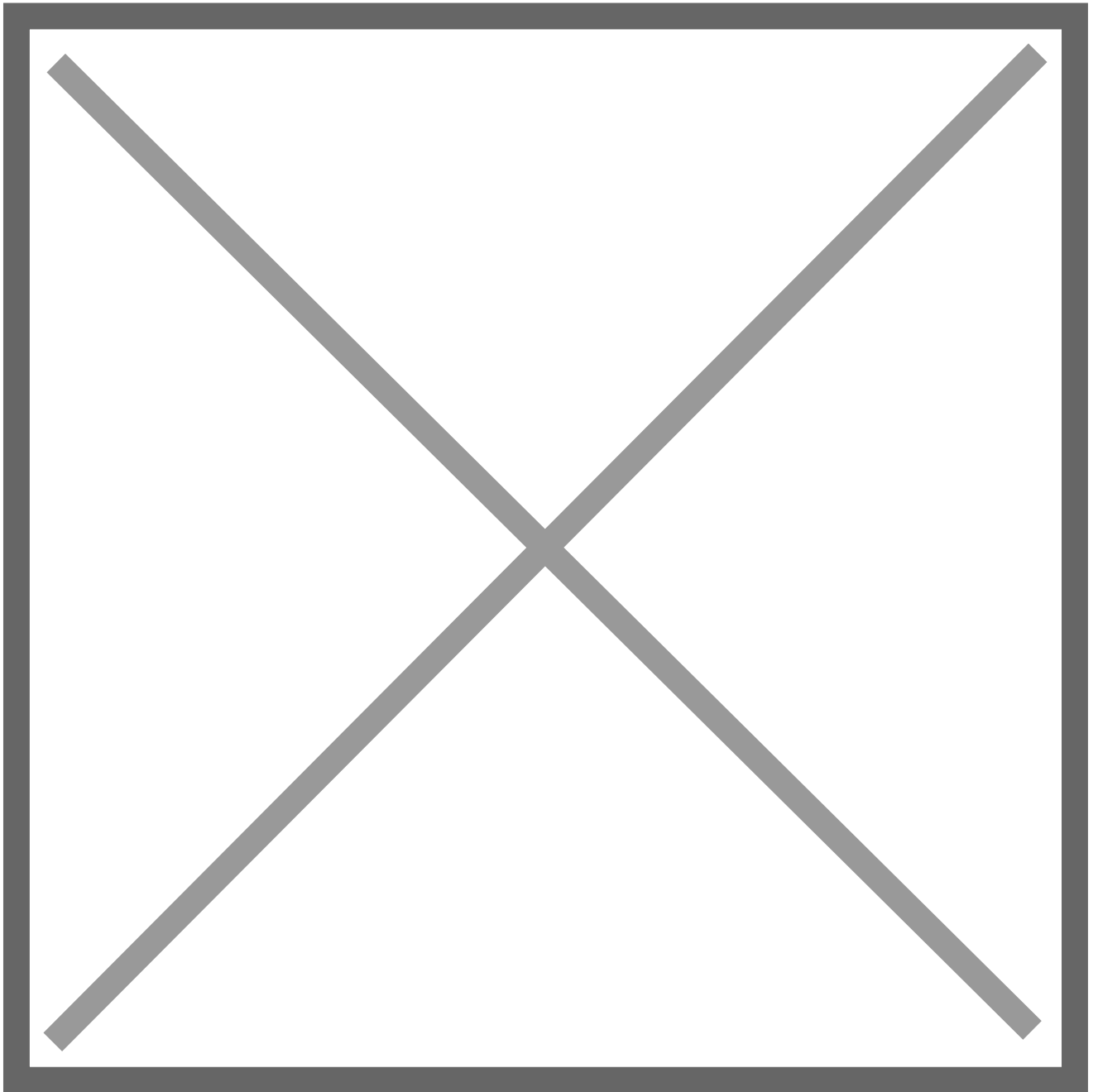
Iâ€ m interested in notations, data, archives and the methods through which processes are transcribed, recorded, visualised or transformed in order to facilitate fixed-parameter research. In natural sciences, the fixed factors are not in themselves the object of research, they are far more a translation of the research process.

The following four scientific topics and their work methods are samples of my artistic focus, of which I will give a more detailed description further down:

Cloud recording in meteorology. The scientific name for cloud observation is *naked eye observation*. Here, I was interested in the method of how varying cloud formations, i.e. transitions, are classified by the human eye and not by technical devices. This led to my *Naked eye observations* (see below).



Katrin von Lehmann: *Naked eye observation 1* (2010). Photo: Bernd Hiepe.



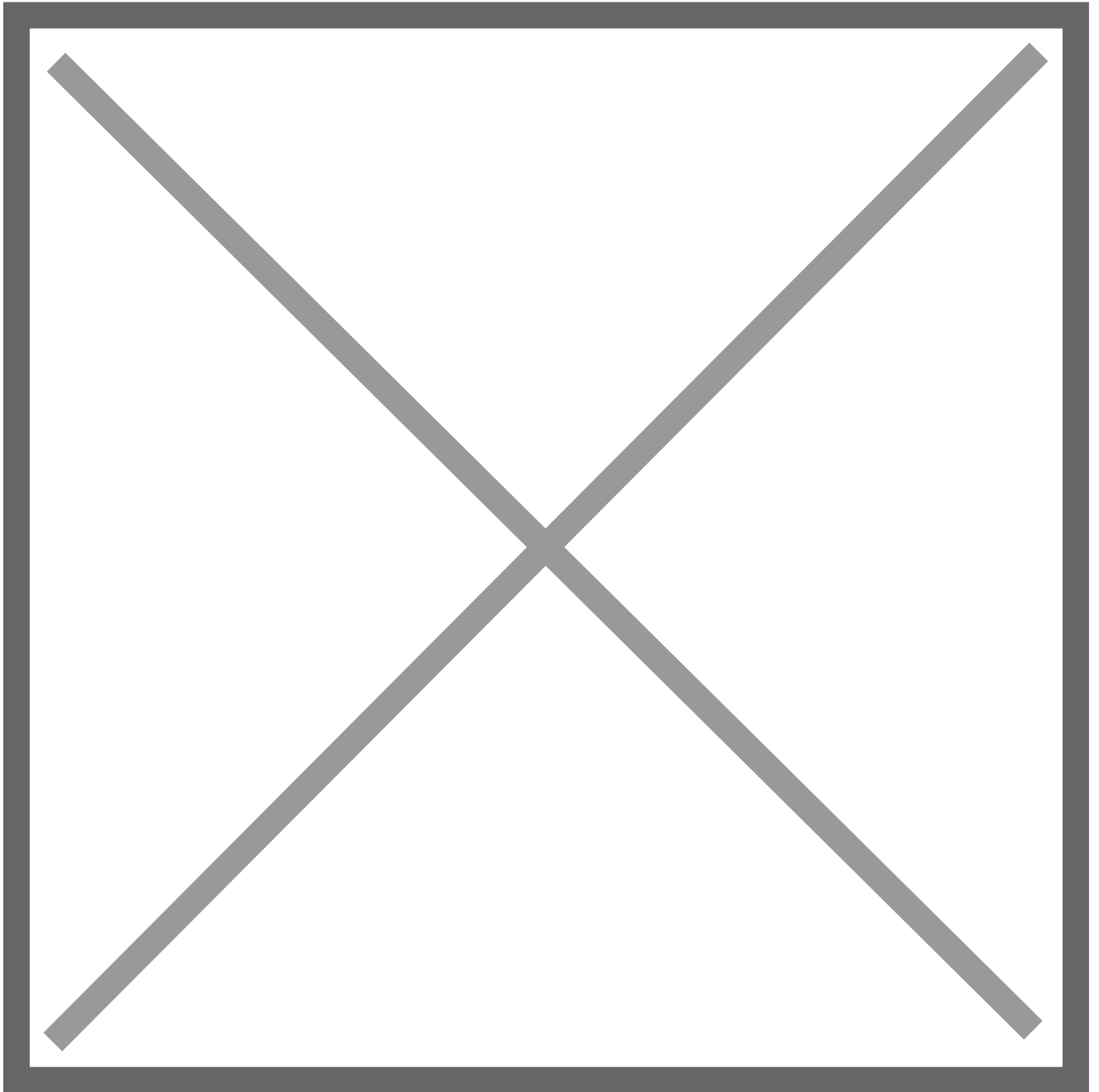
Katrin von Lehmann: Detail from *Naked eye observation 1* (2010). Photo: Bernd Hiepe.

The history of science: documents on the subject of human diversity/historical racial theories: The sectional studies on human beings disregard a comprehensive understanding. This led to multi-layered, perforated drawings (see below).



Katrin von Lehmann: Looking at Diversity 1-23 (2012/2013). Photo: Bernd Hiepe.

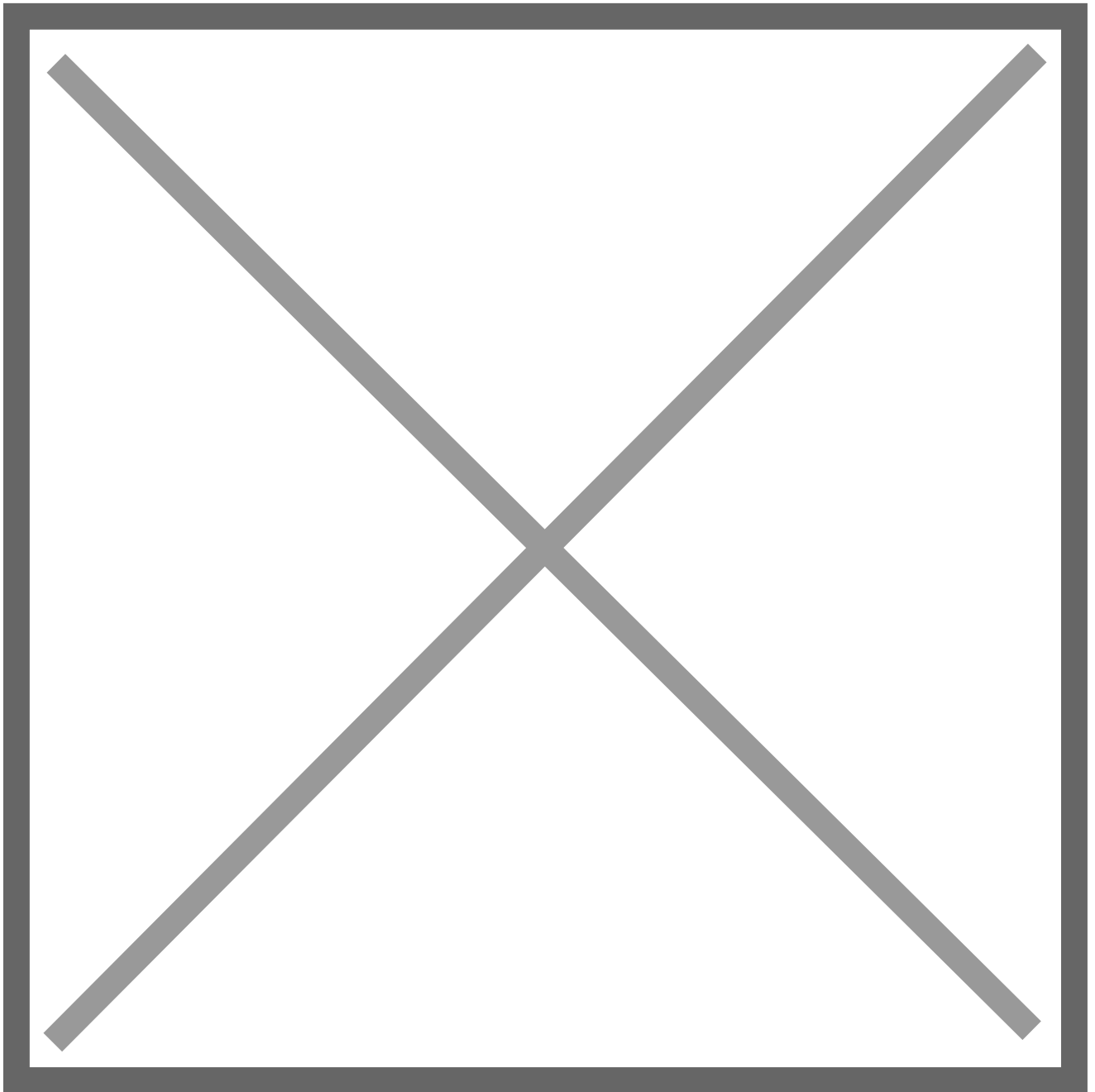
Blackboard drawings by natural scientists explaining the interaction between the atmosphere and the oceans. The blackboard sketches performed by the natural scientists whom I interviewed have more potential to communicate complex reasoning than a digital rendering. This resulted in my *Blackboard Drawings* (see below).



Katrin von Lehmann: *Blackboard Drawing 2* (2015). Photo: Bernd Hiepe.

Genetics: In 2003, the results of the international Human Genome Project caused an uproar in the scientific community because they radically overturned the prevailing state of research. On my side, I put my research on drawing to the test by embarking on an experiment: In 2015, I developed the *Proxy*

Drawing Technique (PZT, Proxy-Zeichen-Technik) and still work with it today. The project is titled *Empty Space of the Unknown/Nothing Is Right Now*.



Katrin von Lehmann: Work Materials for the Proxy Drawing Technique (2019). Photo: Bernd Hiepe.

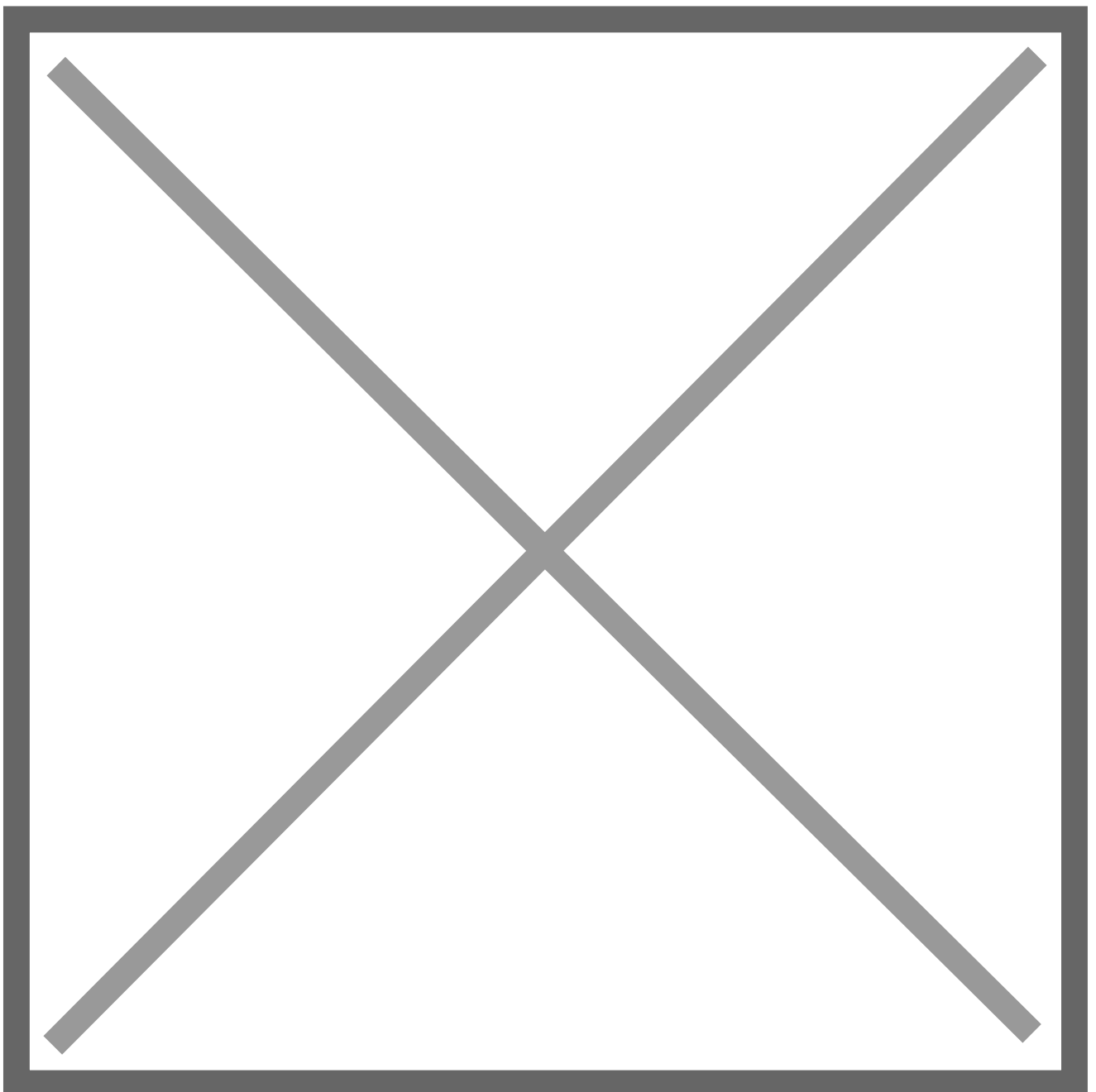
Were you interested in art at school?

In my childhood and youth, I drew and also played the piano a lot. Looking back, I can see that the piano had an influence on my artistic development: I often work with my left *and* right hand alike. In 2015, in my *Proxy Drawing Technique*, I established to draw with both my left and right hands. Iâ€™m attracted to notations and data that say something about a particular process but are not the process in itself. It is

on this base that I have developed my set of artistic rules.

Which are the most important insights gained during your studies that have proved to be relevant to your artistic development?

During my studies at the Akademie der Bildenden K nste in Munich, I had a job with a blind couple that lived largely unaided. This encounter had a lasting influence on my artistic development. I learned that we live in a world that is determined and regulated by sighted people and I often experienced that our perception, most particularly our vision, is selective. This aroused my awareness for things that exist but cannot be seen. Up to that time, I was intensively drawing what I saw. Then my interest shifted to the processes that lie beneath the visible. The visible surface became less and less my object of contemplation. For years, I worked with my eyes closed, drawing the itineraries that I had travelled from memory, for example. I put the sounds, movements and direction of my gaze onto paper rather than what I was seeing.



Katrin von Lehmann: *TransiÃ££o 22* (2006). Photo: Katrin von Lehmann.

Which were the decisive impulses for your further development? How did your interest in particular sciences grow? Which were your decisive steps towards science-related art?

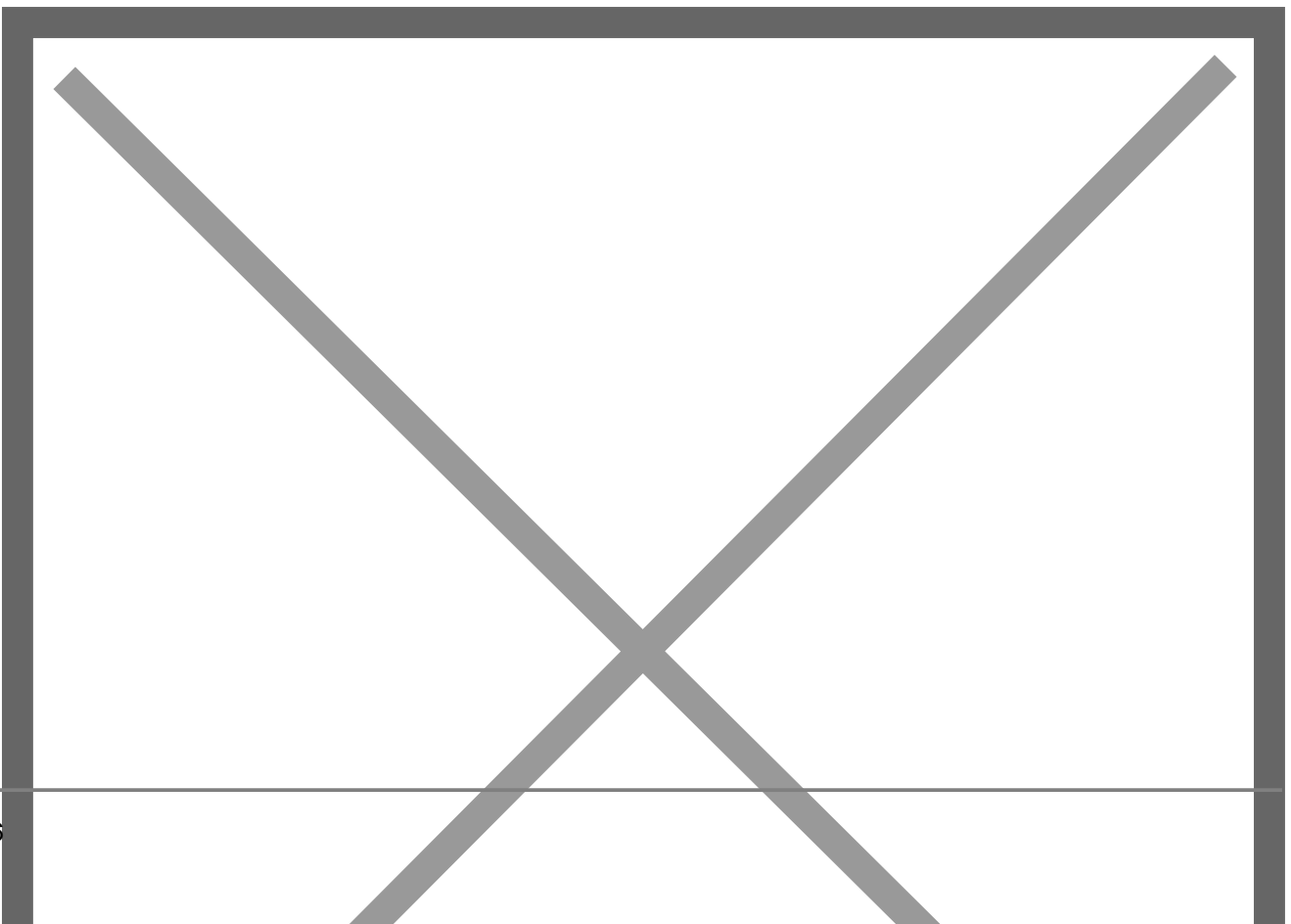
My residency at the Lindenberg Weather Museum near Frankfurt/Oder in 2009 triggered such an impulse. It brought a completely new territory into my field of interest, namely scientific research, the aim of which is to explain phenomena. I first endeavoured to understand the scientific approach in order to develop my own questions and apply them to my artistic practice. After the residency at the Weather Museum, I focused on scientific institutes throughout Europe, where I have been able to realise artistic projects, sometimes on invitation and sometimes through my own initiative.

Naked eye observation is the scientific term for cloud recording. This was my first artistic piece that was linked to natural sciences. I was fascinated by the Lindenberg Meteorological Observatory, which I had got to know in 2009 during my residency at the Lindenberg Weather Museum. At the observatory, I was struck by the combination of high tech and makeshift: rooms painted black for large high-performance computers and weather balloons with temporarily attached devices.

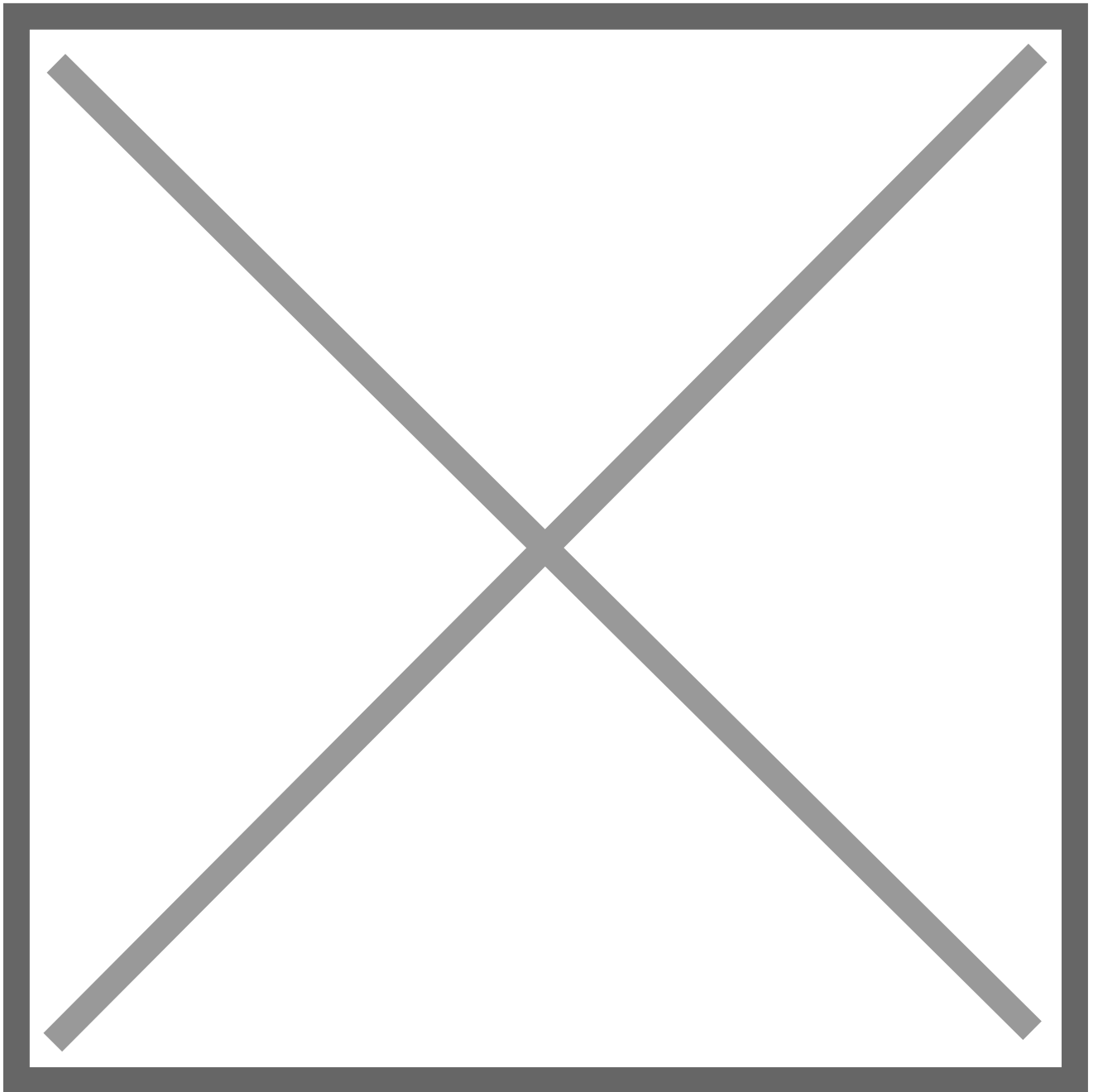
To my surprise, scientific cloud observation is done with human eyes since they are more efficient than technical devices in identifying patterns in the constantly changing shape of clouds.

The classification of clouds sparks my interest. Who was the inventor of the system of nomenclature in use today? Luke Howard, 1802 in London. I find it fascinating that this construed classification scheme still enables the categorisation of highly complex shapes of cloud in an understandable and communicable way.

My artistic procedure: I collected cloud recording data from the observatory over the course of one month. Based on the method of naked eye observation, I develop an artistic process that sheds light upon the process of transition from that which is observed to a system.



Katrin von Lehmann: Printout from the scientific meteorological cloud diary for a one-month period (2010). Photo: Katrin von Lehmann.



Katrin von Lehmann: Documentation of the work process with printouts from the scientific meteorological cloud diary (2010). Photo: Katrin von Lehmann.

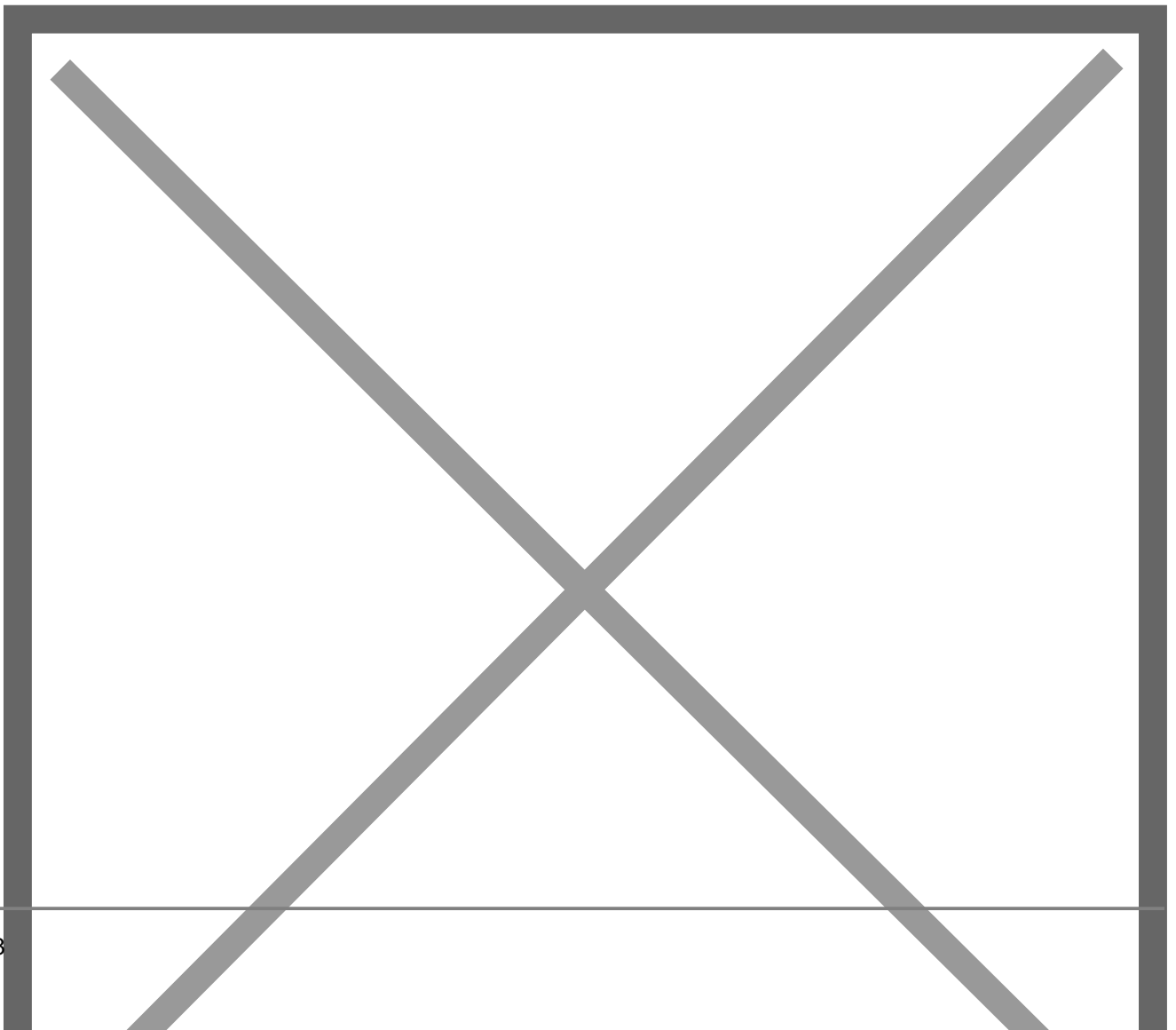


Katrin von Lehmann: Documentation of the work process in the studio (2010). Photo: Katrin von Lehmann.

I swap observations of the clouded sky with observations of the cloud diary in which Latin classification terms are listed. What do they tell me? I translate them into drawing without thinking about clouds; the drawings are loosely associated with the Latin terms. I fold the resulting works following the same principle and arrange them chronologically in layers.

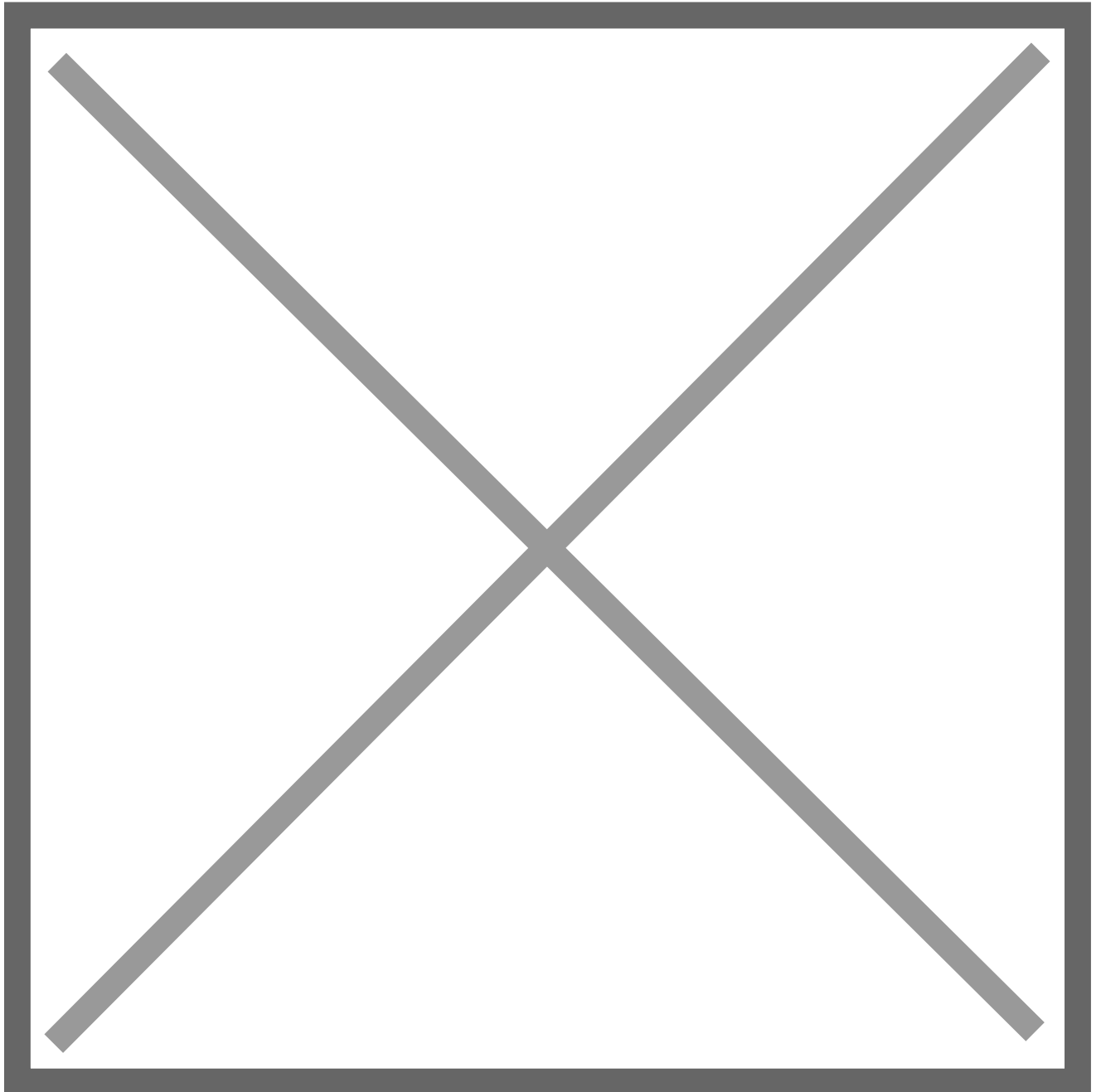
Looking at Diversity: In 2012/2013, I was artist in residence at the Max Planck Institute for Scientific History in Berlin with Veronika Lipphardtâ€™s research group *Histories of Knowledge about Human Variation*. My first encounters with science historians were enormously exciting because they ask really precise questions about specific topics. The emphasis is on a well-articulated question rather than on a rapid answer. This appealed to me since, in my own practice, I outline questions by addressing them artistically.

It is in dealing with the topic of *human diversity/historical racial theories*, that I developed the new technique of perforating my drawings. I had access to the digital archive of historical documents on *human diversity/historical racial theories* and took a closer look. I came across recurring details such as: skull measurements, illustrations of eye, ear or nose shapes, graphs of blood groups, and language maps. In my studio, I used all the pencils from a coloured pencil box to make an abstract drawing roughly related to human diversity and mounted a previously perforated sheet of paper over it. The underlying drawing could be seen through the holes.



Katrin von Lehmann: *Looking at Diversity 1-4* (2012/2013). Photo: Bernd Hiepe.

This technique proved to be very exciting: the more I perforate a sheet of paper with or without a drawing on it, the closer I get to the unpredictable moment in which the paper will bulge into the third dimension. The result is a fragile, three-dimensional paper artwork. I'm interested in what happens to the motif of the drawing.

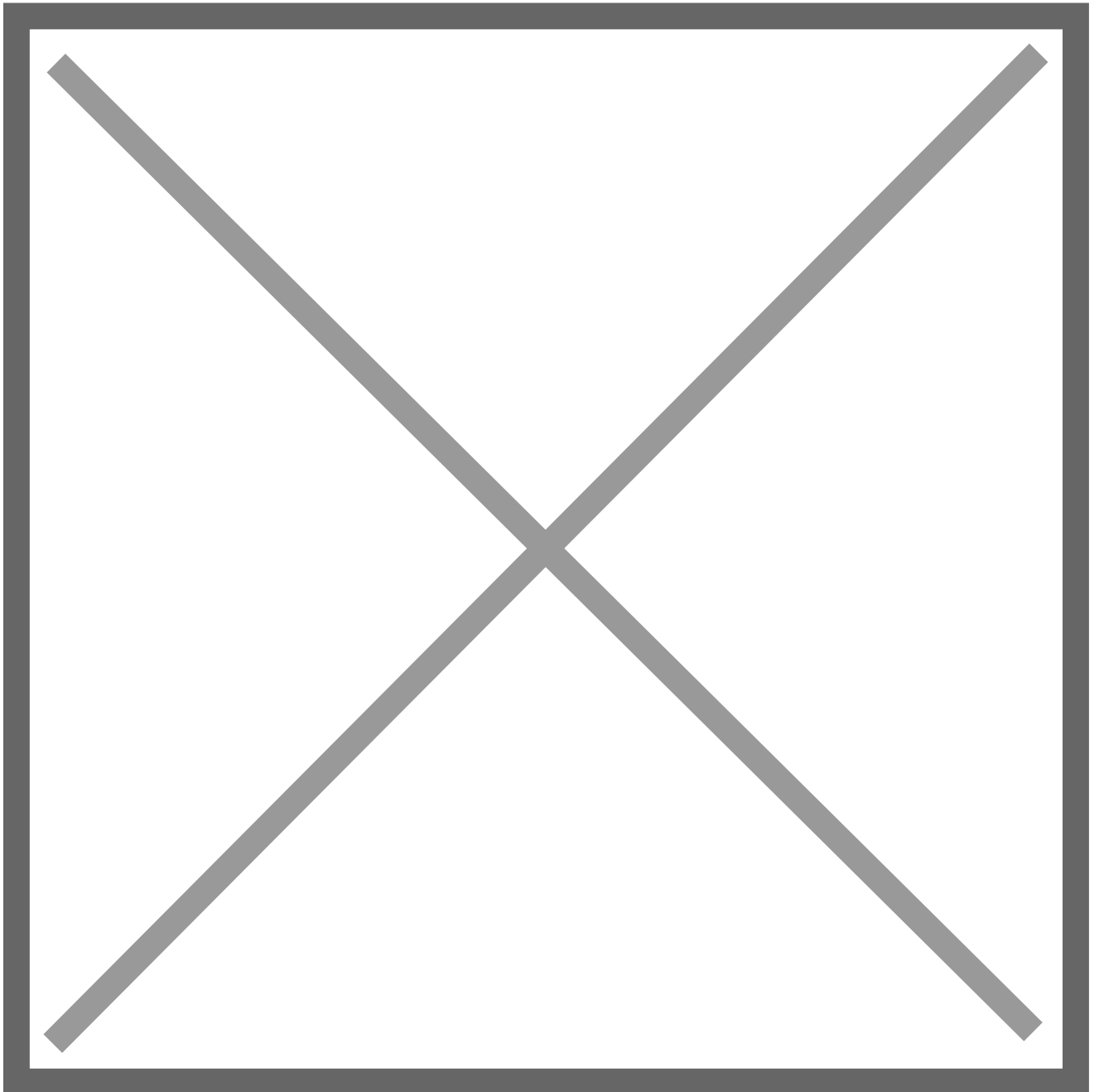


Katrin von Lehmann: *Looking at Diversity 5-9* (2015). Photo: Bernd Hiepe.

Blackboard Drawings: In 2015, I was artist in residence at the Geophysical Institute in Bergen/Norway, which also houses the Bjerknes Center for Climate Research. I went to see scientists in their respective

workplaces and we introduced ourselves to each otherâ€™s work. To help me understand their complex practice, the scientists instinctively went straight to the blackboard to draw sketches. I was surprised that they preferred the spontaneous hand-drawings to computer renderings. This shows the communicative potentials of spontaneous drawing in a conversation.

The *Blackboard Drawings* are developed from the scientistsâ€™ drawings: I wipe away areas of the blackboard sketches using a damp sponge and photograph the drawing in its various stages of drying. I perforate the resulting prints with a punching iron and mount them over one another.



Katrin von Lehmann: *Blackboard Drawing 4-01* (2015). Photo: Bernd Hiepe.

Series from the project *Empty Space of the Unknown/Nothing Is Right Now*

The project *Empty Space of the Unknown/Nothing Is Right Now* is an open-ended attempt to unlock the field of drawing by using a method of fixed procedures and sets of rules borrowed from natural sciences. Do new/different images emerge when I practise this approach over a longer period of time? I call it the *Proxy Drawing Technique* (PZT): I limit my drawing activity to simple, repetitive, rapid movements of both the right and left hands. There is no need to select colours since I apply all the coloured pencils of the box in their random order.

Hanne Loreck writes about this in *textura performativa 5* (p. 63):

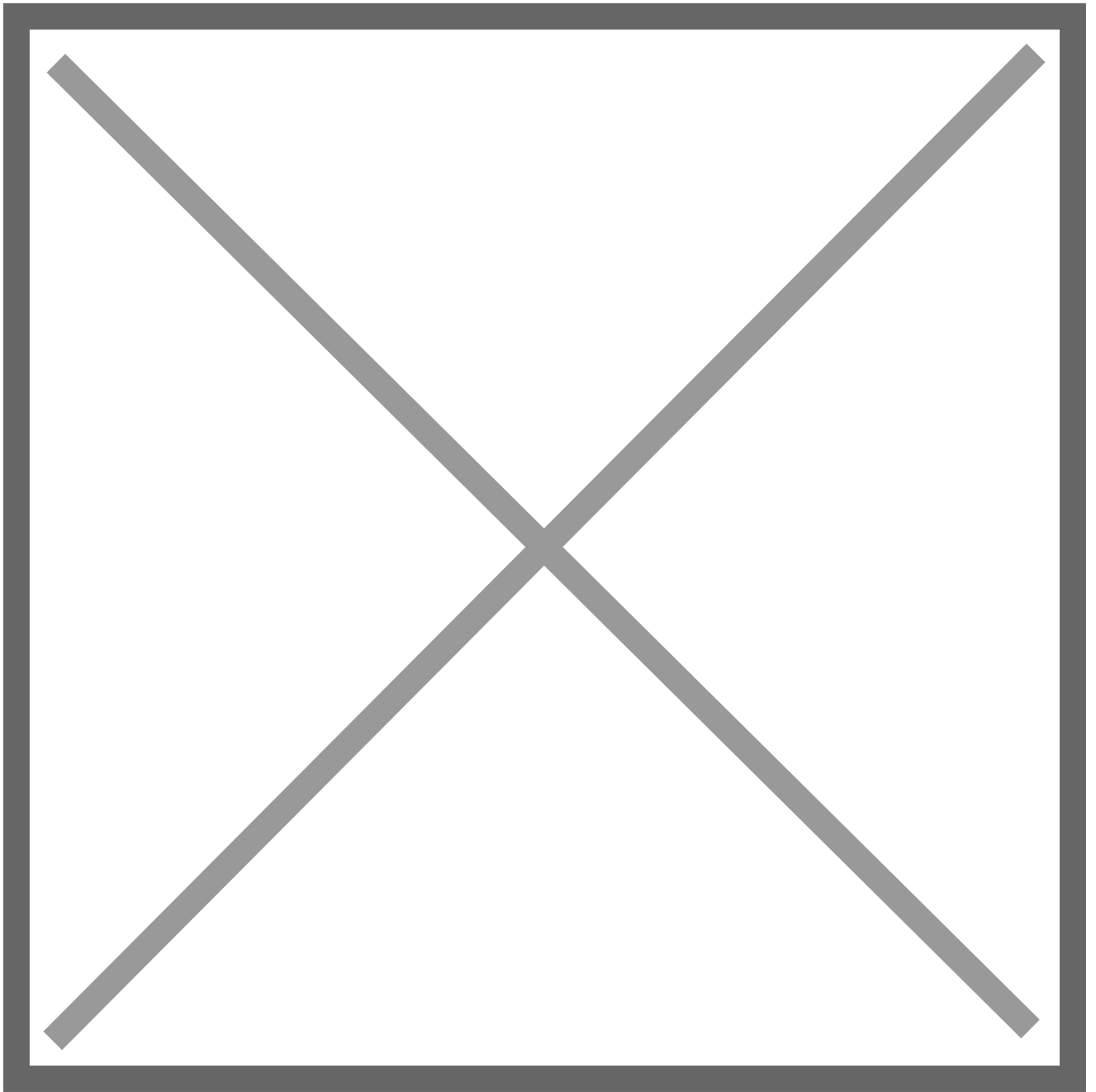
A (natural) scientific experiment can be observed in at least two ways. On the one side, the focus is on the control of the course of events on their way to a preconceived result, on the other side, the observers direct their attention towards the course of events itself. The confirmation of the hypothesis forms one pole, whilst the registering of variations from the â normal courseâ outlines the other. Such open-outcome irregularities stand out in contrast to any scientific postulation of the repeatability of an experiment and enable the new and unknown to be conceived: As a path â or method, since method/methodos signifies the â way towards somethingâ â they branch off from what is planned and lead into the unforeseen in a literal sense.

â Empty Space of the Unknown/Nothing Is Right Nowâ (since 2015) belongs to the second group, in which Katrin von Lehmann transfers the setting of a (natural) scientific experimental arrangement to her artistic practice. The artist thus appropriates the general frame of reference for the research of specific (scientifically relevant, current) phenomena in order to achieve two things: By means of the key data necessary for this type of investigation she establishes a new reality of her own. This â newâ reality manifests itself as a work of art, it â isâ an autonomous aesthetic object. At the same time, however, the reality of the aesthetic persists as a visual and methodological structure of reference, in which the transfer of the experimental system to an artistic production says something about scientific knowledge acquisition itself. Thematically, the aesthetic analogies address the complex field of molecular biology with its research into gene structure, function, and expression.

On my artistic method: The blueprint of life is said to be contained in the pairs of the bases adenine (A), thymine (T), cytosine (C) and guanine (G). In my project, genetics adopt a referential role as pointing to something to come, something that cannot yet be labelled. I chose the letters A, T, C and G as the initial motifs for the first *Proxy* drawings.

After about one and a half years of PZT, I began drawing round shapes. I associate round shapes with the minutest forms of life, molecules and cells, from which living creatures are born. With a few more years, I felt that my physical way of drawing in PZT needed to extend into physical space. Letters and round shapes were no longer satisfying. I strive to make the act of drawing in PZT become the actual motif, rather than it to follow a motif. I therefore mount my paper onto the construction joists of a temporary workspace and draw three-dimensionally in PZT. Or, I mount papers on a wall that has caught my eye

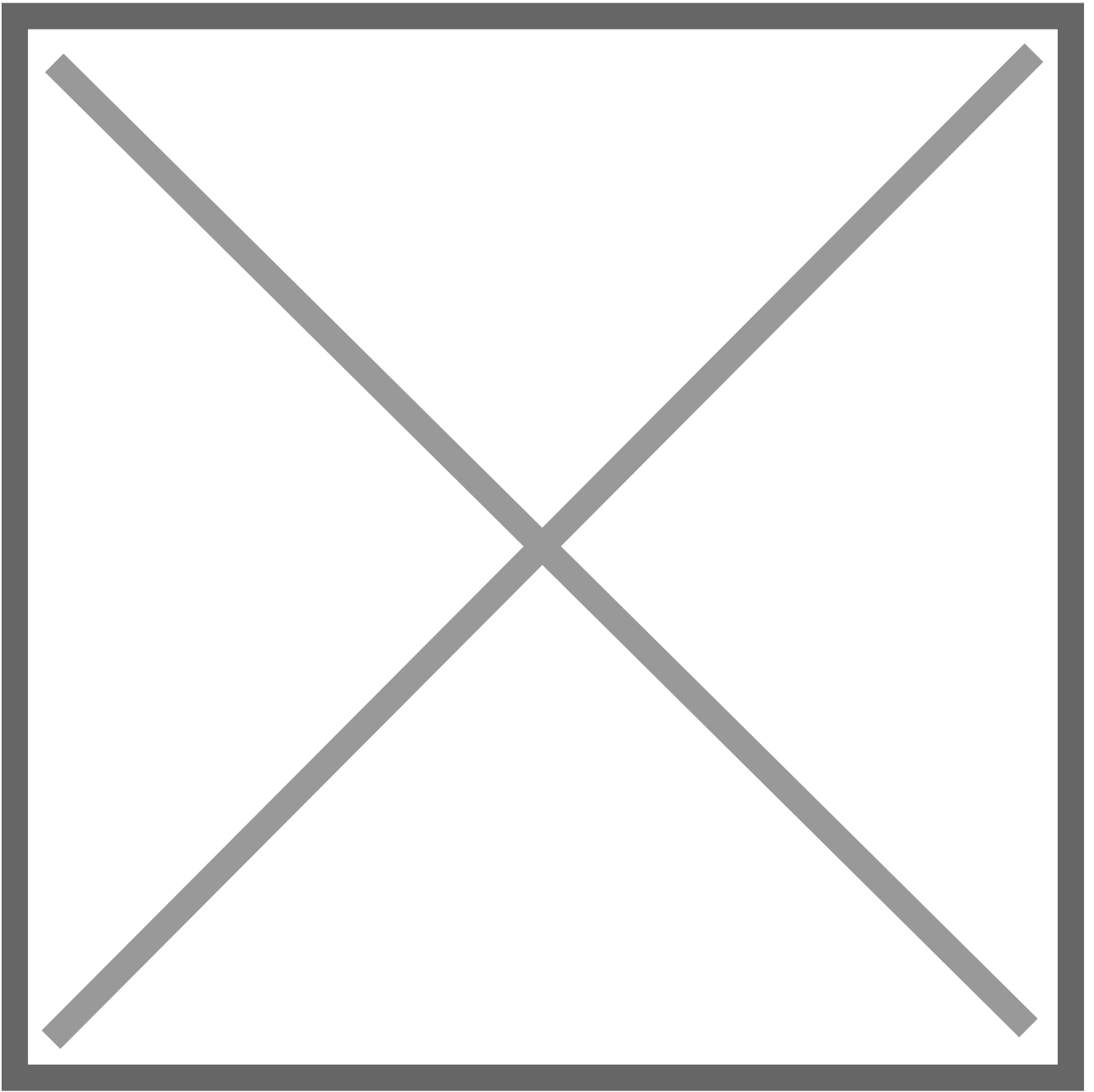
due to its smooth and rough surfaces. The new on-site physical situation challenges me to adapt PZT to the space and vary it accordingly. This experimentation gives me no end of pleasure.



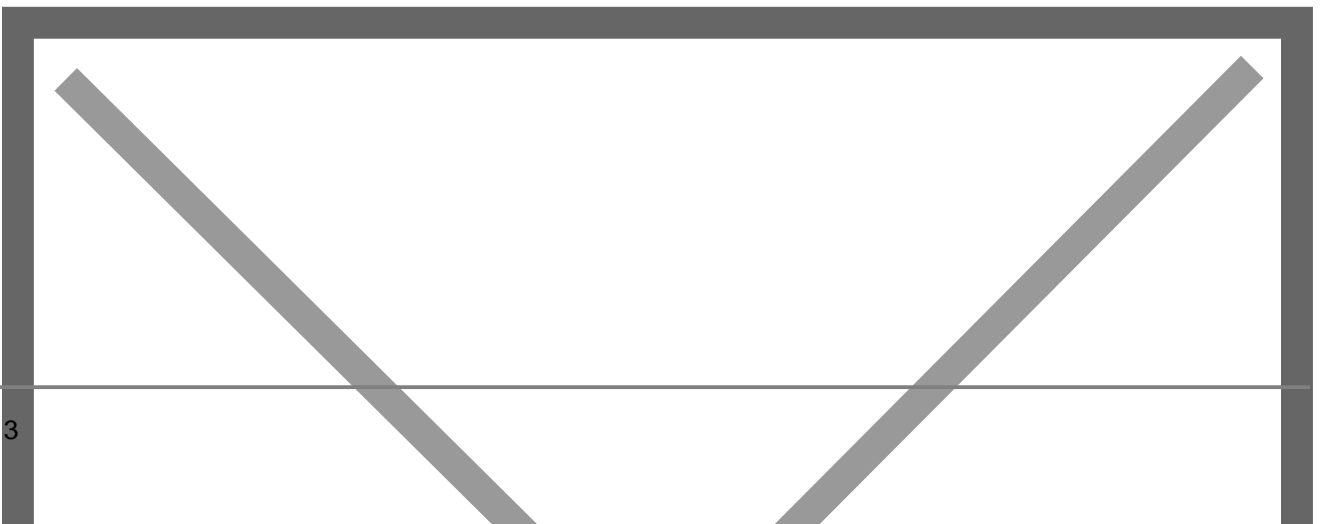
Katrin von Lehmann: *Proxy 1-01* (2015). Photo: Bernd Hiepe.



Katrin von Lehmann: *Proxy 8-3* (2017). Photo: Bernd Hiepe.



Katrin von Lehmann: *Proxy 18-2* (2019). Photo: Bernd Hiepe.



Katrin von Lehmann: Exhibition View: *feldern.zusammentun und auseinandersetzen* at ZAK der Zitadelle Spandau (2021), *Proxy 21* Series. Photo: Lutz Bertram.

It is while working from 2021 to 2024 on the topic of sustainability as artist in residence at the Young Academy for Sustainability Research (YAS), at the Freiburg Institute for Advanced Studies (FRIAS) that I developed my first wall drawings. Anja Gerdemann's quote from the publication *Is sustainability close or far, colorful or black and white?* (pp. 2â 6):

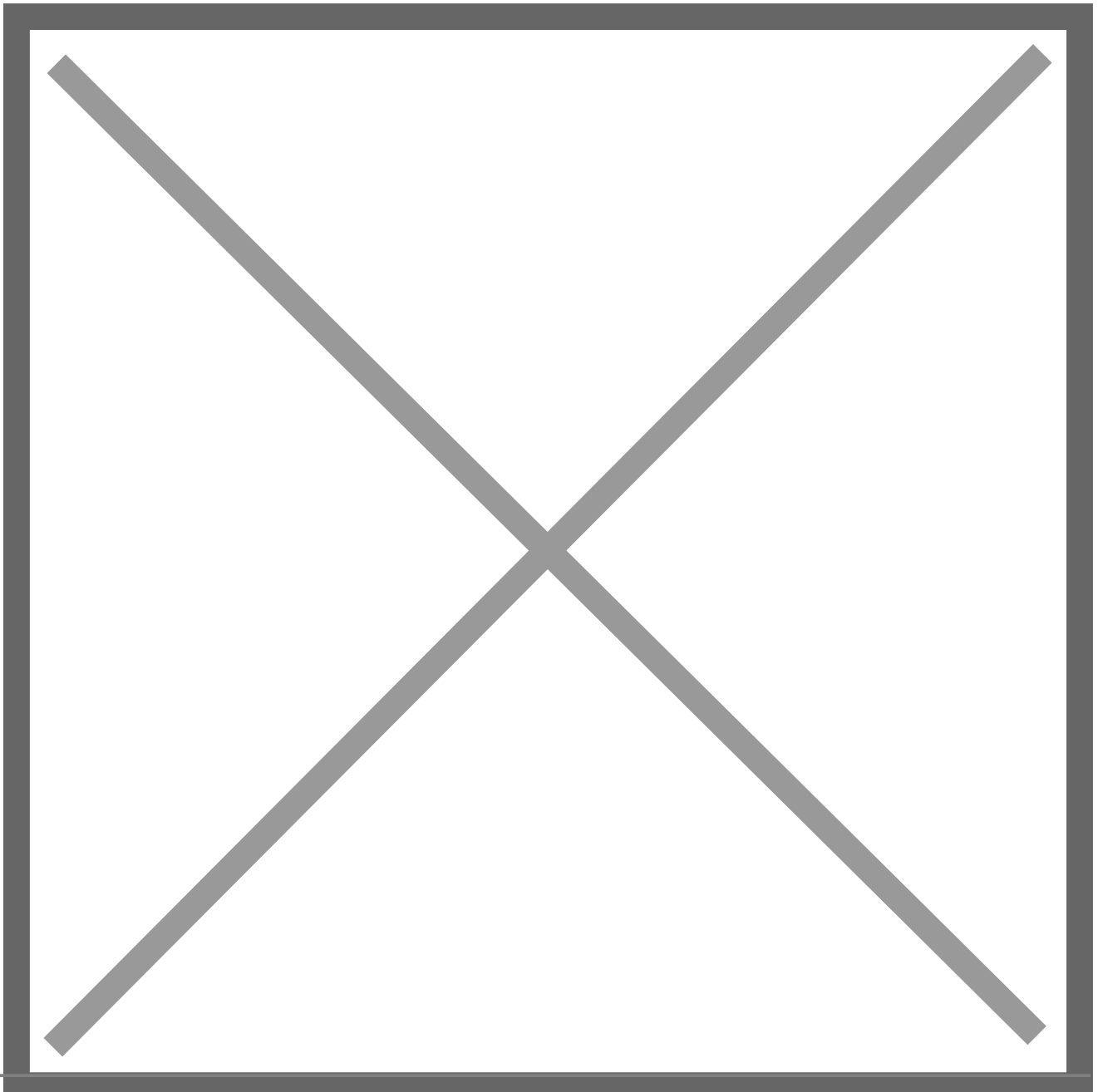
How does Katrin von Lehmann approach the topic of sustainability with her special technique? In *Proxy 38*, the artist integrated her direct physical environment. Alternating her left and right hands, she drew on the wall of her Freiburg studio â an unused room in the FRIAS Institute â thus disengaging her drawing from a paper support. Already within the limitations of a sheet of paper on a drawing table, the Proxy Drawing Technique is a body-related, performative act. When drawing DNA bases, the artist moved around the table in order to work from all directions. The procedure of applying colored pencil lines with alternating hands onto the dimensions of an eight-meter-long, static and frontal wall demands the entire body. For *Proxy 38*, von Lehmann worked with six boxes of pencils. Although the artist does not transfer any tangible motifs into a drawing, the experimental Proxy Drawing Technique nevertheless leads to surprisingly concrete forms. We perceive clusters of lines, circular fields and knots, entangled strokes, stimulating overlaps and intersections. Squareshaped empty spaces stand out: created by blank leftover pieces of paper which the artist fixed to the wall, drew over, and then removed.

Katrin von Lehmann has already exchanged ideas with scientists within the context of previous works. What is new about this project is that the drawing was created first and the artist only then approached various scientists from the YAS and FRIAS to conduct so-called â experimental conversationsâ based on the historiographical method of oral history.¹The artist met with her interviewees in front of her *Proxy 38* wall drawing. The interviews were filmed and can be viewed at T66 Kulturwerk in a compilation or by using QR codes.² Katrin von Lehmann primarily invited scholars of the Humanities and Social Sciences from YAS and FRIAS to take part in then interviews. Her carefully prepared questions led to a mutual reflection on sustainability with exciting insights from very diverse professional perspectives. Political scientist Dr. Benjamin SchÃ¼tze notes that â as with von Lehmann's individual lines and strokes â it takes many small, individual steps to create something sustainable on a large scale. According to Dr. Rita Sousa Silva, discovering something new is not necessarily plannable. This, she concludes for her research field of Urban and Forest Ecology. Von Lehmann and Silva agree that it is precisely the unexpected that leads them both to find the research process so exciting and vibrant. It is a touching moment for the participants when cultural anthropologist Dr. Sarah May describes her sustainability research with the terms â denseâ , â fibrousâ , â diffuseâ , â overlappingâ , or â intersectingâ , also keywords in Katrin von Lehmann's practice. For May, *Proxy 38* is a visualization of the process to sustainability. She likens herself to be â up at the top with this small compact punching ball because it would make everything so easy. There's such power behind it! Like a small meteorite that speeds off

with the precise energy that the world needs.â€

According to philosopher Dr. Christoph Durt, combined and concentrated reflection is fundamental for the facilitation of new assertions and ideas. The art historian and critic Isabelle Graw calls this: â€ something third that would otherwise not have taken place. And that is still what I expect of interviews, namely that thoughts should arise that are only possible through the coming together of twoâ€ people in conversation.â€ 3 If one relates Katrin von Lehmannâ€™s wall drawing to these statements, we will conclude that the creative process is not completed or limited to a finished drawing, but can be continued, taken to another level and given new impulses. In the eyes of the artist, the drawing is not complete before it has been viewed.

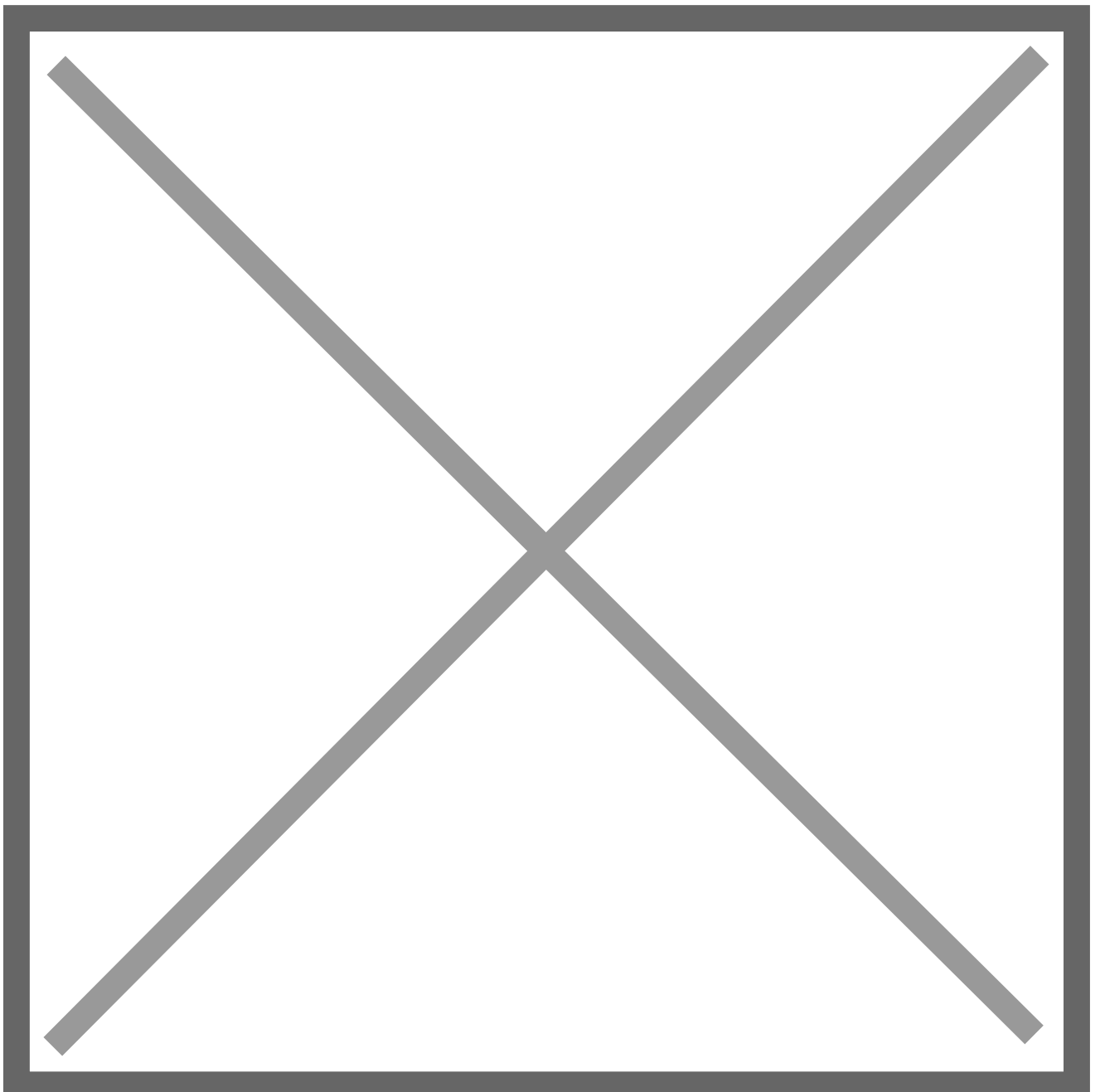
What remarkable dexterity and curiosity is at the origin of defining rules, removing or setting new limitations! Although it may sound contradictory, it is precisely here that the freedom of Katrin von Lehmannâ€™s drawing practice lies.



Katrin von Lehmann: *Going over the edge 1*, (2023). Photo: Bernd Hiepe.

Information on current artistic projects.

My current project is about the herbarium of the Austrian botanist Friedrich Welwitsch (1806â– 1872) and presently in its research phase. In March/April 2024, I was resident artist at the Museum of Natural History in Lisbon to do some research on Welwitsch. Between 1853 and 1860, he spent seven years in Angola with the financial support of the then Portuguese king to conduct research on tropical flora. Today, half of the plants he collected in Angola are deposited at the Lisbon Museum of Natural History, the other half in London.



Katrin von Lehmann: Workspace at the Museum of Natural History, Lisbon, MUHNAC (2024).
Photo: Eduardo Ribeiro.

As a summery: Which are the artistic goals of your dialogue with the sciences?

My interest in science: Scientists explain seemingly chaotic life phenomena with logically structured models. I am interested in investigating the relationship between order and disorder and in an aesthetic translation of this field of tension.

Do scientific data have a quality that reaches beyond scientific information? My focus is on the *journey*. The process that leads to a not foreseeable result.

I have to meet people. I need to get to know the scientists personally. I cannot develop artistic works just by reading interesting texts.

I want to find images for something that cannot be seen by the naked eye but is still connected to our lives. Thatâ s why lâ m particularly interested in abstract imagery.

Feature image above the text: Katrin von Lehmann: Exhibition View: *Of Genes and Human Beings. Who We Are, and Who We Might Become*, 2023, Deutsches Hygiene-Museum Dresden (2023). Photo: David Brandt.

1 Concerning the interview as a scientific method, von Lehmann refers to Dora Imhof and Sibylle Omlin (eds.): *Interviews. Oral History in Kunstwissenschaft und Kunst*, Munich 2010, and to Anke te Heesen: *RevolutionÃœre im Interview*. Thomas Kuhn, *Quantenphysik und Oral History*, Berlin 2022.

2 By showing the films in the exhibition, Proxy 38 will be preserved as a work of art. The space in FRIAS where the drawing was located is being renovated and the drawing will likely be destroyed in the process, with the eventuality of fragments being removed and preserved.

3 Gabriela Christen: *Zwischen Celebrity Cult und produktiver Kontroverse*. Isabelle Graw und Diederich Diederichsen Ã¼ber Interviews, in: Dora Imhof and Sibylle Omlin: *Interviews. Oral History in Kunstwissenschaft und Kunst*, Munich 2010, pp. 59-68, here: p. 64 (translation HA).

Tags

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