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Zurich, June 20, 2022

Kris Decker

# **Machines Under Pressure**

An Essay

Translated by Mark Kyburz

2022

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## I. On the Perch

The perch, borrowed from the arts school's theater department, has five steps. On it, monologues have been rehearsed and stage directions given. Well, perhaps. I rather intend to sit quietly on it and remain silent. On this observation post. On this ivory tower made of tin and plastic. On this improbable, even impossible object, erected in a place that at first glance has little to do with theater, yet a lot with paper and paint.

I climb up onto the seat, a notebook in one hand, and overlook, amazed, an assemblage of materials, people, apparatuses, stones, and dust. So this is a printer's workshop. I have only ever come across the art that is created here in museums. I know nothing about how the machine is used by lithographers to practice their craft. I barely know the names of the inks they mix and apply to the printing rollers. Nor do I know the names of the artists who have worked here over the past decades.

Except for one: Michael Günzburger, who squared up to the printing press with a bear skin a few years ago and cofounded the *Hands-on* project. The *Hands-on* team has installed itself to watch printer Thomi Wolfensberger, his assistant Adem Dërmaku, and artist Dominik Stauch at work. I, in turn, watch the *Hands-on* team

make the workshop the site of their research project. I am an observer, watching other observers as they go about their research. An observer of observers. And probably a curiosity for those gathered here whose interest is strictly focused on creating lithographs—like the artist and the two printers. Or on building a documentation machine—like the research team, intent on recording every single sleight of hand forming part of the artistic printing process and on rendering these manipulations visible for an audience beyond the workshop.

There is nothing machine-like about my perch. It is a seat and serves to keep matters at a distance. Its design is very simple compared to the complicated construction of the printing press at which the research team's cameras are pointed. Measuring approximately seven meters, the machine holds its own, occupying plenty of space. Transporting and assembling it must have been quite an event for the whole neighborhood, back when Thomi Wolfensberger's ancestors acquired the press, built in 1905, and began a lithographic tradition in Zurich that has made a name for itself and is now continued by Wolfensberger in the fourth generation. In between, offset printing and other printing processes emerged. Faster and cheaper than lithography, they contributed to the fact that today lithography is no longer a

commercial printing technique, but an artistic process for initiates, an artisanal niche whose survival is uncertain.

Both in Switzerland and in Europe, the small number of professionally run printing workshops in the field of artistic lithography is declining. Since the 1960s, nobody has been able to undergo training in hand lithography in Switzerland. And so the Wolfensberger lithographic print shop is among the last of its kind, of a profession that is aging at the rate of its printing presses, which can still be repaired but are no longer built. Thus, the practice visible here is growing increasingly rare.

When Dërmaku, following Wolfensberger's instruction, flicks the switch to start the flatbed printing machine (also known as a high-speed press), the lithographic apocalypse is far removed. Barely anything could be more present than a print run that produces art that takes shape between fat and water, in the medium of stone.

The event itself, the printing—which seems like a rattling, chattering spell to me the first time—does not go unwitnessed. The research team has positioned itself at a thoughtful distance around the machine: Christoph Schenker, an art theorist, a passionate advocate of artistic research, and head of the project, talks to the camera operator and takes a snapshot with his cell phone. Piet Esch, tasked with filming events from various angles,

adjusts one of his cameras. Mara Züst, an artist and art historian, who initiated the project with Günzburger and has been researching printing techniques for several years, takes some notes; she will log the numerous hand movements and artistic maneuvers occurring in the course of creating a lithograph. Almira Medaric, who completed her art training a few years ago and began studying information science, is meanwhile preparing to inventory everything in the workshop, from the stones to the hand grinder to the small bottle of saltpetre.

A recording, signifying, registering form of research is taking place here. Its outcomes will be, on the one hand, a “user interface” and, on the other, a *Leitfaden* (“guideline”) outlining the documentation procedure to be developed on-site (and in the offices of the arts school). Although lithography, as Schenker emphasizes, is the exemplary case on which this procedure is being tested, it is meant to function beyond the context of the workshop and to be able to serve as a model for documenting other artistic-technical practices.

Capturing the making of lithographic prints is a major project (funded substantially by the Swiss National Science Foundation) spanning over three years. The protagonists of the lithography observation project come from different corners of the arts: sharing the same interest, practical, curatorial, art-historical,

filmmaking, and art-theoretical expertise has gathered to explore lithography as an intricate form of art making. I, in turn, am investigating the background of this interest, seeking to understand which epistemological tools come into play when a local practice, indeed an entire artisanal culture, is transformed into documentary material. As events unfold, I will remain seated, on my perch, accepted as part of the collective. Biding their time, whole days in fact, at the printing press, those at work on the floor allow me to ask strange questions, which so far I have addressed to the sciences and now, surrounded by spatulas and discarded sheets of papers, am carrying into the field of artistic research, whose epistemic object comes into existence in a workshop, in Zurich, on Eglistrasse 8.



## *Art in Action*

“Think of all the activities that must be carried out for any work of art to appear as it finally does,” Howard Becker demands during his sociological explorations of the arts.<sup>1</sup> He adds: “Whatever the artist, defined as the person who performs the core activity without which the work would not be art, does not do must be done by someone else. The artist thus works in the center of a network of cooperating people, all of whose work is essential to the final outcome.”<sup>2</sup>

The lithographic workshop is an exemplary place for this collectivist understanding of art, which functions based on a division of labor. At Eglistrasse, some competencies are clearly distributed: the choice of subjects, for example, is not up to the two printers, while the artist is not left to operate the machine. The printers’ hands are just as involved in making a lithograph as the ideas and designs with which Dominik Stauch came to the workshop a few days ago. Artistic work, therefore, is not always solitary, confined to a studio—although that is one of its modes, which in the case of lithographic art at some point becomes

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<sup>1</sup> Howard Becker, *Art Worlds* (Berkeley: University of California Press, 2008 [1982]), p. 2.

<sup>2</sup> *Ibid.*, p. 24f. How the work of all these actors, who are generally not considered artists, is inscribed in an emerging artistic work, and how their role might be distinguished from the artist’s “core activity” in a lithographic workshop is yet another question.

exposed to the peculiarities of a printer's workshop. Anyone who steps into this place assuming that a lithographic work originates first and foremost in the artist's ingenuity discovers, after a day's printing, how this assumption is flattened by the high-speed press.

Nor is what happens at Eglistrasse simply the necessary conclusion to an artistic process whose realization was evident from the outset. It is only in the interplay between artist and printer, which involves not only routines but also negotiations, that the lithograph takes shape. It materializes in the back and forth between technical and artistic hand movements and decisions whose character is situational: every new work raises its own problems, artisanal questions, and aesthetic concerns.

This diversity of lithographic work is one of the dimensions that the *Hands-on* project brings to light. Over the course of two years, three artists are invited to the workshop to produce art during a residency lasting several weeks. Art making, observed and captured in sound and image, which is probably rather seldom in this constellation—that is, with a group of spectators present—gives the *Hands-on* project a theatrical character.

Dominik Stauch is the first artist at whose work the project's digital cameras and analog attention will be directed. Born in London in 1962, he is well versed in printmaking. Widely known

far beyond Switzerland, Stauch, whose collaboration with Thomi Wolfensberger dates back to the 1990s, makes him particularly interesting for the research project on account of his experience with the processes and equipment at Eglistrasse. At the same time, his work extends beyond lithography, branching out to different printing techniques and other art forms. According to the *Lexikon zur Kunst der Schweiz*, his fields of activity include “painting, sculpture, video art, printmaking, collage, public art, installations, books.”<sup>3</sup>

Mara Züst tells me that Stauch was invited to participate in the project also because of his approach to color, and his experimenting with forms and patterns. In her master’s thesis in art history, she characterizes Stauch’s early printing experiments as “restless sheets exploring both the possibilities of color and texture,” which Wolfensberger calls “the Roth sheets” with reference to Swiss artist Dieter Roth.<sup>4</sup> Referring to Stauch’s more recent works, Züst describes his widely ramified “study of the use of color” and his “exploration of the serial nature of printmaking,”

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<sup>3</sup> Elisabeth Gerber, “Stauch, Dominik,” in *SIKART Lexikon zur Kunst der Schweiz* (2021), [www.sikart.ch/KuenstlerInnen.aspx?id=4006714&lng=de](http://www.sikart.ch/KuenstlerInnen.aspx?id=4006714&lng=de) (last accessed August 9, 2021). Some of his works are gathered in Dominik Stauch, *Dig a pony, Oeuvre d’artiste*, edited by the Canton of Bern (St.Gallen and Berlin: Vexer, 2019).

<sup>4</sup> Mara Züst, “Eine zweite ‘Print Renaissance’? Verfahren der Steindruckerei Thomi Wolfensberger,” Master’s Thesis, University of Zurich, 2013, p. 56.

as exemplified by *the big showdown* (2011) and *Going de Stijl* (2006). Commenting on the *Going de Stijl* series, she writes:

Here, the artist, according to Wolfensberger, has conducted “controlled color research” on six sheets by reducing them to three colors. (...) The subject on which Stauch conducts this research is a trapezoid running from the left edge of the picture to its center, which is divided vertically in the different versions. Within this form, Stauch has tried out further variants, in each case through combining three colors. The result is amazing (...). Overprinting a dirty grass green with light blue results in petrol blue, while overprinting a dirty grass green with fluorescent orange produces a Bordeaux red. Combining light blue, petrol blue, dirty grass green, Bordeaux red, and fluorescent orange, the sheet appears coherent, despite the combination of colors seeming random at first glance. Moreover, Stauch has used individual printing blocks several times, in different combinations and for different colors, divided among the six sheets of the series. Determining which form was used in which position for exactly which color thus becomes a mathematical game. Or else a sophisticated commentary on the theme of the series and color in the medium of print.<sup>5</sup>

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<sup>5</sup> Ibid., p. 55f.

A play of colors is also evident on the meticulously prepared DIN A4 sheets that Stauch has brought to the workshop. Each sheet contains about a dozen printing templates. Including details on printing formats (“Format C – 120 x 160 cm + 5 mm bleed”), they show various subjects—a hut, a cowboy, a hardware store poster, a railway station concourse—all of which are cut into pieces by circles, so to speak. Circling (sometimes also triangulating) is one of Stauch’s traditional techniques, which he develops in other works and now performs again under the eyes of the research team.<sup>6</sup> From this performance emerges a cycle of prints, which the artist will later title *Orbit*.

The first ideas for this cycle were developed on a computer, which, as Stauch explains in his studio in Thun, is a highly important working tool for him, and whose inherent logic he engages with. Sat at a computer in his studio, Stauch creates numerous, finely attuned drafts that he subsequently negotiates in the workshop. This does not simply involve “implementing” an existing, computer-generated concept. In the workshop, something happens to the concept. As Andrew Pickering, a science

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<sup>6</sup> Catrina Sonderegger speaks of “cut-outs” and remarks: “Dominik Stauch’s entire oeuvre is about the utopia of order. His works deal with the impossibility of entering unknown territory without first disturbing or rather destroying it.” See Catrina Sonderegger, “Nach allem und nichts graben,” in Dominik Stauch, *Dig a pony* (St.Gallen and Berlin: Vexer, 2019), pp. 141–142, esp. p. 141.

studies scholar, puts it: The prefigured ideas brought into the workshop enter into a “dance of agency” between artist, printer, and local conditions: “trying this, seeing what happens, trying something else.”<sup>7</sup> Computer-based art in the studio becomes lithographic-based art in the workshop. What remains, however, is the dependence on the machine: first IT, hardware, software, then the high-speed press—it, too, is hardware, but of a different order.

My sojourn on the perch coincides with Stauch’s entry into the workshop and will end when he completes his work during this first artist residency. Gained on-site, my insights into how lithographic prints are made and how the *Hands-on* team transforms this process of art-making into a research object will thus always remain related to the specific traits of Stauch’s work. Permitted to watch him work from my elevated position day after day—does he find this strange? or are these merely more observations among many others?—, I am struck by his thoughtfulness while making art with Wolfensberger. It is hard to imagine a better attuned team. Before embarking on this field research, I had imagined seeing artists jumping around hectically, who would flee the workshop at the slightest conflict with the printer over the implementation of their ideas; who would stage a

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<sup>7</sup> Andrew Pickering, *The Mangle of Practice: Time, Agency, and Science* (Chicago: The University of Chicago Press, 1995), pp. 78–81. Pickering, of course, is referring to the laboratory context, not to the workshop.

role play corresponding to certain notions of the artist; who would always arrive late in the morning and leave others to clean up in the evening. None of this happened. There is something unwavering about Stauch, which, however, does not prevent him from listening to Wolfensberger's remarks nor from responding to his subtle interventions. And vice versa. When the work is done, everyone helps tidy up before continuing early the next day.

This probably also has to do with the workshop having its own rules. Failing a collaborative spirit, the process of creating a lithographic print, whose emergence involves many hands, cannot succeed, Michael Günzburger observes during a break outside on the delivery ramp. Besides the considerable artisanal dimension, Wolfensberger's social skills also contribute to the reputation of his lithography workshop. By social, I mean, the ritual elements of a printing day. Besides cleaning up, collectively, these rituals include preparing lunch in a kitchen adjacent to the workshop or, according to Wolfensberger's motto, "In the mornings, the artists are lubricated with coffee, the machine with oil." By social, I also mean the modes of collaboration in the workshop, which has so many subtle social elements that enumerating them is barely possible.

A stone is brought into one of the workshop spaces for grinding, materials are delivered, a visitor hurrying past is greeted, prints are carefully stowed away in a metal rack, sponges and rags are readied, and the machine is cleaned. The workshop is neither centered clearly on the two printers nor on the artist; rather, it is a rotating affair in which, besides the human actors, all sorts of Latourian actants play a role.

So what happens “between infrastructure and aspiration”?<sup>8</sup> The firm, strong, and delicate hand movements, the movements in the workshop space that need to be coordinated: are Stauch, Wolfensberger, and Dërmaku performing a dance with materials and machinery, a lithographic choreography? How can their colliding activities be grasped, understood, and described? Which bodily techniques remain hidden from the inquiring audience’s gaze (and for this very reason constitute the magic of lithography)?

Every single printing scene falls into numerous small steps and movements—and into just as many conversations in which Wolfensberger and Stauch coordinate their approach, which repeatedly entails negotiating ideas and the pragmatics of matters. They bend over the machine, apply materials and wipe surfaces,

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<sup>8</sup> Mara Züst, *Kolkata: City of Print*, translated by Linda Cassens Stoian (Leipzig: Spector Books, 2019), p. 93.



move from the table where they mix the colors to the prints spread out on the floor, deliberate over “Cadillac blue” (Stauch), return to working on their own, modify the composition of the paint, discuss the results of the next print run, which are provisionally hung on a wall, and make pragmatic, aesthetic, conceptual, artisanal, and technical decisions.

In the course of a day, some matters are routine, yet others may not work out. They may become stuck, have to be repeated, reconsidered, and done from scratch. Occasionally, the machine plays up, a tool fails to do what it is supposed to, or a material decides to have its own way. Several sheets of paper have passed through the machine. What emerges is by no means accidental, as much as the outcome can neither be completely planned nor entirely predicted. The elements shaping this process are manifoldly interwoven, including the preparations at Stauch’s studio, the spatulas and brushes, the machine rollers, the stone with its special material properties, the etching agent, the artist’s ideas, the printer’s experiences, the history of their collaboration, the art history of lithography, the workshop rituals at Eglistrasse. And last but not least: the ink pots that Wolfensberger opens and from which he takes substances whose properties he has nursed for decades. These substances are capable of springing surprises as soon as they come into contact with the paper inside the machine.

Notwithstanding routine and experience: in essence, says Wolfensberger, no two print runs are the same.

The eventful nature of lithographic work is among those aspects that was already considered when the epistemological interests of the *Hands-on* project were formulated, says Christoph Schenker, who has overseen and promoted the project ever since Züst and Günzburger's first outline. The making of fine art lithographs, according to one of the project's hypotheses, involves far more than manuals and other book-length accounts of lithography are able to capture. Some of these manuals have been updated and modified repeatedly over several decades. More recent manuals include *Tamarind Techniques for Fine Art Lithography*, published in the United States.<sup>9</sup> Thus, a wide range of lithographic processes and problems has probably already been explained in detail in the literature.<sup>10</sup>

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<sup>9</sup> See Marjorie Devon, Bill Lagattuta, and Rodney Hamon, *Tamarind Techniques for Fine Art Lithography* (New York: Harry N. Abrams, 2008). This volume, produced by the Tamarind Institute of the College of Fine Arts at the University of New Mexico, has a predecessor that dates back to 1971: Garo Antreasian and Clinton Adams, *The Tamarind Book of Lithography: Art & Techniques* (New York: Harry N. Abrams, 1971). The fact that the book was also published in paperback and is readily available in secondhand bookstores attests to its widespread distribution.

<sup>10</sup> The many lithography manuals published (in German) since the 1970s include, for instance, Karin Althaus, *Druckgrafik. Handbuch der künstlerischen Drucktechniken* (Zurich: Scheidegger & Spiess, 2008); Felix Brunner, *Handbuch der Druckgraphik* (Teufen: Arthur Niggli, 1975); Walter Dohmen, *Die Lithographie. Geschichte, Kunst, Technik* (Cologne: DuMont, 1982); Siegfried

So why the *Hands-on* project? First, because accounts such as *Tamarind Techniques* largely describe the standardized processes typically occurring in a lithographic workshop. In contrast, the considerable number of unforeseen events and decisions taking place there, each depending on the respective artistic work and resulting from the interaction between printer and artist, without always following a known artisanal procedure, cannot be represented in their entirety in a manual. Second, as a craft, lithography is also shaped by specific local conditions, by the history of a workshop, and by different protagonists, so that lithography per se does *not* exist. Third, when translating the bustle of the workshop and the choreography of the hand movements into the medium of print, some of the situatedness and improvisation is lost—we need only think of the spontaneous conversations between artist and printer. This explains why the medium of film plays a decisive role in the *Hands-on* project. The

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Fuchs, *Die Lithographie* (Recklinghausen: Aurel Bongers, 1979); Peter Kunz, *Der Photochromdruck vom Lithostein* (Küsnacht: Edition Gilde Gutenberg, 2006); Ernst Rebel, *Druckgrafik. Geschichte und Fachbegriffe* (Stuttgart: Reclam, 2009). The seminal work is Alois Senefelder's *Vollständiges Lehrbuch der Steindruckerey enthaltend eine richtige und deutliche Anweisung zu den verschiedenen Manipulations-Arten derselben in allen ihren Zweigen und Manieren belegt mit den nöthigen Musterblättern nebst einer vorangehenden ausführlichen Geschichte dieser Kunst von ihrem Entstehen bis auf gegenwärtige Zeit* (Munich and Vienna: Karl Thienemann and Karl Gerold, 1818).

shots are framed by numerous lists (inventories of tools, materials, artifacts), as well as by photographs and written notes.

The research team has decided that all these materials will serve a documentary purpose. Intended neither as interpretation nor as commentary, they are instead meant to represent workshop events. *Hands-on* hopes to reveal more about lithography than the established manuals while leaving its audience to interpret the significance of its findings. That audience may include novices in the field of lithography, as well as experienced artists and printers, actors from the broad field of art history and, last but not least, members of the wider public interested in art. The project will be exhibited at the Graphische Sammlung at ETH Zurich (Federal Institute of Technology), as well as presented in a digital format: a designated website (i.e., “user interface”) will make the entire research material available for online consultation, giving analog lithographic practice a digital form.

## *The Heirloom*

How does the history of the workshop make itself felt the lithographic present? Through the machine? Through the printer's experience? Through the one hundred and twenty stones (the heaviest weighs about four hundred kilograms)? What kinds of knowledge are passed on? To what extent is lithographic freedom determined by the material conditions of the workshop? What would make the artistic-technical process experimental?

No sooner do a few questions arise in a quiet moment than they are immediately swept away by the high-speed press revving up, cast into action to produce test iris prints—color gradients, that is. How can the involvement of this machine in the artistic process be described? Is it infrastructure? A disruptive factor? A shrine? An object?

In a trade struggling for survival, the machine is first and foremost capital and the most important means of production. The effort and costs involved in its use are enormous; it is highly specialized work that needs to be precisely calculated and planned in advance with the artist, as Wolfensberger tells me when I interview him. “I very often talk about money, simply because it is such a crucial aspect of operating a printer's workshop. You can't afford not to talk about production prices, or unit prices per sheet. These are

very, very relevant variables.” The printer must navigate economic, technical, and artistic issues. As Wolfensberger notes:

This, too, raises the same basic question: how worried should I be about the machine and how much about the art project? We also try to have a range of customers. We have to and want to be able to print precisely and accurately. As we did on this machine when it was operating on an industrial scale. But we also want to be able to experience a freak show. And that’s actually a balancing act, maintaining a boring infrastructure while keeping an open mind. To do so, you need both: a machine capable of delivering and a workplace that at least credibly suggests to the artist that anything is possible.

Michael Günzburger’s bear project was one of those “freak shows,” that is, experimenting with the possibilities and limits of the machine. On a trip to the Arctic, the artist had taken a footprint of a polar bear—which was dead, of course—on foil, with the help of grease. The foil was powdered, rolled up, and brought to Eglistrasse. An exposure apparatus and elaborate experimentation turned the bear into lithographs that have

outgrown the format of the high-speed press and depict the fur down to its finest details.<sup>11</sup>

The artist works intensively on the connection between the animal and the lithographic world: Günzburger is also interested in beavers, wolves, and foxes; but capturing a bear's footprint was an unprecedented undertaking in logistical, artistic, and printing terms. Over a period of roughly six years, Günzburger and Wolfensberger newly explored the procurement channels of art, the printability of the animal's body, and the tolerance of the high-speed press.<sup>12</sup>

In the meantime, for the *Hands-on* project, Günzburger needs to adopt an analytical, external vantage point toward the artistic process. Preparing his workshop residency involves structuring the documentation process and working on the first version of a “process vocabulary” developed jointly with Wolfensberger, which is supposed to include an appropriate term for every observed activity. Together, they begin naming and ordering the workshop processes, bringing them into a shape that over the course of the

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<sup>11</sup> Jenny Billeter and Michelle Ettlin's film *Eisbär* (2019, 28 min.) retraces Günzburger's bear project.

<sup>12</sup> For a selection of prints from this project, see Michael Günzburger and Lukas Bärfuss, *Contact* (Zurich: Edition Patrick Frey, 2018). For earlier works, see Michael Günzburger, *Plots* (Zurich: Edition Patrick Frey, 2012).

project will develop into a “controlled vocabulary” of artistic-technical hand movements.

Beyond this classificatory work, Günzburger will attempt to recreate some of the documented workshop processes after Stauch has left, in order to test how useful the documentation is in terms of craftsmanship. After a while, with the benefit of hindsight, Günzburger will also submit his own work to observation, and will become an object of documentation for a few days in the workshop. Thus, he assumes three guises: that of the researcher pursuing a documentary desire; that of the reproducing artist; and that of the artist with his own lithographic work.

As a threefold artist, Günzburger is particularly interested in the gestures and events occurring directly at the machine: how will Stauch and subsequent artists relate to the creative possibilities offered by the high-speed press? Which of its dimensions will they play with, which ones will they struggle with? Will they try to expand the medium, even to explode it? And will they receive Wolfensberger’s blessing in return?

As far as the potentially transgressive moments are concerned, the invited artists are confronted not least with the organizational limitations of the research project. Unlike in the bear project, their stay at the workshop will not extend to a *longue durée*, but will be



part of a well-timed research schedule, which grants the artists an agreed work phase with precisely defined printing days in the workshop. This is one of the conditions of the residency.

Another condition arises from the fact that the machine is not allowed to break down, however much experimentation Wolfensberger encourages. It is “the heart and soul of the firm” and, as noted, a cornerstone of its economic existence. The machine, dismantled and shipped to Eglistrasse in 2006 from the printer’s former headquarters on Bederstrasse, must live on; it has done so, quite incredibly, for over a century. Weighing thirteen tons, it is part of an entrepreneurial history that began as the *Graphische Anstalt J.E. Wolfensberger*. “Our future also depends on this machine. After all, we also have stones from my great-grandfather, but basically this [points to the high-speed press] legacy defines the company,” says Thomi Wolfensberger.

We are sitting on two small stools, the machine behind us. The research team has already left, the noise of a day’s printing has died down. Into the silence, Wolfensberger returns to his balancing of economic and artistic demands, and outlines the limits of experimental lithography, which at the same time mark out the space of possibility for the *Hands-on* project:

We need to be strict, also with the artists. Well, we have a bit of leeway (...). The Swiss National Science Foundation project might also involve moments where I need to say, no, that's something we can't do. Because it might put the machine at risk. (...) Artists who want to experiment wildly can do so on Gertrude Stein [one of two printing machines in Wolfenberger's workshop], where I want to do proper, professional printing. And of course I would like to have two high-speed presses, so if someone says I want to chuck a kilogram of sand into the rollers while they're running and see what happens, I'd say, "I'd find that interesting, too, but you can't do that." Because you'd endanger the means of production. But these tendencies have existed for 15 years. Or people want to print things the wrong way. As an entrepreneur, it's difficult to balance fulfilling people's wishes and protecting my means of production. You want to be curious, you want to see with young artists what's possible today, but...

KD: ...the machine must remain healthy.

TW: Absolutely. All of us are replaceable, except for the machine probably. Now there's a very weird value system,

according to which the machine takes priority, has a superior value. I consider that quite important.

KD: So the machine is actually the key protagonist in this space?

TW: Yes, indeed. Definitely, without a doubt. And there it is, enthroned on this platform (...). Actually, it's about this thing here, isn't it? This is, this is the heart and soul of the firm.

KD: It takes part in the production of art.

TW: Yes, absolutely.<sup>13</sup>

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<sup>13</sup> Interview with Thomi Wolfensberger, conducted on May 9, 2019. Thank you to Vera Gujer for transcribing the interviews.

How does lithography become an epistemic object?

What is an observational dispositif?

How does a craft, a process, or artistic creation become  
observable?

Understandable?

Documentable?

Which aspects of this practice remain enigmatic, opaque,  
inexplicable, incomprehensible, diffuse, hidden to observers?

Does documenting mean understanding?

Does documenting mean interpreting?

Does the Delphi of printing lie in the undocumentable?

## II. The Documentation Machine

It is a long journey from the drafts and preliminary considerations in Dominik Stauch's studio in Thun through the first print runs to the exhibitable lithograph. Lots of material is created. Imagine the discarded prints or all kinds of waste including the rags used to clean the machine, for example. Waste, too, is collected. That is the motto. At the foot of my observation post, prints created while testing color variations accumulate. The research team selects and archives some of these beautiful color gradients. The copies are time-stamped with a specially purchased device applied by Almira Medaric.

This material is still hot, transpiring, so to speak. After the weeks spent in the workshop, it will, in part, turn cold and end up, in analog form, at the arts school; in part, it will live on digitally, photographed and retrievable on the web-based platform. Printing spoilage becomes research material, which becomes archival material, which eventually becomes a digital object. The material processing cycle of the lithographic workshop is thus followed by the material processing cycle of a research project, whose imperative is to collect and record.<sup>14</sup>

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<sup>14</sup> Implicitly, the project's imperative to record everything is not unlike the collecting practices of natural historians from the 18th century onwards: with each additional animal or plant specimen, after being carefully collected and

Metamorphoses! Everywhere! From the printer's head to his hands. From machine to paper. From a discussion to the researcher's notepad. From the three-dimensional, grimy workshop into a tidy, digital archive. It seems to me that the research process is gradually wearing away the layers of fine dirt from the workbenches, machines, and hands. Raw work, spontaneous interactions, movable objects to which adheres the verve of the protagonists are transformed into cleansed representations and refined documentary material.

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preserved, insights into the functional interrelationships of the natural broadened. "Order, classification, and comparison of objects" were authoritative research practices, as Anke te Heesen and Emma Spary note in their introduction to *Sammeln als Wissen: Das Sammeln und seine wissenschaftsgeschichtliche Bedeutung* (Göttingen: Wallstein, 2001), pp. 7–21, esp. p. 14, with reference to the collections surrounding the Royal Society: "Sir Hans Sloane understood natural history at the beginning of the 18th century as a Baconian, encyclopedic project of collecting and presenting. Contemporaries valued his collections not only for their scope and diversity, but also for the innovative innovations in storing, recording, and ordering objects." Unlike natural history, the perimeter of the lithography researchers' collecting is clearly delineated; it is confined to the interior of the workshop. Instead of setting off for remote areas, as some naturalists (or their assistants) did, who were drawn to the Amazon, the Galapagos, the Andes, the *Hands-on* team has fatefully settled on Eglistrasse 8. What it shares with the naturalists, however, is first the obsession with collecting, second the concern to present what has been collected to the public, and third, being confronted with the imponderables that all this can involve. As te Heesen & Spary (2001, p. 14) remark about natural history: "Yet even at the heart of the Baconian project there were contingencies, constraints, and limitations: reductions in funds, failure of commissioned collectors, difficulties in preserving objects, and prevailing tastes were among the social, material, historical, and aesthetic factors that could affect a collection on a daily basis even beyond the order it sought."

This material may be viewed sitting down without soiling one's clothes. From the workshop, the material is transported to the former milk and yogurt factory now home to the arts school. Once there, a small amount of material is placed on a handcart, a kind of square research barrow pushed along corridors by Mara Züst and Almira Medaric before, for example, the test prints from the workshop are ready for archiving. Among other things, this means that the material ends up digitized on the servers of the arts school's Media and Information Center—in other words, in a basement. The devices down there have little in common with those in the printer's workshop: unlike the high-speed press, the server cabinets are kept in a clinical, pristine environment. Digital infrastructure works best when not a speck of dust enters its enclosures. Linked therewith are several computer operations to be performed by the research team after the workshop stay: sorting, indexing, cataloging photographs, footage, inventorying, all documenting an artistic-technical craft.

When Mara Züst and Almira Medaric keyword the endless hours of footage on the computer and label thousands of film sequences with terms such as “Etching the stone,” “Squeezing a sponge,” “Determining paper grammage,” or “Printing with *chine collé*,” they are referring to the “controlled vocabulary.” Based on Wolfensberger's experience and Günzburger's knowledge, this was

gradually compared with the observations in the workshop and further developed by the project team, to which Almira Medaric also contributed significantly during an internship for her degree in information science.<sup>15</sup>

The vocabulary contains common workshop terms; at the same time, it imposes its own order on the artistic-technical process, dividing it into functional fields: “Planning and preparation,” “Writing and sketching,” “Setting up,” “Prepress and printing block,” “Color,” “Printing,” “Discussions,” “Corrections,” “Postprocessing and finishing,” “Cleaning and maintenance.” The vocabulary also accommodates processes related to “Administration” and the activities of the research team. Each unit is subdivided into several terms, mostly composed of a noun and a verb. For example, “Cleaning and maintenance” includes the following terms: “Clean brush,” “Clean roller,” “Remove grease,” “Remove oxidation,” “Roll up paper,” “Check dimensional stability of paper,” “Check humidity of paper,” “Check pH factor of paper,” “Open window.” For example, “Corrections” includes “Correct register errors,” “Re-etch here and there,” “Remove acidified gum,” “Correct *moiré* effects.”

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<sup>15</sup> See Almira Medaric, “Erstellung eines kontrollierten Vokabulars für die Prozesse im Rahmen des Forschungsprojekts ‘Hands-on.’ Dokumentation künstlerisch-technischer Prozesse im Druck,” Internship report (Zurich: IFCAR, 2020).



“Conversations” lists speech acts such as “Explain plus and minus correction,” “Discuss halftone,” “Describe color property,” “Evaluate other artists’ work,” “Comment on misunderstanding about printmaking,” and so on. This vocabulary, stabilized in several steps and discussions of the project team, is so precise and exorbitant that it might be the most fine-grained lithography vocabulary compiled in recent years.

The vocabulary is situated at the level of daily tasks and speech acts. It does not, however, include terms for the various forms of dirt and dust that accumulate in the workshop. They are insignificant for the researchers. When indexing, Mara Züst concentrates on those actions that are functionally important for the printing process and that can be isolated empirically. Documenting and encoding dirt would be a metaphysical undertaking. But in fact dirt is created when the stone is ground, when the machine goes through its motions, when paper is cut. Barely visible, it covers objects and hands. Dirt is a natural element in the workshop, like pollen in summer meadows. But it is of no interest to *Hands-on*. Only if pollen became a material strewn by an artist on the stone during the printing process would it

receive its own entry. “Scattering pollen.” This, however, did not happen during Dominik Stauch’s residency at Eglistrasse.<sup>16</sup>

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<sup>16</sup> To my regret, that did not happen! It is incredible how sitting on a perch can kindle the imagination for printing experiments, even if the observer has no clue about what is possible in terms of printing technology and what is aesthetically acceptable. If at some point I were to work artistically with a high-speed press, the pollen of apple trees would be the first ingredient of my lithographic practice—with Thomi Wolfensberger’s approval, of course. I would be inspired by the works of Wolfgang Laib, who has elevated pollen to the status of an artistic material and processed it in ephemeral works of art, pollen mountains, for example. He, too, once worked at Wolfensberger’s workshop, as attested by a photograph hanging in the room next to the kitchen on Eglistrasse.

### *Workshop Knowledge*

Entirely empirical, the *Hands-on* project also concerns the objects standing around in the workshop. The brushes, hammers, solvent containers, paper, and all the other elements needed at some point in the printing process must be inventoried. In every corner of the lithographic workshop are things that also need to be photographed, recorded, and added to the digital archive.

But how to inventory the high-speed press? That is a larger question. Scientific illustrator Joe Rohrer is making an elaborate sketch, in which the apparatus is imaginarily disassembled, into its parts, so that its hidden elements can also be recorded: the flywheel, the sheet holder, the pair of rubbing rollers, and so on. Besides the high-speed press, the researchers are also studying a hand press. The technical details of the two machines, named “Emma Stone” and “Gertrude Stein”, are not evident to me but direct my thoughts elsewhere: does the reverence for technology explain why women lithographers are barely ever mentioned?<sup>17</sup>

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<sup>17</sup> Does lithography have a gender? The number of photographs in all kinds of popular representations of lithography showing men at printing machines is remarkable. Is lithography as a profession a masculine, male-centered story? Probably. Regarding artists who make lithography their medium of choice, the story is different. Seen from Eglistrasse—I lack an overview of contemporary lithographic art elsewhere in the world—Zilla Leutenegger and Shirana Shahbazi are among those female artists whose lithographic works are most often mentioned in the workshop. With this question in mind, I am at the same time puzzled by a well-known collection of interviews

This question seems to have no documentary interest for the *Hands-on* project. By turning its attention to equipment, it rather picks up the trail of the artist Hannes Rickli, who, together with Valentina Vuksic, a fellow artist, observed biological laboratories (including their refrigerators, computer infrastructures, and cold-water basins) and listened to their signals with special microphones. *Hands-on* conveys a fragment of this technology-centeredness into the lithographic workshop, whose equipment is somewhat more traditional and much more analog than that of scientific laboratories, where barely any apparatus is as long-serving as Wolfensberger's high-speed press.

While the space whose infrastructure Rickli and Vuksic entered (or rather interfered in) can be deserted and whose microphones are intended to capture natural language conversations, *Hands-on* renders visible and audible the protagonists' bodies and voices, along with their occasional curses. Relating the body techniques

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between printer Craig Zammiello, curator Elisabeth Hodermarsky, and various artists: *Conversations from the Print Studio* (New Haven: Yale University Press, 2012). According to the bibliographical notes, the volume features five female and five male artists. The book is subtitled "A Master Printer in Collaboration with Ten Artists," which lends credence to the spontaneous notion that a male machine operator is needed to run things after all. The first interview, with artist Kiki Smith, begins as follows: "[Craig Zammiello:] So, Kiki, this book is about prints that I feel are important... that I collaborated with certain artists on. And I think this print, My Blue Lake, is one of the most important ones that you and I have done." It seems that the connection between artisanal and cultural orders is one of the desiderata of a nonspecialist study of lithography.

(on the video track) to the speech acts (on the soundtrack) so that viewers and listeners can make sense of them and gain some idea of the processes that are significant in creating a lithograph is difficult. As it happens, the project becomes entangled in questions about the nature and representability of artisanal knowledge: Where is this knowledge located? In the printer's hands? In the interactions between artist and printer? In the artist's mind? In a lithographic superego? In the traditions and apparatus of the workshop? What forms can this knowledge assume? How does it become external? Can it be negotiated, described, made comprehensible? If so, by whom?

One premise of *Hands-on* is that a printer's knowledge should be treated as "tacit knowledge"—a term that became part of the project's set of concepts and references during the application phase. It comes from Michael Polanyi, who approached the matter theoretically: "I shall reconsider human knowledge by starting from the fact that we can know more than we can tell."<sup>18</sup> Polanyi, who worked in chemistry before entering the philosophy of science, speaks of "tacit knowing" in contrast to the idea that knowledge must be explicable, verbalizable, and translatable into linguistic signs in order to claim validity. Referring to the natural sciences, he asserts:

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<sup>18</sup> Michael Polanyi, *The Tacit Dimension* (Garden City: Anchor Books, 1966), p. 4.

Personal knowledge (...) commits us, passionately and far beyond our comprehension, to a vision of reality. Of this responsibility we cannot divest ourselves by setting up objective criteria of verifiability—or falsifiability, or testability, or what you will. For we live in it as in the garment of our own skin.<sup>19</sup>

Thus, for Polanyi, all knowledge—whether scientific or everyday— contains elements that function intuitively, in action, for an individual, yet need not be formalizable. In its long career, this concept has raised a number of questions about the communicability, learnability, representability, and physicality of forms of knowledge understood in this way.<sup>20</sup>

What does this imply for considering the artistic and artisanal skills needed to make a lithograph? How can this workshop knowledge be recognized and documented, if it is not only linguistic (or formalized otherwise)? And what role does the camera play in approaching that knowledge? Since Dominik Stauch began working at Eglistrasse, the camera has been experimented with,

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<sup>19</sup> Michael Polanyi, *Personal Knowledge: Towards a post-critical philosophy* (Chicago: University of Chicago Press, 1974), p. 64.

<sup>20</sup> For a brief and fragmentary history of the concept, see Tim Ray, “Rethinking Polanyi’s Concept of Tacit Knowledge: From Personal Knowing to Imagined Institutions,” *Minerva* 47(1) (2009), pp. 75–92.

inspired by individual cinematic references. These include a film by Harun Farocki that addresses the “aesthetics of work” in a blacksmith’s workshop, a place that, as described by Monika Bayer-Wermuth, is not unlike a lithographic workshop: both are like time capsules.<sup>21</sup> In Farocki’s film, the blacksmith Georg K. Glaser demonstrates some of his activities, while Farocki occasionally asks him questions from off-screen. As the unobtrusive shots unfold, viewers sense the spark of knowledge that comes to bear every time the hammer strikes the iron and seems to have long since passed into the blacksmith’s arms and hands. At one point in the film, Glaser, who was also active as a writer, discusses the relationship between the movements inscribed in the body by forging the iron and the subsequent casting of these movements into language:

I once described what happens during only one of the several ten thousand hammer blows that are necessary to make a jug. It took me days to think of sentences that explained the interplay of brain, hands, and eyes, which illustrated the shaping of the tool needed to perform this work, and what outwitting the reluctant raw material involves. For even if all the hammer blows together add up to the pressure of several hundred kilograms on the

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<sup>21</sup> Monika Bayer-Wermuth, “Zeitreise zu einem Sehnsuchtsort,” *Zeitschrift für Kulturwissenschaften*, vol. 2 (2018), pp. 163–173, esp. p. 170.

workpiece, it is still a matter of resourcefulness and not violence. (...) To read or listen to these sentences took a hundred times longer than the hammer blow to which they applied. We hammer in time with the heart.<sup>22</sup>

The meanings of translating artisanal practice into linguistic practice, into a game concerned with material, whose rules can only be cast into sentences with difficulty, become concrete at Eglistrasse in those moments when the researchers listen to the sometimes short, sometimes longer utterances of the protagonists, who are fitted with small microphones while going about their work. The project is not only interested in the printer's and the artist's actions but also in their verbal exchanges about these actions, in the spontaneous discussions prompted by their work, when Wolfensberger and Stauch reflect on what is going on when printing proceeds in time with the machine.

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<sup>22</sup> Sequence from the film *Georg K. Glaser – Schriftsteller und Schmied* von Harun Farocki (1988), Cinematography: Ingo Kratisch, 44 min., Berlin: Harun Farocki Filmproduktion. Transcription cited as in Bayer-Wermuth (2018), pp. 170–171. Many thanks to Christoph Schenker for the reference. Commenting on Glaser, born 1910, deceased 1995, Farocki notes: “For years he had to play a Frenchman who knew German well. After escaping and surviving a penal colony, he returned to Paris and went to work at Renault. He found the work on the assembly line unbearable and degrading. So Glaser (...) opened an arts and craft business to critique in thought and practice. He connects manual labor and writing, referring to the French word for craftsman (*artisan*, which contains the syllable *art*, which is not yet separated from work)”; (<https://www.harunfarocki.de/de/filme/1980er/1988/georg-k-glaser-schriftsteller-und-schmied.html>, last accessed November 6, 2021).



I observe how some hand movements occur rather silently; others are so well-rehearsed that all that is needed is a brief instruction, a pointer, or eye movement. Stauch and Wolfensberger talk to each other about their attempts, difficulties, and intentions; their working method is dialogical. They discuss some matters at a table or while making coffee, others at the machine or in passing, somewhere in the workshop.

Over lunch, I listen to a brief discussion about the fact that the project's success also depends on its protagonists behaving and talking as they would normally. It is about observing how art is produced in its familiar, traditional habitat. And yet, every last corner of this habitat is lit-up and wired to the project equipment, which joins the printing equipment. Neither printer nor artist holds back his opinion or thoughts. Still, it is difficult to say (or write) what occurs spontaneously or crosses their minds while mixing colors or choosing a subject or looking at the first prints. Just as it proves difficult to explain activities that are integral to workshop knowledge, and to what extent the manifold speech acts jotted down by Mara Züst are circumstantial, that is, conditioned by the presence of a research project.<sup>23</sup>

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<sup>23</sup> In one way of another, this problem might be inscribed in every desired field observation. What about the observations of cultural anthropologists who go to remote areas to study, for example, the craft of the Achuar? That

The days in the workshop go by. Every hand movement or maneuver might be meaningful. How exactly? The project team's hope, to document all the artistic-technical processes taking place in the workshop, raises an important question: which aspects of this craft are undocumentable?

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ethnography does something to its field, shapes its subject, and places actors in specific modes of representation, has been established since *Writing Culture*. But what about the theatrical dimension in the actions of local actors, with the performativity of their most mundane activities and speech acts, which are performed as if on an invisible stage that has been set up after the arrival of the ethnographer (and not only during shamanic dances), possibly unnoticed by the observer, who, prompted by their discipline and the appellative character of the funds they have received for a research trip full of hardship, imagines themselves in situations that would have taken place even without them? Doesn't a tiny residue of the (colonial?) presumption persist in the idea of *Writing Culture*, that it is ultimately the ethnographer who shapes the field in a special way—while the observed, with staging practices and subtle forms of self-expression, could, as it were, write a version into the researcher's notebook (without having to write themselves, at least not in the conventional way)?

### *Recording, Objectifying, Minuting*

Whatever happens: the camera is switched on. The documentary medium of choice, which shapes the entire documentation process, is the “observing camera.” In this regard, the *Hands-on* project also leans toward techno-ethnographic film. This, so the research team, “does not follow dramaturgic conventions, since the camera settings, as in the planned project, are oriented solely toward the object of research. It shows the technical process on different levels: as a manufacturing process in its entirety, in its distinct stages, in single actions, and in individual hand movements.”<sup>24</sup> Along with Farocki’s work, Anette Rose’s close-ups of machines in laboratories, operating rooms, workshops, and Christof Turnherr’s *Abgedreht! China töpft bodennah*, are relevant to *Hands-on* in terms of images.<sup>25</sup> Schenker, Züst, and Günzburger are particularly interested in an objectifying cinematography, “in contrast to a reflexive and performative mode, and also to argumentative, experimental, and essayistic filmmaking.”

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<sup>24</sup> Christoph Schenker, “Projektantrag *Hands-on*. Dokumentation künstlerisch-technischer Prozesse im Druck” [Funding application] (Zürich: IFCAR, 2018), p. 6.

<sup>25</sup> See Christof Turnherr, “Abgedreht! China töpft bodennah,” silent, 51 min. (2010); Anette Rose, *Enzyklopädie der Handhabungen 2006–2010* (Bielefeld: Kerber, 2011); Anette Rose and Christoph Schenker, “Capture, Record, Play,” in Barbara Preisig, Laura von Niederhäusern, and Jürgen Krusche (eds.), *Trading Zones: Camera Work in Artistic and Ethnographic Research* (Berlin: Archive Books, 2022), pp. 50–69.

No single film genre can serve as a starting point (...).

Rather, it makes sense to establish the observing camera as the primary basis, which is used in different ways in different genres. The observing camera evolved from documentary film via *direct cinema*. In the context of *Hands-on*, however, not its narrative aspects are important but rather formal ones: the movement of the camera, which is motivated solely by what is happening in front of its lens (object-relatedness), its restraint (participant observation and its claim to objectivity), and dispensing with commentary (gesture of showing).<sup>26</sup>

Before the first workshop residency, Piet Esch, the *Hands-on* camera operator, devised a cinematographic concept including the envisaged camera positions in order to outline his camera work before the first observation phase; like all other concepts, this one is also debated and modified in the research team. The cinematographic means should be used less for their artistic idiosyncrasy than to represent the workshop reality. An almost monastic self-restriction is imposed on the camera operator. The camera is meant to record the printing process “with uncompromising precision,” says Schenker. Every move, every detail, counts.

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<sup>26</sup> Schenker, “Projektantrag,” p. 6.

The idea of impartially capturing a printing process can be related to an epistemic figure known as “mechanical objectivity” in studies on the history of science. Lorraine Daston and Peter Galison define this concept with reference to historical observations of nature as follows:

By mechanical objectivity we mean the insistent drive to repress the willful intervention of the artist-author, and to put in its stead a set of procedures that would, as it were, move nature to the page through a strict protocol, if not automatically.<sup>27</sup>

This mode of objectivity is called “mechanical” because it is based either on actual machines or on someone’s mechanized maneuvers.” In the case of *Hands-on*, the machines are primarily digital cameras. They are used with restraint, not unlike in scientific recordings, even if they are not capturing “natural” movements but those of the printer’s and the artist’s hands, according to a “strict protocol.”

What if “the widely nurtured hope that the camera would have little effect on the field and the protagonists if it was only used with

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<sup>27</sup> Lorraine Daston and Peter Galison, *Objectivity* (New York: Zone Books, 2007), p. 121.

sufficient reflection and consideration” is more a hope than a practice?<sup>28</sup> While I grow increasingly stiff observing the events from my elevated position, Piet Esch searches for positions from which he can film the gestures of the three protagonists (Stauch, Wolfensberger, and Dërmaku). At various strategically chosen points, he has positioned cameras that are intended to open up different perspectives and listening angles. During the first week of printing, I watch Esch as he moves back and forth between the camera locations in what amounts to orienteering, quietly, without interrupting events. Through one of the cameras, he follows the three print runs on the high-speed press. Another camera functions as a surveillance camera fitted with a three hundred and sixty degree lens. On this day, it repeatedly fails to operate—and is switched off. From my academic lookout, I ask him whether this depresses or delights him, but he only has time for a smirk before moving to another corner of the workshop to adjust the settings on the process camera, which is directed at “parallel and synchronous actions between humans and machines.” “The camera can communicate situationally, as it inevitably influences the behavior of those present,” Esch notes in the first version of his cinematographic concept. Moreover: “Every filmic image has its

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<sup>28</sup> Barbara Preisig and Laura von Niederhäusern, “Camera Practices of Doing,” in Barbara Preisig, Laura von Niederhäusern, and Jürgen Krusche (eds.), *Trading Zones: Camera Work in Artistic and Ethnographic Research* (Berlin: Archive Books, 2022), pp. 5–13, esp. p. 6.

aesthetics, in terms of its color, framing, movement, and sound.”<sup>29</sup>

How the inescapable aesthetics of the filmic image relate to the desire for distanced representation remains an open question.<sup>30</sup>

The other materials (photographs, inventories, notes, etc.) to be displayed on the website, yet to be created, will be arranged around the film footage. Image trumps text. Days, weeks, months of footage will emerge. Who will analyze it, I wonder, and how? Mara Züst comes around the corner to observe a color mixing scene, during which Wolfensberger dabs and taps the material to determine whether the color tone fits or should be shifted even more toward “petrol.” Züst notes down her impressions; the camera runs; Wolfensberger moves from the color mixing table through the workshop; Stauch stands, brooding, with his arms on his hips. Is choosing colors in this craft as serious as choosing terms and concepts in the humanities?

Meanwhile, Schenker is deeply immersed in keeping the handwritten workshop diary. This records the most important activities and special events for every printing day, as well as the researchers’ methodological insights. For example, an entry from

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<sup>29</sup> Piet Esch, “Filmkonzept *Hands-on*” (Zurich: IFCAR, 2019), p. 3.

<sup>30</sup> Is there an aesthetics of distance? Behind this shimmers the epistemological question of the extent to which the camera is more “than a recording and documentation instrument, more than a means to an end, a data collection, visual field note, or means of representation” (Preisig and von Niederhäusern, “Camera Practices of Doing,” p. 6).

the first week outlines Wolfensberger and Stauch's activities, and those of printing technician Shefki Sahiti, who is standing in for Adem Dërmaku on that day; it also records any particular events:

Check 4 provisional color recipes; make 4 definitive color recipes; 4 print runs (aluminium block) on high-speed press. Color palette (...): 1. lemon yellow, 2. brownish English red, 3. violet, 4. olive to fir tree green (...). Problem with water when printing violet. Work interrupted, cleaning. Printing process continues (all the same).

Under the heading "methodological insights," the diary keeper notes about himself:

Over the last two days, he has "expanded" his dilettantish cell phone photography to photographic documentation of the work process. For example, he records documents (such as color samples, tables) in various states, systematically photographs waste (cleaning cloths and papers), records parallel work processes, makes close-ups, etc.<sup>31</sup>

Thus, the principle of "object-relatedness," as defined for camera operating, also applies to diary keeping. The fact that a note-taking system exists in addition to the film footage indicates that

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<sup>31</sup> Workshop diary, April 9, 2019 (*Hands-on Archive*).



the respective documentation media are inherently limited and that every format has dark spots that needed to be illumined by a “multiperspective” documentation process. Multiperspectivity, in this case, means recording from different angles, with different means. In addition to the workshop diary, there are Mara Züst’s handwritten notes; these have been assigned documentary status similar to observation protocols.

These notes have special metal. First, they raise the question of how what is handwritten relates to what is recorded in the medium of film: Does the former supplement, expand, or safeguard the latter? Is it meant to serve as commentary? Which tone, which linguistic register should these notes have? To whom are they addressed? Second, the standardized nature of the notes is at stake: how to ensure that they follow a formal convention and—despite the hustle and bustle in the workshop—have a uniform style? What level of detail should be recorded? How to satisfy the aspiration to record and document when the notes also emerge from idiosyncratic observation? And how can the notes, which are edited in several iterations, be made comprehensible for future readers?

TW starts by preparing the mixture. He scrapes together the old paint mixture from the large lithographic mixing stone with the spatula and pushes everything away from the work

surface. He won't throw this mixture away, TW assures me. But it contains 70 percent transparent white and therefore cannot be used for the current mixture. For the new color mixture, he takes a can of Red 426—"a good basis"—in his left hand and, with a large spatula in his right one, and a flick of his wrist, retrieves a fairly large amount of paint from the can. As he transfers this to the color litho stone, he turns the palette knife briefly in his hand so that the paint doesn't drip. Applying pressure, he spreads it from the spatula onto the stone and repeats this twice. Next, he lifts the doughy mass from the stone surface with the tool and tips it over once each from the edge toward the center. Reapplying pressure, he smoothes the paint again. This procedure smoothes the paint. TW applies pressure with his arm, but tilts with his hand. His body is taut; he keeps shifting his weight from one foot to the other while mixing the paint.<sup>32</sup>

These notes, as well as all the others to be collected on the website, consist largely of microethnographic, activity-based descriptions. They are the revised product of a minuting practice that held in store instances of self-questioning, in which the observer occasionally reflected on the detours and aberrations of her research. Moments in which the rationality of "object-relatedness"

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<sup>32</sup> Edited note ("Mixing topcoat"), January 11, 2021, *Hands-on* Archive.

faded between the lines. These moments no longer have a place in the edited notes.

Fortunately, in ethnography notes exist in at least two ways. Traces of everyday observational practice survive and reveal how much a research project in its ideal methodological state differs from the same project at its moment of creation. Cracks appear.<sup>33</sup> Surprises occur. Methodology manuals suddenly appear like theological writings.

In a field note, beyond the protocol, Mara Züst jots down this thought:

I only realized in the course of the first artist residency just how much TW was planning around us: when we arrive on Monday, the paper has been delivered, the tools are ready, the coffee cups are on the meeting table. When we ask him what exactly he is preparing without us noticing, he explains that he doesn't want to bore us— without being more specific—with banal activities. Just as I notice during the project that TW only wants to deliver the best for the SNF: lots of material, material from different machines, large-format material, always something extra. In the morning,

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<sup>33</sup> “Ring the bells that still can ring / Forget your perfect offering / There is a crack, a crack in everything / That’s how the light gets in,” sings Leonard Cohen in the song “Anthem,” off the album *The Future* (1992). And later: “You can add up the parts / You won’t have the sum.”

when I enter the workshop, I start paying attention to what may have already happened between 7 and 8:30, 9 o'clock: have the ink pots been taken off the shelf and carefully laid out for us? Has TW taken down prints that he considers unimportant and replaced them with current ones? Have artifacts meant to be newly captured already been carefully placed on the project's cardboard box? Once again, in the evening, if I stay longer, I realize that TW is answering emails, tidying the kitchen and conference table, and driving to Birmensdorf to fetch newly exposed printing plates or the truck for a larger shipment. No wonder his working days last 12 hours or more; Fridays and Saturdays—as a rule his days off printing—are somewhat shorter, as is Thursday evening, when TW goes running with “Lüscher,” meaning he leaves the workshop earlier. But which of these activities is important to illustrate the artistic-technical process? (...) <sup>34</sup>

The printer lays a trail for the research team on the documentation boxes, quietly preparing his craft for representation. Reading this note, I begin to regret not having spent a single night behind the stones, secretly following the early morning arrangements before the workshop became a stage.

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<sup>34</sup> Field note, Mara Züst, personal archive, 2019, provided by the researcher.

What makes research application-oriented basic research?

Which fundamentals? Applied where?

Which orders does a project carry into the field?

What is the risk of field research?

What is the explosive, hazardous aspect of observing?

What is epistemologically at stake?

And what if things fail?

### III. Artistic, Scientific, Documentary

Sometimes, when little is happening in the workshop, or when the research team is discussing other matters, I ponder the similarities and differences between *Hands-on* and other projects in the field of artistic research that I have encountered during my time at the arts school.

I am only entitled to the view of a semi-accultured outsider. I have learned that no such thing as artistic research *per se* exists; that its approaches and concerns are as broad as those of any subdiscipline in the sciences; that artistic research, as an exploratory, inquiring practice, often eyes with caution and rebels against the norms, conventions, and disciplining conceived as “scientific” in standard, classical terms; that artistic research can mark an attempt to multiply the ways of scientific world-making, as well as open up or thwart the repertoire of traditional forms of approaching things, problems, and situations, with the help of artistic means; and that this is less about domesticating the objects of research than about trying out possible ways of accessing them.

Artistic research materializes as installations, as performances, as video works, as books, and in many other formats. Let me mention some recent (yet hardly exhaustive) examples from the Zurich context: sometimes artistic research investigates

phenomena beyond everyday perception, for example, by illuminating and eavesdropping on scientific infrastructures at the edge of the North Sea<sup>35</sup>; sometimes it produces critical theorizations that reach into digital interstices<sup>36</sup>; sometimes it foregrounds the interrogation of artistic means, for example, through essayistic films<sup>37</sup>; sometimes it shifts conceptual and methodological sensibilities, as in the *Aesthetics of the Translocal*, a project that materialized in a collection of fifty-six speculative questions<sup>38</sup>; and sometimes it instigates earth-spanning discussions on social issues, as in *Draft*, which went ahead in Hamburg, Hong Kong, Cairo, Cape Town, Mexico City, Mumbai, Beijing, Saint Petersburg, and Zurich.<sup>39</sup>

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<sup>35</sup> See Christoph Hoffmann, Hannes Rickli, Philipp Fischer, Hans Hofmann, Gabriele Gramelsberger, and Hans-Jörg Rheinberger (eds.), *Natures of Data: A Discussion between Biology, History and Philosophy of Science and Art* (Zurich: Diaphanes, 2020).

<sup>36</sup> See Felix Stalder, Cornelia Sollfrank, and Shusha Niederberger (eds.), *Aesthetics of the Commons* (Zurich: Diaphanes, 2021).

<sup>37</sup> See Laura von Niederhäusern, “Exploring Asynchronic Experiences – Seven Motifs: A *Zettelkasten* as (Filmic) Research Method,” *MaHKUscript: Journal of Fine Art Research*, 4(1) (2020), pp. 1–12.

<sup>38</sup> These questions, which “emerged out of an engagement with the conditions and processes of translocal artistic research,” include: “Why does this matter matter to you?”; “What would re-invent the situation differently?”; “Does the production of imagination help?”; “How can (your) dirtiness be a part of this?” See Ines Kleesattel, Knowbotiq and Uriel Orlow (eds.), *Untooling*. <https://doi.org/10.5281/zenodo.6344282> (last accessed May 15, 2022).

<sup>39</sup> See here Knowbotiq’s work on the conflictual material cycle of gold in and beyond Switzerland: Knowbotiq and Nina Bandi, *Swiss Psychotropic Gold* (Basel: Christoph Merian, 2020).

The *Hands-on* project is less inclined toward theory than to gathering concerns from different artistic and scientific fields. It involves a monitoring group. Centered on lithography, the group considers the research team's documentation practices (including infrastructure issues) in regular workshops. Art-historical, archival, printmaking, and curatorial aspects are discussed with the representatives of various fields—printmaking (Patrick Wagner), art history (Joachim Sieber), and art technology (Dorothea Spitzza)—as well as from very different Zurich-based institutions, including Alexandra Barcal and Linda Schädler (ETH Graphische Sammlung), Matthias Oberli (Swiss Institute of Art History), and several members of the arts school: Rolf Wolfensberger (Archive), Jan Melissen (Media and Information Center), and Franziska Müller-Reissmann and Yvonne Radecker (*Materialachiv*).

Exchanging ideas with the monitoring group serves not to save lithography, but to multiply the perspectives on the ways and means of recording and representing the artistic-technical process.

The actors define what they consider to be robust documentation differently, for example: what should find its way into the archive, in what detail, and with what metadata? How should the inventory be structured? Does the temperature in the workshop need to be measured? Which modes of presenting the collected material are interesting for which community? The monitoring



group agrees that the project should focus on the inner workings of the printing process, not its surrounding cultural, historical, social, or art policy conditions. The status of lithography in Switzerland's arts and culture (and beyond), or how far economic contexts influence a technique that has become rare are not among the questions addressed by the workshop collective, whose recommendations contribute to adjusting the project's documentation procedure. This reveals a facet of the term "application-oriented basic research," under which the project is registered with the Swiss National Science Foundation: as they are "application-oriented," the important questions in the discussions with the monitoring group are those of practical relevance for the technical usability of the documentation.

### *A Sense of (Dis-)Order*

While the monitoring group with its different expertises forms one context for the project, another context is spanned by the debates and positions shaping the ways and means of artistic research in the present. Where does *Hands-on* situate itself in these debates? Where does it differ, in its concerns and ways of thinking? And how does the project inscribe itself into the local history of a research institute at the arts school, by which it is at the same time conditioned?

During my stay at the workshop, I intend to pursue the epistemological circumstances a little further, without losing myself in the field. Time being too short, I confine myself to observing the microcosm of the institute home to the *Hands-on* project: the Institute for Contemporary Art Research (IFCAR), to which I have also become affiliated for the limited duration of my “high-seated” research. Thus, I am unable to consider artistic research at large, which would also be impossible. The field is complicated and multifaceted, scattered among a myriad of collectives and individuals, all with their own practices, ideas, and biographies.

One common feature of IFCAR’s heterodox projects might be that they are not restricted to one version of artistic research. Some of these projects combine theoretical and artistic concerns.

They involve arts school faculty, often attached to IFCAR as lecturers or professors, collaborating with all kinds of actors in the arts under the institute's roof. This is a distinguishing feature, because artistic research also thrives beyond arts schools, in nomadic ways and potentially wherever artistic work is carried out, whereas the research I encounter is mostly institutionalized, and funded externally. Accordingly, raising research funding plays a significant role in daily institute affairs and in the work of its researchers, many of whom also teach on arts programs or support doctoral candidates enrolled in artistic PhD programs.

Perhaps students and doctoral candidates would be the most interesting interlocutors when it comes to thought styles and subtle canonizations in the field of artistic research. But that will have to wait. Instead, I am standing in front of a row of orange books in the IFCAR office. Seemingly untouched, these volumes are lined up next to each other. The spine reads *Künstlerische Forschung. Ein Handbuch* (Artistic Research: A Manual).

A cautious look at the introduction tells me that the book promises a “discourse topography,” “systematized stocktaking,” which negotiates “epistemological-conceptual foundations, methodological questions, inventories of practices and forms of expression, as well as institutional, research- and cultural-policy frameworks” in several dozen contributions by German-speaking

authors.<sup>40</sup> An assorting-synthesizing book, then, running to 344 pages, which Ludwik Fleck would have roguishly enjoyed and perhaps have found that, not entirely unlike the handbooks in the natural sciences sitting on his desk at the time, it seems to emerge from an “intracollective communication of thought” and functions as a “critical synopsis in an organized system.”<sup>41</sup>

Some of the handbook articles are richly programmatic and sometimes accompanied by footnotes. These mention artistic works, research funding policies, and theoretical writings.<sup>42</sup> The

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<sup>40</sup> Jens Badura, Selma Dubach, and Anke Haarmann, “Warum ein Handbuch zur künstlerischen Forschung?” in Jens Badura, Selma Dubach, Anke Haarmann, Dieter Mersch, Anton Rey, Christoph Schenker, and Germán Toro Pérez (eds.), *Künstlerische Forschung. Ein Handbuch* (Zurich: Diaphanes, 2015), pp. 9–14, esp. p. 10.

<sup>41</sup> Ludwig Fleck, *Genesis and Development of a Scientific Fact*, translated by Fred Bradley and Thaddeus J. Trenn (Chicago: The University of Chicago Press, 1979/1935), pp. 118–119. Fleck continues: “The vademecum is therefore not simply the result of either a compilation or a collection (...). A vademecum is built up from individual contributions (...) like a mosaic from many colored stones” (p. 119).

<sup>42</sup> The first two footnotes in the handbook refer to Polanyi and Feyerabend. Browsing through the volume, I come across various philosophers, including Wittgenstein, Benjamin, Adorno, Foucault, Deleuze, and Lyotard (the list is incomplete). Science studies, by the way, are also represented, with footnotes mentioning Latour, Haraway, and Rheinberger. Bernhard Böhm wrote a piece on the reception of Hans-Jörg Rheinberger’s *Toward a History of Epistemic Things: Synthesizing Proteins in the Test Tube* (Stanford: Stanford University Press, 1997) in the field of artistic research. For Böhm, the appropriation of an iterative kind of research driven by blurriness represents a strategic move, a research policy that made Rheinberger’s book an “ideal[n] partner for the subversive creation of freedom at arts universities.” See Bernhard Böhm, “Künstlerische Forschung,” in Monika Wulz, Max Stadler, Nils Güttler, and

paratexts (discursive and topographical) also include a selected bibliography. Some contributions are named like the departments of an arts schools (“Fine Arts,” “Performing Arts,” “Design,” “Music”), others announce larger conceptualizations (“Creativity,” “Work and Process,” “Outreach and Transfer”) or address the research process (“modeling,” “researching,” “improvising,” “experimenting”). In addition, some contributions discuss epistemological facets of artistic research. Among these is Christoph Schenker’s discussion of “forms of knowledge in art.” He deals with forms of knowledge that are characterized by “producing and experimenting with a different, a new distinctive behavior.” As he remarks:<sup>43</sup>

Artistic work, as the basic observation goes, consists in introducing new distinctions in the realms of perception, emotion, or intellect, experimenting with these other modes and forms of differentiation, and thus generating new aesthetic, emotional, or intellectual constellations. Such work is, in a certain sense, artistic research.<sup>44</sup>

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Fabian Grütter (eds.), *Deregulation and Restoration. A Political History of Knowledge* (Berlin: Matthes & Seitz, 2021), pp. 250–261, esp. p. 259.

<sup>43</sup> Christoph Schenker, “Wissensformen der Kunst,” in Jens Badura, Selma Dubach, Anke Haarmann, Dieter Mersch, Anton Rey, Christoph Schenker, and Germán Toro Pérez (eds.), *Künstlerische Forschung. Ein Handbuch* (Zürich: Diaphanes, 2015), pp. 105–110, esp. p. 107.

<sup>44</sup> *Ibid.*, p. 105.

Things, practices, problems are addressed artistically, reworked, made visible, audible, describable, and experienceable in unexpected ways. In doing so, “the artist transcends (...) his or her competencies. Strictly speaking, they prove to be an artist precisely by crossing aesthetic boundaries.”<sup>45</sup> With their work, artists also enter fields of knowledge as a rule investigated by scientific disciplines, which requires an “exploratory experimentation with concepts,” as Schenker argues.<sup>46</sup> His comments are those of an art theorist with a philosophical interest, not of the head of a research project. I wonder what the assertion that “dense knowledge” emerges in the course of research might mean for the *Hands-on* project on a small scale.<sup>47</sup> Perhaps the statements in a handbook are not even meant to be translated down into the pragmatic lowlands of research.

Knowledge is not in short supply in the various handbook entries, and appears in manifold terminological constellations: as “knowledge production,” “knowledge generation,” and “knowledge practice”; as “knowledge order” and “knowledge apparatus”; as “knowledge acquisition,” “search for knowledge,” “knowledge transmission,” “knowledge transfer,” “knowledge exchange,” and “state of knowledge”; as “critique of knowledge”

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<sup>45</sup> Ibid., p. 109.

<sup>46</sup> Ibid., p. 107.

<sup>47</sup> Ibid., p. 105.

and “knowledge democracy”; as “previous knowledge,” “background knowledge,” “material knowledge,” and “secret knowledge”; as “scientific knowledge”, of course; and finally, to nuance this list, as “knowledge-spectacle,” the only hyphenated knowledge in the volume.

In his contribution, Uriel Orlow instead speaks of “fragments of knowledge” and of “latent knowledge.” This is based on research, understood as “intensive, associative exploration and investigation.” Where do such research practices have their place? Orlow notes that the “lowercase knowledge” he seeks is “not necessarily to be found in classical archives or storerooms, but rather, for example, in collective memory, in places steeped in history, in landscape, or in the body.”<sup>48</sup> One important site in Orlow’s artistic research is botanical gardens, in whose existence (and plants) is inscribed a postcolonial historicity that the artist seeks to uncover through comparative studies.<sup>49</sup>

I close the handbook and nearby discover several volumes produced by IFCAR researchers. These include a collection curated by Michael Hiltbrunner with texts and materials by Serge

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<sup>48</sup> Uriel Orlow, “Recherchieren,” in Jens Badura, Selma Dubach, Anke Haarmann, Dieter Mersch, Anton Rey, Christoph Schenker, and Germán Toro Pérez (eds.), *Künstlerische Forschung. Ein Handbuch* (Zurich: Diaphanes, 2015), pp. 201–204, esp. p. 201f.

<sup>49</sup> See Shela Sheikh and Uriel Orlow, *Theatrum Botanicum* (Paris: Les Presses du Réel, 2018).

Stauffer, who was already thinking about artistic research when the term had a different meaning in terms of research policy than it does today.<sup>50</sup> Standing next to this volume is a black-and-white tome containing over a thousand pages, *Mind the Gap*, which deals with the forms of art in public space using the example of Kunsthof Zürich.<sup>51</sup> Over the years, the city including its back alleys seems to have become an exemplary site of artistic research.<sup>52</sup> Other works created in Zurich consider the creeping changes in peri-urban space and its uses<sup>53</sup>; experiences of marginalization<sup>54</sup>; the elusive sonority of rows of houses and backyards<sup>55</sup>; the fragility of encounters in an urban neighborhood<sup>56</sup>; and loitering.<sup>57</sup> The conditions of urban

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<sup>50</sup> See Helmhaus Zürich, *Serge Stauffer – Kunst als Forschung*. Curated by Michael Hiltbrunner (Zurich: Scheidegger & Spiess, 2013).

<sup>51</sup> See Andrea Portmann, Christoph Schenker, and Daniel Kurjaković (eds.), *Mind the Gap. Kunsthof Zürich: Materialien und Dokumente, 1993–2013* (Zurich: Edition Fink, 2013).

<sup>52</sup> See Michael Hiltbrunner and Christoph Schenker (eds.), *Kunst und Öffentlichkeit. Kritische Praxis der Kunst im Stadtraum Zürich* (Zurich: Ringier, 2007).

<sup>53</sup> See Ulrich Görlich and Meret Wandeler, “Fotografische Langzeitbeobachtung Schlieren,” in Nanni Baltzer and Wolfgang Kersten (eds.), *Weltenbilder* (Berlin: Akademie Verlag, 2011), pp. 203–230.

<sup>54</sup> See Jürgen Krusche, Aya Domenig, Thomas Schärer, and Julia Weber, *Die fragmentierte Stadt* (Berlin: Jovis, 2021).

<sup>55</sup> See Andres Bosshard, “Das fliegende Mikrofon,” in Departement Kunst & Medien der Zürcher Hochschule der Künste (eds.), *Praktiken des Experimentierens* (Zurich: Scheidegger & Spiess, 2012), pp. 24–39.

<sup>56</sup> For instance, in San Keller’s legendary actions *Best of Hardau – Tanzen Sie mit der San Dance Company zu Ihrem Lieblingslied* and *Freinacht in der Hardau*. In the latter, local residents could hand in their keys at a porter’s lodge in return for the keys of other residents. See Christoph Schenker, Annemarie Bucher, Kathleen Bühler, Beat Grossrieder, Michael Hiltbrunner, Jürgen Krusche,



existence are questioned in these works, which are political in that they give space to the marginalized and the ephemeral.

Depending on the subject, location, interest, and researcher, the practices of artistic urban research assume their own forms. Only rarely does such research present conclusive findings, as would be expected of urban geographers, urban sociologists, or spatial planners, who also investigate urban milieus, yet with other epistemological interests and means. In some artistic research endeavors, collecting and working on photographic, scenographic, and audiographic material can be more interesting than formulating poignant results. Nor do artistic urban research projects need to be hypothesis-driven (like the studies of urban sociologists); they are instead interested in the representability and processual character of research activities. Meret Wandeler's photographic long-term observations, which have produced a dense series of images of changing suburban spaces, are a striking example.<sup>58</sup> Whether they serve urban planning is as unimportant as with Julia Weber's socially stirring performances with a cross-

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Christoph Lang, Sascha Renner, Christian Ritter, and Charlotte Tschumi, *Kunst und Bau. Die Hardau* (Zurich: Stadt Zürich, 2012).

<sup>57</sup> See Julia Weber, "Herumlungern?! Begegnungsräume an urbanen Orten," Unpublished dissertation, Linz University of Art and Design, 2022.

<sup>58</sup> See Meret Wandeler, "Fotografische Langzeitbeobachtung in Schlieren," *NIKE Bulletin*, 6 (2016), pp. 28–35.

section of people on city streets. These works speculate on achieving nothing less than shifting common modes of perception.

Notwithstanding the handbook, such artistic research seems to be characterized by methodological eccentricity. By this I mean the distance, the difference, to research amounting to a disciplinary, collectively sanctioned operationalization of existing methods. The methodological eccentricity of artistic research materializes in procedures, forms of presentation, and concerns barely derivable from canonized forms of knowledge—even if it is not always clear to me whether this is due to conscious delimitation or perhaps a matter of coincidence.

Be that as it may: discarding conventional methodology ushers in the politics of epistemology. Does this mean chipping away at “the modern understanding of science” and its “master narratives,” as Anette Baldauf and Ana Hoffner note about those methods in artistic research that can be understood “as a practice of critical analysis and performativity”?

Their promise is that of disturbance: critical artistic research wants to pierce the matrix of understanding, establish irritating connections, sever conventional seams. As part of a critical epistemology, it promises to read knowledge against the grain and to use it parasitically for its own purposes. It

wants to sound out knowledge for latent systems of order, break the dichotomy of thinking and doing, or even confront knowledge with desire. Following Paul Feyerabend and his advocacy of a Dadaist epistemology, critical art-based research, with its various, even incompatible presuppositions and ambitions, is best understood as methodological disobedience, as a rejection of the Western, positivist research ethos that seeks to define research as a reason-guided and systematic search for knowledge (...).<sup>59</sup>

Baldauf and Hoffner's examples include works by the Art Workers Coalition or the Guerrilla Girls. In their account, artistic research is a heated business, in discreet contrast to Orlow's outline of rather quiet mode of research.

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<sup>59</sup> Anette Baldauf and Ana Hoffner, "Kunst-basierte Forschung und methodischer Störsinn," in Elke Gaugele and Jens Kastner (eds.), *Critical Studies. Kultur- und Sozialtheorie im Kunstfeld* (Wiesbaden: Springer, 2016), pp. 325–338, esp. p. 327. Science studies scholars would probably counter the attributions informing the authors' notion of *the* sciences by arguing that even in the contemporary natural sciences there exists a diversity of (partly conflicting) forms of knowledge that are not committed to a singular "research ethos" but have emerged from a diversity of epistemological, material, and practical research conditions. Especially in scientific subcultures there is evidence of "methodological disobedience." This is another reason why disputes over findings and how they are reached are nothing out of the ordinary, as I have witnessed, as an observer, in climate research. Sometimes things bubble and whistle and furrows appear in the foundation of seemingly consolidated bodies of knowledge that are more provisional and partial than the notions of the monumental character of scientific truths circulating in everyday culture would suggest.

More striking is the contrast with the concerns of the *Hands-on* project— and it is high time that I return from my meandering to the workshop at Eglistrasse. The lithography observation project taking place here differs from some of the works and positions sifted through above in terms of the role that it assigns to artistic practice. This practice becomes an object of study and is placed within an “observational *dispositif*,” that is, within a scientific-technological apparatus, and thus within the project’s edifice of thought. The project is also characterized by its methodological conformity. Rather than standing traditional forms and means of documentation on their head, it operationalizes them in the workshop. Attempting to establish a documentation practice that points beyond the local, the project proceeds in a classificatory and systematizing manner, and creates a “taxonomy of artistic gestures.”<sup>60</sup> Hence, the “sense of methodological disorder” of an artistic research that chips away at the foundations of “current

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<sup>60</sup> I owe this concept to a tea-kitchen conversation with Sigrid Adorf. The product of *Hands-on*’s taxonomic aspiration is not least a “guideline,” which has meanwhile taken shape and explains the rules of observing workshop events. This guideline is oriented toward descriptions of inventory procedures in museums, breaks down the documentation process into its individual parts (for example, the setting up of the observation apparatus, the postproduction and coding of videos, the archiving of artifacts), describes procedures for proper documentation that are intended to be intersubjectively comprehensible and could in principle be carried out in a comparable manner in other artistic-technical contexts. If, as Christoph Schenker says, “We have built a machine,” then the guideline he wrote is the blueprint for that machine.

knowledge capitalism and inspires visions of another world” has given way to a documentary sense of order.<sup>61</sup>

Setting up, filming, naming, marking, photographing, inventorying, minuting, recording, archiving, recording. Such documentary research, which spruces up its object, is fueled by another epistemology than the grimy color experiments with Dutch magenta, lemon yellow, orange, olive fir green, English red, petrol turquoise and violet tetra-marine, to which Stauch and Wolfensberger devoted themselves over three weeks. Pursuing artistic research in their own special ways, they have explored what is technically possible in printing, have played with lithographic forms and formats, and have mixed and layered colors during the printing process, from which ensued “unexpected events.”<sup>62</sup> Art has come into existence.

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<sup>61</sup> Baldauf and Hoffner, “Kunst-basierte Forschung und methodischer Störsinn,” p. 326.

<sup>62</sup> Rheinberger, “Toward a History of Epistemic Things,” p. 32f.

What happened to lithography and art after they became part  
of a research context?

Can lithographic knowledge still be saved? A part of it?

What does its survival in the digital age mean?

What reception will follow the wealth of materials collected?

What afterlife will the findings of the lithographic observation  
project have?

What remains when the last stone has been cut, the last  
sheet printed, and the last artist has left the workshop?

What next in the long history of lithography? And in the history  
of artistic research?

### *The Peep-Box*

Dominik Stauch's residency has come to an end, and the documentation material has been sorted and annotated. Michael Günzburger now needs to continue working with it. In a "review loop," he tries to retrace Stauch's steps through the workshop, starting from the documentation material, by attempting to make his own prints, which closely approach Stauch's artisanal and aesthetic decisions. What Günzburger produces are not copies; rather, he takes up individual aspects of Stauch's work—for instance, the halftoning or a certain color composition—and makes these the starting point for his own works. His reenactment aims to determine whether the footage, photographs, descriptions, and inventories are sufficiently precise before they are presented to the art world.

By translating the collected material back into art, as it were, the project takes another turn. If, as Günzburger assumes, it is possible to carry out and appropriate some of Stauch's procedures, then documentation fulfills a pragmatic criterion: it can be used by artists versed in lithography as a point of departure for other works. Associated with the *Hands-on* project is the hope for an artistic survival of the documented procedures, which could fan out from the workshop at Eglistrasse to other workshops and inspire a still unknown multitude of lithographic works.

I had already bid farewell to the workshop when, after Stauch and Günzburger, the artist Sabine Schlatter also came to print (and be observed) at Eglistrasse. Subsequently, artists Maya Rochat and Lena Maria Thüring explored her printing experiments. The workshop cycle and the documentation process have been completed. The last type of paper has been recorded, the last term added to the controlled vocabulary. “We have documented everything that can be documented,” Günzburger notes. *Es ist im Kasten*: things are literally in the box or, in film language, “it’s a wrap.”

This box shall be looked into from anywhere in the world, provided the prospective viewer has a computer and Internet access. On the web, an interface of images, sound, text, tables, inventories, with foldout entries and detailed information will open up to the public, enabling a computer-mediated encounter with the people, machines, and materials involved in the printing process at Eglistrasse. This user interface, as it is also called, bears the signature of the commissioned design studio A/Z&T (Astrom/Zimmer & Tereszkieicz) and will be the legacy of the lithography observation project.

What could not be more analog thus ends up in a digital peep-box. Against the background of lithography, whose materiality



and craftsmanship confronted the *Hands-on* project, the orientation to the computer is richly contrastive and consequential: the old and traditional, embossed in lithography as an art form, becomes entangled in the demands of contemporary digitality.

What happened after attention shifted from a site-based artisanal culture to a tethered user interface? For the *Hands-on* team and its everyday business, this initially meant: negotiating with the arts school's IT, which provides the storage capacities for the project website, with the web designers and the programmer, the "infrastructurers" on whom the functioning of the website depends.<sup>63</sup> An infrastructure needs to be built, maintained, and paid for before the project results can be disseminated (and received). Everything required a form that proved usable for the user interface, and questions about the epistemology of documentation were soon followed by ones about IT feasibility. Some of the problems facing the project team shifted from the thought styles and practices of the art field to archiving and digitization discourses, in whose context creating a lithographic print is no longer an epistemological object, but rather a field of application for computer-based solutions.

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<sup>63</sup> Eva Barlösius, *Infrastrukturen als soziale Ordnungsdienste. Ein Beitrag zur Gesellschaftsdiagnose* (Frankfurt a.M.: Campus, 2019), p. 21.

Month after month passes, during which the infrastructure is stabilized and the digital peep-box is set up, rebuilt, and tidied. Finally, the time has come: the documented workshop residencies go online.

The website presents a large number of images of artistic and technical sleights of hand. I remember Wolfensberger's sweeping movements when coating the rollers with fabulous petrol turquoise. Clicking "Rolling on paint" suffices to view this step through the screen filters. A moment in the workshop becomes an enduring photograph, whose significance extends beyond an ephemeral action performed in a workshop; it acquires representational status. On-screen, the colors look somewhat different. There is no longer the smell of solvents and the sound of the high-speed press now emanates from the computer speakers, which convey a digital workshop reality of their own. This reality is well-colored, stripped of dust and dirt.

The spatulas, turpentine container, stones, aluminium plates, sponges, cloths, and all the other material conditions of lithography are represented photographically and with some details on the website. In the multiperspective shots, which viewers may call up subject to their interest in this or that hand movement, this or that actor, and so on, Thomi Wolfensberger and Dominik Stauch appear before me as film protagonists, in

sequences of varying duration that provide material for several evenings of viewing. As I watch the images, there appears, on the screen, the place itself, the workshop. Will these images, in twenty or fifty years, be from another world? From a sphere that will only exist in such detail in the memories of former practitioners, in manuals, and on this website?

The high-speed press at Eglistrasse can still be repaired. The printing materials can still be procured, albeit with some effort.<sup>64</sup> Enough slabs of Solnhofen limestone are still available, which are ground down until they become too fragile for the weight of the high-speed press. The machine runs briskly. Artists who have been printing with Wolfensberger for many years are celebrated for their lithographic works. Adem Dërmaku, who produces his own art in the evenings, often after hours, was recently able to show his work at a solo exhibition in Pristina.<sup>65</sup>

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<sup>64</sup> As early as 2006, Wolfensberger noted: “There are too few and, above all, too few good suppliers of auxiliary materials for lithographic printing. The few printers today are forced to spend a great deal of time procuring suitable chemicals and materials. Individual products that are no longer available have to be replaced by other products with the help of lengthy empirical tests.” See Thomi Wolfensberger, “Lithografische Techniken im Steindruckatelier. Die Verfahren, ihre künstlerische Anwendung und ihre aktuelle Weiterentwicklung,” Diploma Thesis, Zürcher Hochschule Winterthur, 2006, p. 5.

<sup>65</sup> Adem Dërmaku, “It’s Not a One-Way Thing,” Exhibition catalogue (Pristina: Galeria e Ministrisë së Kulturës, 2021). Some of Dërmaku’s works began with materials that are usually thrown away, such as the offset paper that is run through the machine to clean the ink after a completed printing

The representations that the *Hands-on* project has produced are therefore far from having the status of historical material. On the contrary, they are ready for future practitioners and other recipients: artists from various disciplines could devote themselves to the minutiae of gestures and events, if they wish to delve into lithography for the first time or draw on the documented peculiarities of other artists' actions; sociologists of art specializing in discourse analysis would have countless hours of recordings to study the speech acts performed in a workshop; and health scientists might want to use the material to gain insights into the handling of hazardous substances in a "high-risk workplace," as lithographic workshops are classified by the Swiss Accident Insurance Fund.

Beyond such specialized interests, the peep-box is also open to a wide range of viewers, which raises the question of the cultural status of lithography. This site-bound, heavy-duty business is not only shaped by aesthetic traditions or the economics of printing, which extend far beyond the individual workshop; it also interacts with an audience that views, discusses, covets, and keeps alive lithographic techniques and works. By rendering visible the

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process. Recyclage as a mode of creation is where he started in his days as an art student, Dërmaku says. What began as an economic trade-off became a hallmark of his art.

artisanal process, the *Hands-on* project multiplies the possibilities for engaging with lithography, and commits this craft to an exoteric process of reception. This in turn will affect the future of lithography—and also the “ways of worldmaking” (Goodman) that this art form is capable of inspiring.

Will the public also be interested in how the documentation, to be marvelled at, came about? Similar to the finished lithograph, which does not reveal the hardships of its production, what appears in the peep-box bears no sign of its fragile creation. On the website, various facets remain elusive: the futility of capturing hand movements in writing; the search for the most sublime camera shot in the workshop; the countless meetings of the project team; the laborious desk and computer work in whose course the collected material was prepared for its digital abode; the negotiations with the “infrastructurers” who confronted the project with its own technical conditions; the revision of vocabularies, lists, and tables, which increasingly fanned out the inventory of printing processes and brought the *Hands-on* team to the edge of madness.

Do some forms of observation perhaps entail that the more intricate questions arise in the shadow of the visible?

I am reassured that not even a perch can offer an unobstructed view of the confusing things of research and the equally confusing things of art. The “god trick” does not work.<sup>66</sup> And thus, the perch has been stowed away again in some prop room, ready for the next piece.

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<sup>66</sup> Donna Haraway, “The Science Question in Feminism and the Privilege of Partial Perspective,” *Feminist Studies* 14(3) (1988), pp. 575–599, esp. pp. 581 and 589.

## Bibliography

Althaus, Karin. *Druckgrafik. Handbuch der künstlerischen Drucktechniken*. Zurich: Scheidegger & Spiess, 2008.

Antreasian, Garo, and Clinton Adams. *The Tamarind Book of Lithography: Art & Techniques*. New York: Harry N. Abrams, 1971.

Badura, Jens, Selma Dubach, and Anke Haarmann, “Warum ein Handbuch zur künstlerischen Forschung?” In: Jens Badura, Selma Dubach, Anke Haarmann, Dieter Mersch, Anton Rey, Christoph Schenker, and Germán Toro Pérez (eds.). *Künstlerische Forschung. Ein Handbuch*. Zurich: Diaphanes, 2015, pp. 9–14.

Baldauf, Anette, and Ana Hoffner, “Kunst-basierte Forschung und methodischer Störsinn.” In: Elke Gaugele and Jens Kastner (eds.), *Critical Studies. Kultur- und Sozialtheorie im Kunstfeld*. Wiesbaden: Springer, 2016, pp. 325–338.

Barlösius, Eva. *Infrastrukturen als soziale Ordnungsdienste. Ein Beitrag zur Gesellschaftsdiagnose*. Frankfurt a. M.: Campus, 2019.

Bayer-Wermuth, Monika. “Zeitreise zu einem Sehnsuchtsort.” *Zeitschrift für Kulturwissenschaften* 2 (2018), pp. 163–173.

Becker, Howard. *Art Worlds*. Berkeley: University of California Press, 2008 [1982].

Böhm, Bernhard. “Künstlerische Forschung.” In: Monika Wulz, Max Stadler, Nils Güttler, and Fabian Grütter (eds.). *Deregulation und Restauration. Eine politische Wissensgeschichte*. Berlin: Matthes & Seitz, 2021, pp. 250–261.

Bosshard, Andres. “Das fliegende Mikrofon.” In: Departement Kunst & Medien der Zürcher Hochschule der Künste (eds.). *Praktiken des Experimentierens*. Zurich: Scheidegger & Spiess, 2012, pp. 24–39.

Brunner, Felix. *Handbuch der Druckgraphik*. Teufen: Arthur Niggli, 1975.

Daston, Lorraine, and Peter Galison. *Objectivity*. New York: Zone Books, 2007.

Dërmaku, Adem. “It’s Not a One-Way Thing.” Exhibition Catalogue. Pristina: Galeria e Ministrisë së Kulturës, 2021.

Devon, Marjorie, Bill Lagattuta, and Rodney Hamon. *Tamarind Techniques for Fine Art Lithography*. New York: Harry N. Abrams. 2008.

Dohmen, Walter. *Die Lithographie. Geschichte, Kunst, Technik*. Cologne: DuMont, 1982.

Esch, Piet. “Filmkonzept *Hands-on*.” Zürich: IFCAR, 2019.

Fleck, Ludwik. *Genesis and Development of a Scientific Fact*. Translated by Fred Bradley and Thaddeus J. Trenn. Chicago: The University of Chicago Press, 1979/1935.

Fuchs, Siegfried. *Die Lithographie*. Recklinghausen: Aurel Bongers, 1979.

Görlich, Ulrich, and Meret Wandeler. “Fotografische Langzeitbeobachtung Schlieren.” In: Nanni Baltzer & Wolfgang Kersten (eds.). *Weltenbilder*. Berlin: Akademie Verlag, 2011, pp. 203–230.

Günzburger, Michael. *Plots*. Zurich: Edition Patrick Frey, 2012.

Günzburger, Michael, and Lukas Bärfuss. *Contact*. Zurich: Edition Patrick Frey, 2018.

Haraway, Donna. “The Science Question in Feminism and the Privilege of Partial Perspective.” *Feminist Studies* 14(3) (1988), pp. 575–599.

Helmhaus Zürich. *Serge Stauffer – Kunst als Forschung*. Curated by Michael Hiltbrunner. Zurich: Scheidegger & Spiess, 2013.



Hiltbrunner, Michael, and Christoph Schenker (eds). *Kunst und Öffentlichkeit. Kritische Praxis der Kunst im Stadtraum Zürich*. Zurich: Ringier, 2007.

Hoffmann, Christoph, Hannes Rickli, Philipp Fischer, Hans Hofmann, Gabriele Gramelsberger, and Hans-Jörg Rheinberger (eds.). *Natures of Data. A Discussion between Biology, History and Philosophy of Science and Art*. Zurich: Diaphanes, 2020.

Kleesattel, Ines, Knowbotiq, and Uriel Orlow (eds.). *Untooling*. Zurich, 2021.

Knowbotiq and Nina Bandi. *Swiss Psychotropic Gold*. Basel: Christoph Merian, 2020.

Krusche, Jürgen, Aya Domenig, Thomas Schärer, and Julia Weber. *Die fragmentierte Stadt*. Berlin: Jovis, 2021.

Kunz, Peter. *Der Photochromdruck vom Lithostein*. Küsnacht/Zurich: Edition Gilde Gutenberg, 2006.

Medaric, Almira. “Erstellung eines kontrollierten Vokabulars für die Prozesse im Rahmen des Forschungsprojekts *Hands-on*. Dokumentation künstlerisch-technischer Prozesse im Druck.” Praktikumsbericht [Internship Report]. Zurich: IFCAR, 2020.

Orlow, Uriel. “Recherchieren.” In: Jens Badura, Selma Dubach, Anke Haarmann, Dieter Mersch, Anton Rey, Christoph Schenker, and Germán Toro Pérez (eds.). *Künstlerische Forschung. Ein Handbuch*. Zurich: Diaphanes, 2015, pp. 201–204.

Pickering, Andrew, *The Mangle of Practice. Time, Agency, and Science*. Chicago: The University of Chicago Press, 1995.

Polanyi, Michael. *The Tacit Dimension*. Garden City: Doubleday, 1966.

Polanyi, Michael. *Personal Knowledge. Towards a post-critical philosophy*. Chicago: University of Chicago Press, 1974.

Portmann, Andrea, Christoph Schenker, and Daniel Kurjaković (eds.). *Mind the Gap. Kunsthof Zürich: Materialien und Dokumente, 1993-2013*. Zurich: Edition Fink, 2013.

Preisig, Barbara, and Laura von Niederhäusern. "Camera Practices of Doing." In: Barbara Preisig, Laura von Niederhäusern, and Jürgen Krusche (eds.). *Trading Zones. Camera Work in Artistic and Ethnographic Research*. Berlin: Archive Books, 2022, pp. 5–13.

Ray, Tim. "Rethinking Polanyi's Concept of Tacit Knowledge: From Personal Knowing to Imagined Institutions." *Minerva* 47(1) (2009), pp. 75–92.

Rebel, Ernst. *Druckgrafik. Geschichte und Fachbegriffe*. Stuttgart: Reclam, 2009.

Rheinberger, Hans-Jörg. *Toward a History of Epistemic Things. Synthesizing Proteins in the Test Tube*. Stanford: Stanford University Press, 1997.

Rose, Anette. *Enzyklopädie der Handhabungen 2006–2010*. Bielefeld: Kerber, 2011.

Rose, Anette, and Christoph Schenker. "Capture, Record, Play." In: Barbara Preisig, Laura von Niederhäusern, and Jürgen Krusche (eds.). *Trading Zones. Camera Work in Artistic and Ethnographic Research*. Berlin: Archive Books, 2022, pp. 50–69.

Schenker, Christoph, Annemarie Bucher, Kathleen Bühler, Beat Grossrieder, Michael Hiltbrunner, Jürgen Krusche, Christoph Lang, Sascha Renner, Christian Ritter, and Charlotte Tschumi. *Kunst und Bau. Die Hardau*. Zurich: Stadt Zürich, 2012.

Schenker, Christoph. "Wissensformen der Kunst." In: Jens Badura, Selma Dubach, Anke Haarmann, Dieter Mersch, Anton Rey, Christoph Schenker,

and Germán Toro Pérez (eds.), *Künstlerische Forschung. Ein Handbuch*. Zurich: Diaphanes, 2015, pp. 105–110.

Schenker, Christoph. “Projektantrag *Hands-on*. Dokumentation künstlerisch-technischer Prozesse im Druck.” Zurich: IFCAR, 2018.

Senefelder, Alois. Vollständiges Lehrbuch der Steindruckerey enthaltend eine richtige und deutliche Anweisung zu den verschiedenen Manipulations-Arten derselben in allen ihren Zweigen und Manieren belegt mit den nöthigen Musterblättern nebst einer vorangehenden ausführlichen Geschichte dieser Kunst von ihrem Entstehen bis auf gegenwärtige Zeit. Munich and Vienna: Karl Thienemann and Karl Gerold, 1818.

Sheikh, Shela, and Uriel Orlow. *Theatrum Botanicum*. Paris: Les Presses du Réel, 2018.

Sonderegger, Catrina. “Nach allem und nichts graben.” In: Dominik Stauch, *Dig a pony*. St.Gallen and Berlin: Vexer, 2019, pp. 141–142.

Stalder, Felix, Cornelia Sollfrank, and Shusha Niederberger (eds.). *Aesthetics of the Commons*. Zurich: Diaphanes, 2021.

Stauch, Dominik. *Dig a pony*. Œuvre d’artiste. Edited by the Canton of St.Gallen. St. Gallen and Berlin: Vexer, 2019.

Te Heesen, Anke, and Emma Spary. “Sammeln als Wissen.” In: *ibid.* (eds.), *Sammeln als Wissen. Das Sammeln und seine wissenschaftsgeschichtliche Bedeutung*. Göttingen: Wallstein, 2001, pp. 7–21.

Von Niederhäusern, Laura. “Exploring Asynchronic Experiences – Seven Motifs: A *Zettelkasten* as (Filmic) Research Method.” *MaHKUscript: Journal of Fine Art Research*, 4(1) (2020), pp. 1–12.

Wandeler, Meret. “Fotografische Langzeitbeobachtung in Schlieren.” *NIKE Bulletin*, 6 (2016), pp. 28–35.

Weber, Julia. “Herumlungern?! Begegnungsräume an urbanen Orten.” Unpublished Dissertation. Linz University of Art and Design, 2022.

Wolfensberger, Thomi. “Lithografische Techniken im Steindruckatelier. Die Verfahren, ihre künstlerische Anwendung und ihre aktuelle Weiterentwicklung.” Diploma Thesis, Zürcher Hochschule Winterthur, 2006.

Zammiello, Craig, and Elisabeth Hodermarsky. *Conversations from the Print Studio. A Master Printer in Collaboration with Ten Artists*. New Haven: Yale University Press, 2012.

Züst, Mara. “Eine zweite ‘Print Renaissance?’ Verfahren der Steindruckerei Thomi Wolfensberger.” Master’s Thesis, University of Zurich, 2013.

Züst, Mara. *Kolkata. City of Print*. Translated by Linda Cassens Stoian. Leipzig: Spector Books, 2019.