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A Survey of the Photographic and the Filmic in Contemporary Art

Edited by Edgar Lissel Gabriele Jutz Nina Jukić

DE GRUYTER edition: 'AngewAndta

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Edited by Edgar Lissel Gabriele Jutz Nina Jukić

Edition Angewandte Book Series of the University of Applied Arts Vienna Edited by Gerald Bast, Rector

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PREFACE

This book represents the culmination of the three-year international research project RESET THE APPARATUS! *A Survey of the Photo-graphic and the Filmic in Contemporary Art*, which was launched in March 2016 and funded by the Programme for Arts-based Research (PEEK) of the Austrian Science Fund. Hosted by the Department of Media Theory at the University of Applied Arts Vienna, its core team consisted of artist Edgar Lissel, the project's director, along with Gabriele Jutz and Nina Jukić, the key researchers. Partner institutions included the Austrian Film Museum, the Department of Photography at the University of Applied Arts Vienna, and the Department of Photography at Folkwang University of the Arts in Essen.

RESET THE APPARATUS! gathered together film and photography artists and theorists in the hope that together we might come up with a different take on contemporary photographic and filmic practices based on opto-mechanics and/or photo-chemistry-that is, supposedly "obsolete" analog film and photography. Photography and film have more in common than what is frequently cited as what differentiates them, namely, the difference between stillness and movement. Both, for example, were regarded as "new" technologies during the nineteenth century and-at their respective beginnings-were greeted with suspicion as artistic media. Moreover, photography and film shared the same technological base. At the present moment their very existence is under threat due to the proliferation of digital technologies and media convergence. Not to forget, analog photography and film are technological singularities that allow for immediate intelligibility by the user (whereas the digital requires transcoding). This has far-reaching consequences, such as the impact of technological change on the human body and its modes of sensation.

The "User's Manual" in this publication defines the framework of our research. Our enquiry focuses on artistic methods and processes that make clear reference to the material and technological conditions of the photographic and/or filmic and, at the same time, open to an "expanded field" of practice. The terms "photographic" (instead of "photography") and "filmic" (instead of "film") no longer adhere to the respective mediums' technological implementations as we know them, rather they appeal to the concept underlying photographic and filmic practices. As the project's emphasis is placed on deviant uses of media, photography and film are not only addressed as media but also as apparatuses or *dispositifs*, a perspective that broadens the scope and facilitates examination in terms of their operational use. Equally important was to foreground the process of *production*, as opposed to that of reception alone, which is the main issue in traditional apparatus theory. In order to understand the working procedures underlying a respective artwork, a renewed focus on the history of technics and technology also became necessary.

Far from romanticizing the pre-digital/analog past, RESET THE APPARATUS! asserts a critical engagement with the conventional apparatus and reflects the rich potential that can result from artistic practices that modify, repurpose, or even dismantle their own apparatus. The photographic and filmic, as the site of innumerable productive contaminations, not only expand our common notion of photography and film; they also generate insights into the contingent nature of their apparatuses and provoke new forms of artistic production. In the light of today's indulgence in digital media, the return to allegedly outdated media and their apparatuses manifests as a resolute resistance to the norm, thereby fulfilling a critical function, too.

Alongside this book, one of the main outcomes of this research project is the CORPUS, a digital archive of selected artworks. The CORPUS not only provides precise descriptions of the works; it also establishes their typology via TAGS (visit our website, www.resettheapparatus.net/ corpus.html).

This book features a collection of heterogeneous articles and essays that reflect our contributors' activities in relation to the topic of our research. The artworks created by the participating artists over the course of the past three years represent an artistic exploration of the project's topic and are introduced in the section "Partner Collaborations." For these essays each artist (or artist duo) worked together with a theorist, which resulted in innovative forms of collaboration. Taking their point of departure from the artworks themselves, these contributions demonstrate the manifold ways how the apparatus might be "reset." The results range from modified or disassembled 16 mm projectors (Gibson + Recoder-Jonathan Walley) to media archaeological lecture performances (Gustav Deutsch & Hanna Schimek-Hubertus von Amelunxen), from "chlorophyllographies" that exhibit the photographic in biological processes (Edgar Lissel-Barnaby Dicker) to the (re)invention of electro-mechanical television (Gebhard Sengmüller-Andy Birtwistle), a carefully documented "analog" mail exchange across the Atlantic Ocean (Rosângela Rennó—Ruth Horak), and celluloid films that evidence the potential of material agency (David Gatten—Kim Knowles).

Furthermore, we were interested in the idea of how so-called "digital natives" deal with analog photography. This part of our research led to a number of works by a younger generation of artists, students, and graduates, which were created at the Department of Photography at the University of Applied Arts Vienna (headed by Gabriele Rothemann) and supervised by Ruth Horak, and at the Department of Photography at Folkwang University of the Arts, Essen, supervised by Elke Seeger.

Finally, the themes of RESET THE APPARATUS! are "framed" within different contexts: Alejandro Bachmann presents artworks with a direct relation to the cinematic *dispositif*; Miklós Peternák offers an account on Hungarian artists; and Nina Jukić discusses the possibilities of "resetting the apparatus" in contemporary popular culture. A poetic essay, aptly titled "DIS POSITIF ION," by *Sprachkünstler* Ferdinand Schmatz, concludes this volume.

RESET THE APPARATUS! aims to add a new dimension to the profile of arts-based research by offering—as a result of collaborations between artists and scholars—an innovative perspective on contemporary photographic and filmic practices. Together with the digital archive's CORPUS and its TAGS, this book should be of interest to a broad scope of potential beneficiaries, from artistic researchers and artists working in the field to theoreticians, curators, and students.

We are indebted to all of the artists and scholars who accompanied the project over the period of three years in a fruitful partnership and contributed to this book and the digital archive by supporting us with texts and images. We would also like to acknowledge the University of Applied Arts Vienna, which not only provided the relevant resources and infrastructure, but also encouraged this project with its active research culture. Finally, we thank our "critical friends" Barnaby Dicker, Arturo Silva, and Martin Stefanov for their precious and insightful input throughout the research process.

RESET THE APPARATUS! A USER'S MANUAL

Gabriele Jutz, Edgar Lissel, Nina Jukić

When, in 1882, Friedrich Nietzsche began to use a typewriter instead of his usual ink pen, he quickly noticed that the new technical tool was having an impact on his writing style; he thought it had become denser and more telegraphic.¹ In one of his few typewritten letters the German philosopher stated: "Our writing tools are also working on our thoughts" ("Unser Schreibzeug arbeitet mit an unseren Gedanken").² The idea that the technical tools being used are anything but neutral is central to the project RESET THE APPARATUS! Although it is true that the concept of a medium is multifaceted and cannot be reduced to its material/ technological aspects, we pay close attention here to the roles of material and technology in contemporary photographic and filmic practices. One of our main concerns is to demonstrate how allegedly "dated" media-in particular, photography and film based on opto-mechanics and/or photo-chemistry-can serve as access points to contemporary art. Paradoxically, the ascendancy of digital culture has sparked a renewed interest in media commonly termed "analog," not only in artistic fields but in popular culture, too. Hence, our question-what is specific about these media and how do they distinguish themselves from the digital regime?-seems all the more urgent today.

Departing from Nietzsche, who never felt the need to question the standard utilization of his typewriter, our project has a decisive interest in deviant and/or expanded uses of media, in artworks that modify, repurpose, or even dismantle their "home" medium and extend our notion of photography and film—or, to put it more accurately, of the *photographic* and the *filmic*. The adjectival nouns "photographic" and "filmic" instead of "photography" and "film" correspond to our assumption that these media no longer adhere to the material, technical, cultural, institutional, or socio-economic constraints and limitations of their respective mediums, rather they open to other artistic formations and practices. Hence, the broader context of RESET THE APPARATUS! is the expanding field of photography and film in contemporary art, one that transcends narrow definitions of these media. Furthermore, this raises the question of how convergence models of art, which foster permeation between media and encourage expansion, can be reconciled with specificity models of art, which assert each medium's distinctness.3

Interestingly, digital technology's capacity to merge all media has not rendered the concept of a medium "meaningless," as Lev Manovich predicted,⁴ but ushered in a return to medium specificity-convergence's presumed antithesis. Nevertheless, as Jonathan Walley recently noted, "if medium specificity is back with a vengeance, it is also back with a difference."5 Erika Balsom has argued the point similarly: For her, the term "medium specificity" is still useful but has to be reassessed within the context of digitization and media convergence. For a contemporary understanding of medium specificity, it is necessary to give up "the old fiction of the purity of media" and to consider their "interpenetration and contamination."6 Thus, one of the crucial lines of enquiry in RESET THE APPARATUS! is how the boundaries between media are-paradoxically-both dissolved and confirmed. Or, more specifically, we examine how photography and film exceed the confines of their respective media while staying connected to them. This interplay between "expansion" and "contraction" is at the core of Jonathan Walley's 2011 article "Identity Crisis: Experimental Film and Artistic Expansion."7 Unlike Walley, who focuses on expansive tendencies in experimental film in the 1960s and 1970s, the majority of the artworks discussed in our project are more recent and, of course, include photography, too.

Focusing on works that make clear reference to the material and technological conditions of the photographic and/or filmic (without necessarily resulting in "photographs" or "films") does not mean to pit the "old" against the "new." Rather, in our current moment of media transition, the embrace of "new" media and the increasing dominance of the digital make the analog appear as a resolute resistance to the norm. Undeniably, the advent of digital photography and film marks a change in the nature of the medium from the photo-chemical to the algorithmic. But one may consider the analog/digital divide in a different way: As opposed to seeing it as a purely ontological question involving the relation between reality and photographic/filmic artifact, we emphasize instead the relation between artifact and user (be it the artist/producer or the recipient). In this regard, D. N. Rodowick's differentiation between "transcribing" and "transcoding" media proves useful. According to him, the analog mode "transcribes before it represents,"8 whereas the digital mode implies a transcoding process from light into digits or codes (encoding) that precede digital representation (decoding). Building upon Rodowick's distinction, Giovanna Fossati rephrases the analog/digital debate into one about those media that are immediately intelligible for the user and those that require transcoding in order to allow intelligibility.9 Though, in the strict sense, we can only speak of film when the series of still images is

projected, it remains true that on a celluloid print we can always look at the frames even when one does not have a screening apparatus. In other words: The "content" of a celluloid print is immediately comprehensible, as opposed to a film delivered on a hard disk, which completely hides what it contains.¹⁰

For the average consumer it might make no great difference whether the medium of display is analog or digital. For artists working with these media, however, it matters considerably if, let's say, the image can be inspected directly via, for example, a filmstrip, or if it has moved beyond the range of human perception, as in the case of digital files. Artists' choices of particular media are neither motivated by a medium being old or new nor by their ontological differences; rather, it is that certain media are transcoding-free, which makes them appealing. Media that transcribe have the advantage of making creative processes transparent because the artist has direct access to the results. Such media are susceptible to physical intervention, as many contemporary uses of photo-chemical film demonstrate.11 Even the building or modification of the corresponding machines that artists use to make their artworks is to be comprehended within notions of skill and handcraft. Emphasizing the transcoding-free quality of certain media eventually also equates with a turn toward the artist's body, that is, "embodied perception," or simply "embodiment."

Before surveying the rich potential that can result with a "resetting of the apparatus," certain points need clarification, above all, the notion of the medium as well as that of the apparatus, or the dispositif. Next, we must ask the question if filmic practices must be conceived necessarily within the framework of the cinematic or if there is an alternative genealogy that can serve as a reference point. As the artworks discussed here are particularly sensitive to the material and technical aspects of the apparatus, we will underline the importance of a renewed technical history as well as a detailed understanding of the working procedures underlying these works. Then we will look at some examples from the project's CORPUS; these works demonstrate how the spatio-temporal arrangement of the apparatus can be critically reset, its elements replaced, and how "productive contaminations" may occur. The CORPUS-our digital archive of artworks-not only provides a precise description of these works, it also establishes their typology via specific TAGS, which are assigned to groups of works. A detailed survey of these TAGS begins on page 15. Finally, we will discuss how technological change is related to the human body and to its modes of sensation.

MEDIA BETWEEN EXPANSION AND SPECIFICITY

The concept of a medium is based on many parameters, among them its technical, formal, and thematic aspects, cultural practice, socio-economic modes of circulation, and conditions of perception.¹² Depending on the research context, the various parameters that define a medium are in flux with some being privileged over others. What RESET THE APPARATUS! brings to the fore is each medium's technological and material aspects, which are involved in their respective modes of production as well as the specific mode of perception each artistic practice produces.

That media transgress their disciplinary boundaries is anything but new. But the present moment can hardly be compared with earlier manifestations of "expanded cinema"¹³ and what later would be called "expanded photography."¹⁴ The artistic works discussed here are unmistakably reminiscent of their medium of origin by way of their clear reference to their material conditions. Hence, they demonstrate the continuing relevance of thinking about contemporary work in photographic and filmic terms; at the same time, when they mix with other media, they call into question a medium's constraints and open to an "expanded field" of practice.

Expanding beyond material limits and engaging with other media harbors the danger that a medium might lose its independent identity. If the terms "photographic" and "filmic" are to maintain their taxonomic potential and not become meaningless because they could mean anything, their specificity has to be protected against dissolution within the open field of intermedia practices. As mentioned, it is indeed this concern about the loss (in this case) of film's identity that leads Jonathan Walley to suggest a dialectical perspective. The conception of expanded cinema that he proposes "recognizes the interplay between generality (in which differences among art forms dissolve) and specificity (where each art form's distinctness and autonomy are asserted, explored, sustained): between expansion and contraction."15 It is a matter of fact that even today experimental film (with expanded cinema being just one part of it) lacks the high cultural profile of the other arts, and is therefore particularly at risk of losing its identity when it draws upon other media or becomes porous to other art practices.16

But what about photography? Does its expansion also pose a threat to its identity? As framed and wall-bound pictures, photographs can be easily traded like goods, treated as pieces of furniture, or integrated into institutional spaces such as galleries and museums. But the object

THE CORPUS Edgar Lissel, Gabriele Jutz, Nina Jukić

One of the main outcomes of RESET THE APPARATUS! is a virtual collection of selected artworks—the CORPUS—which exemplifies the myriad ways how the photographic or filmic apparatus can be "reset." This archive is constructed around a curatorial concept that groups each work under one or more TAGS, whereby each TAG corresponds to at least one aspect that critically addresses the traditional notion of the apparatus. As opposed to strict, exclusive categories, however, the TAGS should be seen as indications of the many possible ways to view the respective artwork. To convey a fuller picture of our curatorial endeavor, diverse artistic examples from the CORPUS will be briefly described for each TAG on the following pages.¹

www.resettheapparatus.net/corpus.html

of traditional photography already began to transform during the 1920s and 1930s, when the Dadaists and Surrealists merged photographic images with other art forms. During the 1960s photographic practices that mixed heterogeneous media, objects, and materials had to hold their own against institutionalized art photography. Even up to the mid-1980s, the time when Abigail Solomon-Godeau wrote her "Photography After Art Photography,"¹⁷ hybrid practices had not yet found recognition and ascended to fine art status. In sum, the situation that expanded photography finds itself in today is not much different from that of expanded cinema in the 1960s because contemporary artists, when dealing with the concerns of other media in their practice, are "less utilizing photography to recode other practices than allowing the photograph to be recoded in turn,"¹⁸ as George Baker states. When expanded photography is "an object in crisis,"¹⁹ that crisis derives from the fact that it has been swallowed up by other art forms and is no longer recognizable as photographic.

The terms "photographic" and "filmic" promote the idea that the chosen artworks retain specific photographic or filmic elements even when they expand, and thus remain associated with their "home" medium. It should be clear that photography and film's expansion beyond their material boundaries does not necessarily do away with medium specificity; it casts their elements into a new light, one that illuminates them in new configurations.

APPARATUSES/DISPOSITIFS

From a methodological point of view, the concept of a medium has to be complemented with the concept of an apparatus, which addresses the medium in terms of its *use*. The English term "apparatus" covers two distinct French terms, *appareil* and *dispositif. Appareil*—the technical apparatus—denotes the mechanical parts of the machine as well as its flexible and changeable constituents (such as camera roll and filmstrip, for instance); *dispositif*, however, adds to this the relation between the mechanical device and the user and all that this implies. As a relatively stable, fixed arrangement between heterogeneous elements, the dispositif is "a practice with its own distinct protocols,"²⁰ and it is only within a dispositif that a medium's identity fully realizes itself. It is important to keep in mind that the concept of "apparatus"—as used in this project's title oscillates between these two aspects, rendering the technical-mechanical side (the apparatus) more important sometimes, and the relational side (the dispositif) more important at other times.

ARTWORKS UNDER ANALOGITAL Telefunken Digitale 201,

Markus Burgstaller, 2016 Obskur V.1, Eva Maria Dreisiebner, 2017 Vintage Print, Siegfried A. Fruhauf, 2015 Continuization Loop, Wim Janssen, 2010 Save Your Digital Data, Mobileskino, 2005 Distortion, Lydia Nsiah, 2016 Excavate, Christa Sommerer and Laurent Mignonneau, 2012 Ashes, Apichatpong Weerasethakul, 2012 Side by Side, Virgil Widrich, 2017

1 Frau im Mond Georg Luif, 2012 Installation with two parallel projections (16 mm, h/w, digital) Courtesy of the artist

2 Digital Scores I (after Nicéphore Niépce) Andreas Müller-Pohle, 1995 Courtesy of the artist

3 Escape Christa Sommerer and Laurent Mignonneau, 2012 Interactive installation developed for THE VIEW Contemporary Art Space, Switzerland Copyright: Christa Sommerer and Laurent Mignonneau

Nº 1: ANALOGITAL

Digital technologies have been predicted to eventually replace the analog in many fields of culture, especially in film and photography, but today we not only witness efforts to preserve and revive the analog, there is also a growing interest among artists and amateurs to bring the analog and the digital together in new, unexpected ways. "Analogital" is a term coined by Verena Kuni to "mark a broader scope of possible relationships between 'hybrid unions' of analog and digital."²

One such example are Andreas Müller-Pohle's *Digital Scores* (1995–1998), which translate the earliest known photograph by Nicéphore Niépce (1826) into alphanumeric signs and distribute it over eight squares. "The panels, unreadable for the human eye, represent the complete binary description of the oldest surviving photograph."³

The "analogital" can go in both directions, as exemplified by Georg Luif's installation *Frau im Mond* (2012), in which the artist applied the formal elements of *Frau im Mond* (*Woman in the Moon*), one of the last blockbusters of silent film from 1929, to his video game film from 2012. Luif then transferred this digital information onto a 16 mm black and white roll of film, which runs through a projector simultaneously with a digital projection of the original movie.

An unexpected interactivity between an analog interface and a digital image occurs in the installation *Escape* (2012) by Christa Sommerer and Laurent Mignonneau, in which an old film projector was modified to hold a small video projector and some sensor technology. The visitors turn the projector's hand crank—a mechanism typical for early projecting devices—and suddenly the digital image of a fly, which is seen on the screen, starts to move around. As the visitor keeps turning the crank, more flies appear, forming a text.







The term dispositif originated in French film theory in the 1970s. According to Giovanna Fossati, French dispositif theory (usually translated into English as "apparatus theory"²¹) "offers a way of looking at film from a broader perspective than simply as an abstract object of analysis."²² The *film-as-dispositif* perspective allows us to take into account the "situation [...] where the film meets its user"²³ and comprises the particular combination of screen, user, and image. As one of many possibilities of viewing a film within a dispositif that is different from its historical situation, Fossati gives the example of a silent film being viewed on an iPad.²⁴ She argues that it rather depends on the *viewer's awareness* of the specific technical apparatus in place (e.g. film or digital projector) than on the setting if a viewer experiences a different dispositif.²⁵

The dispositif approach facilitates an investigation of media technologies in terms of their use; and in this process the user is not necessarily reduced to only the viewer. To exploit the rich potential of the notion of the dispositif, it is equally important to address the instance of the artist/producer. It remains a matter of fact that, all in all, classical apparatus theory showed little interest in the situation of production and, corollarily, in those works that reveal the trace of their production because that trace is essential to their identity. As our project is artsbased, our aim is to address the concerns of apparatus theory not only from the point of view of the artworks' reception but from that of their production, too.²⁶

Thus, to return to Fossati's argument, in the framework of RESET THE APPARATUS! we can assume that artists are highly aware users and that they can count on an audience that more or less shares this awareness. From an artistic viewpoint, whether an old movie is available on celluloid or as a digital file on a computer screen makes a difference. Detached from the media technologies that used to support it, specific material properties, such as a filmstrip's susceptibility to physical intervention, are lost, properties that once had (and continue to have) an impact on the artist's working processes, procedures, and gestures.

The relational nature of the concept of dispositif highlights the aspect of a particular spatial and temporal *disposition* or arrangement between its heterogeneous elements. Among them are the body of the machine (the apparatus, including its parts) as well as the body of that machine's user (including his/her eyes, hands, and so on). More recent methodological propositions regarding the concept of dispositif, such as those made by François Albera and Maria Tortajada, leave no doubt that the producer as well as the situation of production deserve as much attention as the spectator does—classical apparatus theory's main focus.

ARTWORKS UNDER **BODY INVOLVEMENT** Taschenkino (Pocket Cinema), Gustav Deutsch, 1995 Blutrausch (Bloodlust) Thorsten Fleisch, 1999 Vulva, Paolo Gioli, 2004 Skin Film, Emma Hart, 2005–2007 Pretend to be ein Schienenfahrzeug, Christian Kurz, 2018 Light-Memory, Mnemosyne II, Edgar Lissel, 2007 Sehmaschinen (Vision Machines) Alfons Schilling, 1960s-1980s Escape. Christa Sommerer and Laurent Mignonneau, 2012 Excavate. Christa Sommerer and Laurent Mignonneau, 2012

4 Aliento (Breath) Óscar Muñoz, 1995 Nine silkscreens on metal mirrors, diameter 20 cm each Courtesy of Óscar Muñoz and mor charpentier

5 Das dritte Auge (The Third Eye) Thomas Bachler, 1985 From the series Das dritte Auge, baryta paper, 30×40 cm Courtesy of the artist

b one month on skin – Olena (detail) Olena Newkryta, 2013–2014 Baryta paper, b/w, 50 × 57 cm Courtesy of the artist





№ 2: BODY INVOLVEMENT

Technical media like photography and film usually keep the body at a distance and therefore fulfill the modernist paradigm of *ocularcentrism*—that is, an objective eye seemingly detached from the rest of the body. The TAG "Body Involvement," however, investigates corporeal interactions with the artwork from two points of view: 1. the artists themselves establish a bodily relationship with their material (be it hardware or software, such as photo paper or filmstrip); 2. the viewers become active participants in the artwork's coming into being by physically interacting with the apparatus, instead of merely watching from a distance.



Thomas Bachler's *Das dritte Auge* (*The Third Eye*, 1985), in which the artist's oral cavity becomes the camera, offers an excellent example of how the body can be involved in the making of a photograph. Bachler took self-portraits by facing a mirror with a filmstrip in his mouth, and the slight opening of his lips served as an aperture. In effect, his body photographed itself.

For one month on skin (2013–2014) Olena Newkryta involved not only her own body but also the bodies of her friends, asking them to carry a developed but unexposed piece of negative film close to their skin for one month. Afterwards, she enlarged the negatives onto photographic paper. Through the direct contact between their bodies and the light sensitive surface, each participant became the creator of a unique abstract image.

Aliento (Breath, 1995) by Óscar Muñoz is a series of circular, polished steel mirrors, which likewise turn the visitors into participants by involving their bodies. Each mirror contains a photographic image of a dead person, hidden due to the transparent silicone that the artist used to print the image. The images become visible only after visitors approach the mirror and fog its surface with their breath. Moreover, Albera and Tortajada's concept of dispositif is not limited to cinema. Having in mind the scientific photographic experiments undertaken by Eadweard Muybridge and Étienne-Jules Marey in the late nineteenth century, they conceptualize the experimenter (whether scientist or artist) as the first "user" or "observer," and hence he himself (including the situation of experimentation) forms an integral part of the dispositif.²⁷

The logical next step would be to itemize the elements that the photographic and filmic dispositif encompass. Instead of offering an enumeration, we will describe *how* the heterogeneous elements of an actual dispositif engage with one another. According to Noam M. Elcott, each dispositif tends toward specific and interlocked configurations of *space*, *time*, and the *human body*.²⁸ In order to understand the specificity of each dispositif, one has to identify the spatio-temporal arrangement of those configurations as well as the place occupied within that arrangement by, on the one hand, the artist/producer and, on the other, the viewer. To be precise, one has to distinguish between two dispositifs: a *dispositif of pro-duction*²⁹ and a *dispositif of reception*.

With regard to the dispositif of production and its spatial arrangement, we have to consider the particular set-up the photographic act requires. Conventional cameras are designed and used in such a way that the space in front of the apparatus—usually the object or person being photographed—and the body of the operator are *separated* by the presence of the machine between them. This separation is an essential factor for both photography and film. In temporal terms, production's technical operations are also strictly regulated: roughly summarized, first comes exposure,³⁰ then processing, and finally exhibiting or screening.

With regard to the dispositif of reception, there is a temporal and spatial gap between production and reception. The subjects depicted on the film screen and the bodies of the spectators never share the same time and space. Furthermore, the space occupied by these images is detached from the broader visual field; conventionally, it is flat and dependent on a material support. Finally, the spatial relation between a photograph and its viewer is not fixed and might vary—depending on its context—between distance and closeness. So, for example, pictures of beloved or deceased persons might be touched, caressed, kissed; these "sentimental usages of photography" ("die sentimalen Gebrauchsweisen der Fotografie"),³¹ as Philippe Dubois put it, defeat distance and establish a haptic relationship between viewer and (only the) image. Watching a film, however, excludes direct contact with the screen and is unambiguously determined by distance. Bodily interaction with the apparatus is not only unwanted but straight out forbidden—the reason why Wanda

ARTWORKS UNDER BY OTHER MEANS Text Parts to be Learnt by all Means, Anna Barnaföldi, 2012 Visions of Reality, Gustav Deutsch and Hanna Schimek, 2013-2014 Planfilme (Sheet Films), Philipp Goldbach, 2012-2015 Narciso (Narcissus), Óscar Muñoz, 2001_2002 Carrazeda+Cariri, Rosângela Rennó, 2009 Foto-Bilder (Photo Paintings), Gerhard Richter, 1960s-present No Black in the Shadows, Hessam Samavatian, 2017 Who's Afraid of Blue, Red and Green?, Günther Selichar, 1996-1997

Self-Portrait, Anna Vasof, 2016

Film zeichnen 1–4, Prozesse des Schauens – Überlegungen in Bildern (Drawing Film 1–4, Processes of Looking—Reflections in Images) Hanna Schimek, 2015 An artist book series in four volumes and

The Modern Magician Hanna Schimek, 2016 Two-channel video installation, HD, color and b/w, silent, endless loops, left channel: 0:22 min, right channel: 5:46 min. Camera: Gustav Deutsch. Editing: Lydia Nsiah Courtesy of the artist

8 Film in One Drawing Vadim Zakharov, 2014–2016 Series of drawings of 70 films on black or white paper with pencil, pastels, or charcoal Courtesy of the artist



Nº 3: BY OTHER MEANS

Based on a concept by Pavle Levi, artworks that fall under this research TAG fulfill two requirements: First, they have to be realized with means other than photographic or filmic artistic media; and second, those media must have existed before photography or film were established—for instance, drawing, writing, or performing. According to Levi, the only way to maintain the utopian potential originally contained in any new medium before it becomes standardized is to repeatedly evoke and enact the discrepancy between the medium as a concept—an ensemble of unrealized possibilities and as an actual apparatus—the familiar standardized device we know.⁴

Fiona Banner's *Apocalypse Now* (1997) is one such example. It is a cross-medium translation of Francis Ford Coppola's eponymous Vietnam epic from 1979, which consists of a hand-scribbled single block of text that describes the entire film from the viewer's perspective and measures 17 square meters. Banner's written account can be read as an engagement with scale, handwriting, and narrative.

In her Film zeichnen 1–4, Prozesse des Schauens–Überlegungen in Bildern (Drawing Film 1–4, Processes of Looking—Reflections in Images, 2015) and The Modern Magician (2016) Hanna Schimek having been involved in various projects based on viewing and analyzing large bodies of archival film material—used drawing as an instrument for research and internal communication with her project partners, as an aid to visual memory and as a means for abstraction and observation.



Another example of representing film by means of drawing is the series *Film in One Drawing* (2014–2016), in which Vadim Zakharov hand-draws silent film classics and early milestones of cinema history directly onto the projection screen while the film is running. With a pencil, pastel, or brush he attempts to capture the outlines of what the light of the projector writes on the screen, in a sort of an artistic-archiving process.⁵

In Liddy Scheffknecht's series *Lapse* (2011) sunlight is used as a sculptural material. Incident light casts a shadow into the room shaped by a silhouette attached to the window. This results in an immaterial image of light, which moves through the room and changes its shape, size, and proportions. At one particular moment during the day the sculpted light correlates with an object, in this case a chair in the room. What emerges is an illusion of unity between the object and the projection of light and shadow.









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Liddy Scheffknecht, 2011 Installation, sunlight, black masking tape, chair, shadow variable dimensions Courtesy of the artist

10 Apocalypse Now Fiona Banner, 1997 Pencil on paper, 274 × 650 cm Copyright: Fiona Banner Darkroom Exposed 11 *da-gegen-gehen (going against)* Annegret Soltau, 1977–1984 Series of twelve photo etchings Copyright: Annegret Soltau VG Bild-Kunst, Bonn 2018

Nº 4: DARKROOM EXPOSED

The TAG "Darkroom Exposed" encompasses artworks that make a break with the normative approach to photo-chemical processes in the darkroom and experiment with alternative usages of photographic material. The conventional approach to photography and filmmaking implies strict rules when dealing with exposure, film or paper, and chemistry. However, these very processes can also be freed from their original purpose to bring about a perfect image while remaining invisible, and become the main tools of artistic experimentation instead. Artworks gathered under the TAG "Darkroom Exposed" demonstrate that light-sensitive materials can be employed to reveal the full potential of photo-chemical processes. These works make the process visible and shed light upon otherwise hidden practices.

Richard Tuohy's *Ginza Strip* (2014) is a film created with a "Chromaflex" processing technique, which the author devised himself. The filmstrip is developed in a manner that enables positive, negative, black-and-white, and color sections to be present within the same frame. After the initial black-and-white processing, the film is treated in the light by placing material on the film surface, which blocks or allows chemistry through in subsequent processing.

In his *Lichtmalerei* (*Paintings with Light*, 1980s-present) Martin Holzhäuser experiments with the process of exposing by moving a "light-brush"—a lamp inside a narrow oblong box with variable openings in the bottom, which resembles a squeegee blade used in screen printing—in complete darkness along horizontal and vertical rails over photo-sensitive paper, thus exposing it directly. The process is largely intuitive and the results unpredictable.

The series *Palimsestos* (*Palimpsests*, 1993) by Joan Fontcuberta consists of photograms made on different found paper materials, which were covered with a light-sensitive emulsion. Fontcuberta selected different papers (catalog covers, wrapping paper, etc.) with motifs of nature and then placed real plants and other objects on them, creating a second image layer.

In her series *da-gegen-gehen* (*going against*, 1977–1984) Annegret Soltau uses a needle to scratch the photographic film, expanding the photographic process with a technique reminiscent of etching. She makes a new print after every step. The twelve final images show the gradual erasure of the depicted figure of the artist and culminate in complete blackness. The unique, original photographic negative is usually protected from scratches, but here it is destroyed on purpose and no further copies are possible.























Strauwen reminds us that the "cinema of contemplation" (as opposed to the "cinema of attractions") is based on a strict "look, don't touch" rule.³²

In temporal terms, the act of recording always precedes the final product—photography and film exist *before* consumption. The most frequently mentioned difference between photography and film, the divide between motion and stillness, can also be described in spatio-temporal terms. As Christian Metz stated, the still image "creates one space in another space," its representation is "a point in time that has been frozen."³³ Film, however, is a synthesis of space and time, a temporal sequence where space is always present.

These configurations of time and space, bodies and vision are key features of the standard photographic and filmic dispositif. Concerning the latter, film scholars prioritize the term "cinematic apparatus," which—in the context of RESET THE APPARATUS!—begs the question: Is film really best thought of as "cinema," or can it be regarded as a "standardized" apparatus or dispositif in its own right?

CAN FILM DO WITHOUT CINEMA?

For about a century the experience of film viewing was anchored in the cinema, understood as "projected motion pictures in a commercial, theatrical setting,"³⁴ as Charles Musser put it. The experience of viewing photographs, on the other hand, was always much more scattered: As prints they appear in books or magazines, on postcards or posters or in private albums; they are exhibited in museums or galleries, projected by magic lanterns (long ago) or slide projectors (more recently). Unlike films, photographs are far less bound to a particular place or institution.

"Cinema" has a variety of significations, and assessments of how "cinema" and "film" are related also diverge. The question of when the *cinématographe* (the technical apparatus) became cinema (a standardized dispositif) has been a controversial one in film history. For example, for André Gaudreault the decisive transformation occurred in 1910 with the advent of institutional norms;³⁵ for Tom Gunning it is the emergence of the "narrator system" around 1908;³⁶ whereas Charles Musser proposes the year 1903, when a technological invention, the three-blade shutter which reduced flicker, was integrated within the movie camera and film projector with far-reaching consequences.

As far as "cinema" as a particular location is concerned, the classical theater setting is a contingency that happened to become hegemonic at a certain period. In the early years of the moving image the experience ARTWORKS UNDER DARKROOM EXPOSED Das dritte Auge (The Third Eye), Thomas Bachler, 1985 Manipulations of photographic paper, Marco Breuer, 1990s-present Untitled (Purple), Ernst Caramelle, 2000-2002 Chemigrams, Pierre Cordier and Gundi Falk 1950s-present Zoografías, Joan Fontcuberta, 1994 Rohfilm, Birgit Hein and Wilhelm Hein, 1968 31/75 Asylum, Kurt Kren, 1975 Cubes. Harald Mairböck. 2012–2015 Sunburn, Chris McCaw, 2007-present Marginal Perforation, Olena Newkryta, 2016 one month on skin, Olena Newkryta, 2013-2014 Laundromat-Locomotion, Steven Pippin, 1997 Works with expired photographic paper, Alison Rossiter, 2007-present No Black in the Shadows. Hessam Samavatian, 2017 Untitled (Bildkreis) (Image Circle), Hessam Samavatian, 2016 Shadows, Claudio Santambrogio, 2016-present Nr. 9 nicht fixiert and Nr. 10 nicht fixiert, Ulrich Tillmann 1999 Motion Picture (La Sortie des Ouvriers de l'Usine Lumière à Lyon), Peter Tscherkassky 1984

Autopoiesis, Robert Zahornicky, 1990

12 Palimpsests: Le Jardin d' Hoschedé à Montgeron Joan Fontcuberta, 1993 Photogram treated with selenium on a museum poster with a reproduction of Claude Monet's painting, 53 × 57 cm Courtesy of the artist

13 91.2.1991 Martin Holzhäuser, 1991 Colored light on PE color paper, 100 × 100 cm, Stadthalle Bielefeld collection Courtesy of the artist

14 *Ginza Strip* Richard Tuohy, 2014 16 mm color print, sound, 9:00 min Courtesy of the artist







of film viewing was not tied to a special location. As Noam M. Elcott unequivocally declares, "the cinematic arose wholly independent of film."³⁷ Experimental filmmakers Sandra Gibson and Luis Recoder's statement "film can do without cinema once and for all"³⁸ also attests to the tendency to separate film from cinema.

If there is a standardized apparatus or dispositif against which deviant uses can be measured, it is clearly not the cinematic. Though it is true that the artworks discussed here subvert codified practices, these practices have little to do with the norms established within the context of cinema. Rather than being indebted to a cinematic genealogy, the codes and rules that fuel these artworks' centrifugal forces-their energy to "reset the apparatus"-derive from different kinds of visual motion apparatuses, most of these in existence before cinema was "born." As Tom Gunning explains,³⁹ the step that brought us to cinema was animated images. According to him, an exemplary case of these early animation devices was the phenakistoscope, invented by Joseph Plateau in 1829, a disc that was spun while attached to a handheld stick. The phenakistoscope consisted of "a series of closely related still images of stages of motion; a means of rapidly moving these images; and a means of situating a viewer so that the images are seen both through an aperture and with a shutter that interrupts the view, converting the succession of images into an intermittent series of flashes: flickers."40 Although the phenakistoscope possessed a great number of essential elements of later visual motion apparatuses, it still lacked projection. Projected moving images were only achieved around 1880: Photographer Eadweard Muybridge combined the phenakistoscope with the magic lantern projector in order to project the chronophotographic images of animals and people in motion he had taken with an electrically triggered shutter onto a screen. As Gunning elucidates, this assemblage, which Muybridge called a zoopraxiscope, "brought together three independent apparatuses (the battery of multiple cameras that photographed the series of images; the phenakistoscope disc that revolved the images rapidly; and the lantern that projected them onto a screen)."41

All in all, the genealogy that RESET THE APPARATUS! draws upon is rather indebted to many *different* kinds of early moving image apparatuses than to cinema alone. Though we do not exclude the cinematic,⁴² it becomes evident that there is no single standardized apparatus suitable to serve as the neutral ground upon which a "resetting of the apparatus" can be based, rather a variety of apparatuses; among them, the aforementioned zoopraxiscope, but also, for example, Thomas Edison and William Kennedy Dickson's peep-hole Kinetoscope, or the Biograph company's Mutoscope. All of these visual motion apparatuses,

ARTWORKS UNDER FLEETING IMAGES

Girl on Fire, Tony Lawrence, 2010 Light-Memory, Mnemosyne II, Edgar Lissel, 2007 Decasia. Bill Morrison, 2002 Aliento (Breath), Óscar Muñoz, 1995 Narciso (Narcissus), Óscar Muñoz, 2001-2002 Littoral Drift, Meghann Riepenhoff, 2007-present Latente Bilder, Bastian Schwind, 2016-present 15 Still from burn (Or, The Second Law of Thermodynamics) Bradley Eros, 2004 Single-channel video, 17:20 min (original: projection performance, 8 mm film. 16 mm projector) Copyright: Bradley Eros, 2004

16 Nr. 9 nicht fixiert and No. 10 nicht fixiert Ulrich Tillmann, 1999 Agfa Baryt 111 photo paper, 60 × 50 cm, developed, watered, not fixed, black Molton cloth to cover image Photo: Ulrich Tillmann. Subject: Dodo Jin Ming, Hong Kong 1993 Courtesy of the artist

Courtesy of the artist and Microscope

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Nº 5: FLEETING IMAGES

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In the early history of photography enormous efforts were undertaken to make permanent photographs possible in the sense of being reasonably lightfast when exposed to light. But what happens when the image is not "fixed" and the transience of the image becomes an integral part of the artistic process? There is a number of contemporary artists who are interested in the fleeting nature of photographic images, processed without fixer or only partially fixed, and hence, when exposed to light, enter a continuous process of self-destruction. Furthermore, due to its materiality, the photographic material inherently contains aspects of change, self-dissolution, and impermanence. These "studies in ephemerality," though limited, are often combined with subject matters such as remembering and forgetting, as they drastically demonstrate that photography is far from creating a permanent trace. For instance, Ulrich Tillmann's photographs *Nr. 9 nicht fixiert* and *No. 10 nicht fixiert* (1999) have not been fixed and are presented with a black cloth covering, which is lifted up by visitors upon viewing. With the first rays of light a slow darkening becomes perceptible; however, the process decelerates drastically later on, never reaching complete black.

One filmic example is the projection performance *burn (Or, The Second Law of Thermodynamics)* (2004) by Bradley Eros, in which he "pulls sections of an 8 mm pornographic film by hand through the gate of a 16 mm projector. [...] Segments of the film are held in the gate for us to ponder, until they begin to bubble, melt, split and finally burn up in the heat of the projector lamp."⁶

accomplished with or without projection onto a screen, are clearly not cinema. Nevertheless, as technological practices, they are embedded in a system of conventions and limitations. Moreover, as Charles Musser points out, they "required not only an *appareil* (a technical apparatus) but a *dispositif*—that is a practice with its own distinct protocols,"⁴³ its own rigorous standards and constraints.

The film-related works (here termed "filmic") in our CORPUS make clear reference to the technical/material conditions of filmmaking; likewise, the photography-related works (termed "photographic") reference the technical/material framework of photography. As opposed to "cinematic," the term "filmic" invokes all kinds of visual motion apparatuses; so too, the term "photographic" covers phenomena prior to the invention of photography (or rather prior to the sum of inventions that occurred around the 1830s). While some of the artworks gathered in the CORPUS bring one or more of the essential elements of these technical apparatuses to the fore, others testify to an engagement with the dispositif. In the first case, these elements can be the lens (or aperture) in relation to optics, the shutter in relation to time and duration, or the light-sensitive surface in relation to questions of indexicality, contiguity, and touch.44 In the second case, when the dispositif is exploited, artists not only counteract the standard use of a camera and invent new uses, they also modify existing apparatuses or create their own machinery. In doing so, they remind us that the actual dispositif is a historical contingency. In sum, the framework against which a "resetting of the apparatus" can be measured has to take into account a plurality of apparatuses, each with its own rules and conventions. The cinematic apparatus is only one of them.

MACHINES, PROCEDURES, GESTURES

RESET THE APPARATUS! suggests an invitation if not a request. It prompts a doing and involves a process-oriented approach, as is characteristic of artistic research. Our close collaboration with artists over the course of the project has contributed to a shift in perspective from the finished product alone to foregrounding the process of production.

The very act of "resetting the apparatus" implies a familiarity with machines for artists/producers but also for scholars, critics, and curators in order to understand "how it was done." Before elaborating on the textual and contextual meanings of the artworks in our project, it is necessary to understand how each artist made his or her work. This is all the more relevant given that we are dealing with technical apparatuses.

ARTWORKS UNDER LIVE ACTS Photoshooting, Thomas Bachler, 2011

Spacelength Thought, Rosa Barba, 2012 Lost, Zoe Beloff, 1995 Taschenkino (Pocket Cinema), Gustav Deutsch, 1995 burn (Or, The Second Law of Thermodynamics), Bradley Eros, 2004 Projection performances, Bruce McClure, 1994–present Projections, Bruno Munari, 1950–1953 Reel Time, Annabel Nicolson, 1973 Der Voyeur, Hans Scheugl, 1968 zzz: hamburg special, Hans Scheugl, 1968

17 The Performative Wall Exposure Birgit Graschopf, 2018 Performance at the Museum der Moderne Salzburg, February 7, 2018 Courtesy of the artist

18 Paper Landscape #1 Guy Sherwin, 1975 Expanded film performance with transparent screen and white paint, Super 8 mm projector, color, silent, Super 8, 10:00 min Courtesy of the artist



Nº 6: LIVE ACTS

As exemplified by the artworks compiled under this TAG, media of technical reproduction do not necessarily exclude liveness and performance. The conventional model of photography and film presupposes a finished product; in other words, production and presentation are temporally separate entities. However, this bipartite scheme is not fixed, rather merely a convention, as proven by numerous filmic and even photographic performances, both contemporary and historical. Live cinema has a long tradition dating back to the Dadaists' film performances of the 1920s, and whose ongoing vitality is impressively demonstrated by recent film projection performance. Though still photography plays a decisive role in documenting performances, our interest, by contrast, focuses on photographic processes whose precondition is a public live act—whether on the side of production or on the side of reception—in which the audience turns into an active collaborator.

In Guy Sherwin's live performance *Paper Landscape* (1975 and 2016) the artist stands behind a transparent screen onto which he applies white paint. This white surface makes a projected image of the same artist tearing up a paper screen visible to reveal a landscape behind. The performance progresses until the screen



is entirely covered yet simultaneously uncovered, as the live action gives way to a filmed representation. Finally, the filmed figure disappears into the distance and the performer cuts through the screen to reappear in front of the audience.

Photo-chemical processes can also be turned into live acts, as illustrated in *The Performative Wall Exposure* at the Museum der Moderne Salzburg (2018) by Birgit Graschopf. The artist transformed the auditorium into a darkroom by photo-sensitizing a wall panel, exposing and developing it in front of an audience. The visitors could watch a blank wall surface turn into a picture of the space itself within minutes.

Traditional technological histories of photography or cinema are not very helpful in this regard, for they mainly focus on key transitional moments (the introduction of sound and color as highlights for cinema) and detailed studies of production processes typically remain outside their scope. What is needed is a history of the techniques themselves, as Benoît Turquety, following Lucien Fèbvre and Gilbert Simondon, has intriguingly demonstrated on several occasions.⁴⁵ Such a technical perspective proves useful for a better understanding of the role of users in the transformation of techniques because it gives prominence to overlooked aspects of technological history, such as the ephemeral phenomena of what Turquety refers to as "gestures." His history of filmic techniques views machines as "archives of gestures"⁴⁶ and suggests a shift from more or less *stable* objects to unstable operations, since this level is where the major breaks and ruptures in the technical lineage occur.⁴⁷ For example, removing the emulsion of the image carrier can be done in many ways: by scratching, scraping, perforating, shaving, burning, soaking, or de-collaging it with a variety of tools and agents, including a kitchen knife, sandpaper, a needle, a Brillo pad, chemical substances, cellophane tape, and so on. Another example, which makes us reconsider the gestures involved in a working procedure, is optical machines that are cranked. The presence of a crank, its size and placement on a machine, regulates the distance between the machine and the operator and thus calls for certain gestures, as Turquety explains.48 Each of these operations-removing the emulsion or cranking a handle-requires not only the necessary tools but also the necessary gestures and has its own procedural and aesthetic implications.

Inspiring as Turquety's take on the history of techniques is, we cannot simply adopt it because professional practices (Turquety's main issue) and artistic practices have different technological implications. Professionals tend to respect the norms and standards, whereas artists deliberately transgress them. This transgression, according to Peter Wollen, "can be regarded as a negative act, as infringement of legitimate codes and practices or, in contrast, as a positive act, as exploration of possibilities overlooked within the industry."49 Deviant uses, though not totally absent from professional practices, remain marginal "within the industry," but they are dominant in artistic practices.

"HOW WAS IT DONE?"

Dealing with concrete techniques poses several methodological problems because they present themselves "as essentially non-discursive: objects

LOST AND FOUND Shadow Land or Light from the Other Side, Zoe Beloff, 2000 Wait and See, Françoise and Daniel Cartier, 1998-present Lyrical Nitrate, Peter Delpeut, 1990 Film ist., Gustav Deutsch, 1998, 2002. Vintage Print, Siegfried A. Fruhauf, 2015 Eureka, Ernie Gehr, 1974 Anonimatografo, Paolo Gioli, 1972 Filmograms, Thomas Glänzel, 2017 Sturm (Iconoclasm), Philipp Goldbach, Girl on Fire, Tony Lawrence, 2010 Decasia, Bill Morrison, 2002 Exposure of a Rabbit. Gerda Lampalzer and Manfred Oppermann, 1996 Précis de décomposition. Éric Rondepierre. 1993-2015 Slide Movie, Gebhard Sengmüller, 2006 VinylVideo™, Gebhard Sengmüller, 1998 The Clouds Are Not Like Either One -They Do Not Keep One Form Forever, Viktoria Schmid, 2015 Latente Bilder Bastian Schwind 2016-present Escape, Christa Sommerer and Laurent Mignonneau, 2012

ARTWORKS UNDER

2009

2013

Excavate. Christa Sommerer and Laurent Mignonneau, 2012

19 Gevaert Gevarto 47, exact expiration date unknown, ca. 1960s, processed in 2014 (#37) Alison Rossiter, 2014 From the series *Fours*, gelatin silver print Copyright: Alison Rossiter Courtesy of Yossi Milo Gallery, New York

Nº 7: LOST & FOUND

The artistic works gathered under this TAG enter into a dialogue with the history of photography and film, either as media-archaeological investigations into media apparatuses or by drawing their material from already existing image stocks.

"Lost & Found" addresses these two different aspects: On the one hand, the invention of hardware, where artists explore overlooked or forgotten aspects of our media-technological past. This might result in belated inventions, fake pieces of media archaeology. or re- and deconstructions of seemingly familiar media apparatuses. On the other hand, appropriation refers an aesthetic strategy of reusing pre-existing images. The extensive use, transformation, and re-interpretation of photographic or filmic images made by others as well as carefully selected material from archives are characteristic of this approach. Both invention and appropriation involve memory, recollection, loss, retrieval and rediscovery.

The appropriation approach is exemplified by the installation Rio-Montevideo (2011-2016) by Rosângela Rennó, in which she confronts visitors with 32 slides by Aurelio González, the chief photographer of the daily newspaper El Popular, which were taken before the Chilean military coup in 1973 and had long been considered lost. For the projection, Rennó used 20 slide projectors of varying formats, models, and eras found in flea markets in Rio de Janeiro and Montevideo. Visitors can switch the projectors on and off and decide for themselves how long they want to look at each picture.

In her works with expired, unused, and unexposed silver gelatin paper (2007-present) Alison Rossiter conducts a certain form of media archaeology. The artist prefers materials manufactured prior to 1950 because these early papers offer a broad variety of choices with regard to the emulsion's silver content, the added dyes, coating, tonality, and contrast grade, which all have an influence on the texture and appearance of the images. Rossiter simply develops and fixes (or only fixes) what is already there in the unexposed paper. Her only other intervention with her photo papers is to title them. All of the titles include the name of the paper's manufacturer and the brand, the expiration date as well as the date when the paper was subjected to various processes.

CORPUS 31



When Thomas Glänzel restored a 16 mm black-and-white reversal film from the late 1950s he noticed that the splicing tape had become so dry that it popped off the celluloid. As the glue had absorbed silver particles from the gelatin emulsion, each chip of tape contained fragments of two half frames from the film stills. For Ghost Frames (2018), in what became another example of a media-archaeological approach, Glänzel placed these "contact copies" on glass microscope slides, like those used in medical laboratories. With the aid of a photo enlarger he blew them up into negative prints on photographic paper.



Lost and Found 20 *Ghost Frames* Thomas Glänzel, 2018 13 photographic prints on Ilford Multigrade IV, 24 × 30 cm, splicing tape on glass microscope slides in wooden box

Courtesy of the artist

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Rio-Montevideo Rosângela Rennó, 2011–2016 Installation with 20 slide projectors, 32 digital slides, plexiglass plates and painted iron tables, variable dimensions Installation view at The Photographers' Gallery, London Photo: Kate Elliott Copyright slides shown in the installation: CdF de Montevideo Courtesy of the artist

Material Agency 22 *Kodak* Françoise and Daniel Cartier, 2017 From the series *Wait and See*, unfixed, only Kodak papers, 65 diverse b/w fiber-based expired Kodak papers, 1910–1980, from the artists' collection. Kunst Bezirk Stuttgart, exhibition *Get the Kodak...*, March 24 – April 30, 2017 Courtesy of the artists



№ 8: MATERIAL AGENCY

Matter itself can have an agential dimension and play an active and at times even dominant role in artistic practices. The resurgence of material practices has fostered a variety of unorthodox production methods. For example, external influences, such as water, heat, and weather, or biological processes, or even the human body with its fluids and substances, such as blood, urine, sperm, and spit, can all serve as resources to which the sensitive surfaces of photo paper or a filmstrip can be exposed.⁷ From this perspective, matter is no longer regarded as "'dumb,' 'mute,' 'irrational' stuff on which humans act,"⁸ but as a kind of co-producer. Dealing with active (rather than passive) matter raises the question of materiality and its performative power.

David Gatten's *What the Water Said, nos.* 1–3 (1997–1998) is an example of a mode of producing images (and sound), which is only possible with analog media that "transcribe." At various times and for various durations the artist put unspooled, unexposed, and undeveloped rolls of film stock inside a crab trap and submerged them into the ocean—the images and sounds on the film were the result of camera-less collaborations between the film material, the Atlantic Ocean, and a crab trap. Depending on changing weather conditions and the film stock used, the traces left behind by sand, rocks, shells, and aquatic fauna emerge as abrasions and scratches in different layers of the film emulsion, creating images of various colors and densities.

Another example, *Wait and See* (1998–present) by Françoise and Daniel Cartier, is a series of site-specific installations. The primary concrete medium on display is unprocessed sheets of photographic paper (predominantly black and white), dating anywhere between 1890 and 1980. Outdated and continually exposed to light during their exhibition, these sheets are unstable, ephemeral, and unique (visual) objects that also change their color during exhibition.

For *Domus Aurea* (2005), developed in cooperation with archaeologists and biologists, Edgar Lissel used the propensity of photo-sensitive bacteria to move toward light sources to create an image. A bacterial culture called "Leptolyngbya" was discovered in the excavated site of the Domus Aurea in Rome and deemed responsible for the destruction of its frescoes. Lissel transferred the same bacteria onto a plasterboard moistened with a nutrient solution, and exposed it to the negative image of a ruined fresco for a period of several months. The light-sensitive bacteria oriented themselves to the bright image areas and after several months began to redraw the outlines of the original image. After the plasterboard had dried up, the bacteria remained as relics on its surface.



and sets of objects, gestures, and uses, traditional procedures that may never have been described with words."50 During this project's three years of research we were repeatedly confronted with the situation of trying to understand in detail the working procedures underlying many of the artworks in question. Especially in the case of less documented works, sources regarding detailed technical issues were sparse.⁵¹ Working with the little information we had, lengthy discussions within the team-including making drawings, sketches, or three-dimensional contraptions as well-did not always lead to success. On occasion, we invited artists to present and "explain" their work to us. Innumerable emails were sent to museums, galleries, artists, and rights owners, always asking the same question: "How was it exactly done?" In the end we were largely successful-but in a few cases we simply had to give up. The detailed technical specifications we were looking for went beyond the usual caption indications of format, size, technique, and materials used. For a thorough description of each artwork, we had to grasp the overall logic of all of the materials, machines, and procedures involved as well as the concrete organization of the artist's working gestures. In order to give an introductory notion of how the spatio-temporal arrangement of the dispositif can be reset, how parts of it can be substituted by other parts, and how it can establish alliances with other dispositifs, a small number of artworks from our digital archive will be discussed in what follows.

PATHWAYS INTO RESET THE APPARATUS!

If for decades the photographic and/or cinematic dispositif had been a relatively stable system of relations between heterogeneous elements, the contemporary climate of convergence brings interpenetration and contamination to the fore. In Erika Balsom's words: "The cinematic dispositif that had maintained hegemony for so long [...] has shattered into its aggregate parts, which are now free to enter into new constellations with elements once foreign to it."⁵² The same is true of the photographic dispositif. The adjective "aggregate" used by Balsom refers to the distinct forms in which matter can exist. On the one hand, this metaphor indicates a drastic mutation (from solid to liquid to gas, for instance); on the other, it suggests that even when the order of the particles has changed—by expansion or contraction—the particles themselves stay the same. Applied to the photographic and/or filmic dispositif and the alliances it establishes with other dispositifs, the image of the "aggregate state" is helpful because it reminds us that we have to consider both

ARTWORKS UNDER MATERIAL AGENCY Untitled (Purple), Ernst Caramelle, 2000–2002

- Lyrical Nitrate, Peter Delpeut, 1990 Rohfilm, Birgit Hein and Wilhelm Hein, 1968 80° Celsius, Ulrike Königshofer, 2013
- Decasia, Bill Morrison, 2002 Littoral Drift, Meghann Riepenhoff, 2007–present Précis de décomposition, Éric Rondepierre,
- 1993–2015 Works with expired photographic paper, Alison Rossiter, 2007–present
- Shadows, Claudio Santambrogio, 2016–present *Nr. 9 nicht fixiert* and *Nr. 10 nicht fixiert*, Ulrich Tillmann, 1999
- 23 Domus Aurea Edgar Lissel, 2005 From the Bacterium series (1999–2010), bacteria on plaster on wood board, 60×50 cm Courtesy of the artist

24 What the Water Said, nos. 1–3 David Gatten, 1997–1998 Unexposed b/w and color film stock with soundtrack

Courtesy of the artist





differences and continuities, for certain elements remain constant while others change.

The artworks discussed in RESET THE APPARATUS! alter core aspects of both their own apparatus and their dispositif, negotiate with neighboring dispositifs, and are redistributed in new arrangements. Often combined with a spirit of inquisitive exploration, artists working in this field view the constituents of the dispositif as variables that can be modified—abandoned, multiplied, replaced—at any time and at any point.⁵³

RESETTING THE SPATIO-TEMPORAL ARRANGEMENT

Photographs and films made without a camera are exemplary of how the spatial arrangement provided by conventional photographic and filmic devices can be modified. As noted above, in the standard photographic and filmic dispositif of production the camera separates the operator's body from the subject before the camera. Cameraless photographs and films, however, emerge by way of direct contact between the film material and the artist's hand or other body parts. Even bodily fluids such as blood and spit or living organic matter such as skin are used as a way of producing images.⁵⁴ Not only the artist's body but also the viewer's body can be involved in the production process, where the work is only accomplished when the viewer conducts a certain action or executes a particular gesture.

Regarding interventions in the temporal order of the working process, this is a central element in German artist Ulrich Tillmann's work. His photographs *Nr. 9 nicht fixiert* and *Nr. 10 nicht fixiert* (both 1999) consist of a developed but not fixed positive photograph measuring 80×60 cm and mounted on a board. A dark Molton cloth covers the image. Upon lifting the cloth, the visitor discovers that the—not fixed—photo turns darker and darker. In Tillmann's case, fixing, the final step of process altered. This has far-reaching consequences: The artwork is no longer a stable object and changes each time a visitor lifts the cloth.

Another group of works demonstrates that a photograph is not always a "point in time" and a film not always a clearly discernable "temporal sequence," as Metz insinuated, rather that the temporality of production and display can be changed, condensed, or stretched. Michael Wesely's long-exposure photographs (1997–present) capture and condense time periods of minutes, days, months, and even years into still images. In turn, the stretching of time is intrinsic to Karthik Pandian and

ARTWORKS UNDER Relics

Mothlight, Stan Brakhage, 1963 Some gestalt forms surveyed, and organized into primary structures, on dates between 2001–2011. Site: Loch Ness, Scotland, Gerard Byrne, 2001–present

Moxon's Mechanick Exercises, David Gatten, 1999 Domus Aurea. Edgar Lissel. 2005

Und ich blieb stehen. (Thames, London), Susanne Miggitsch, 2017 Projections, Bruno Munari, 1950–1953

25 00036082-1, Mathers Department Store, Pasadena, 1971 Matthew Brandt, 2013 From the Dust series, gum bichromate print on paper with dust from AT&T building courtyard, 110.7 × 143.7 cm Courtesy of the artist



Nº 9: RELICS

Photography and film are both deemed to be classical media of recording and reproduction. Artworks under the TAG "Relics," however, often bypass these processes by making the object itself manifest, instead of its reproduction, or even by presenting it simultaneously alongside its reproduction. Whereas the photographic image is usually described as a copy or trace of a depicted object, relics can be considered as fragments of reality, capable of bringing something from the real world into the picture plane.

Lina Selander's installation *Lenin's Lamp Glows in the Peasant's Hut* (2011) includes a range of media, from photography to film to analog and digital video, as well as electrical and nuclear energy. The installation features a number of radiographs, traces of nuclear radiation on the stones of Chernobyl, printed on—or burned into—photographic paper. Unlike common photograms, where the light only leaves a trace on the photo-sensitive material, in this case the radiation is still present and will remain in the paper for a long time as a relic.

For the series *Dust* (1998–present), Matthew Brandt "first made reproductions of archival photos showing buildings no longer

in existence and then, when printing them on watercolor paper using gum bichromate, added dust collected from the buildings' former locations to the printing ink as pigment. As a result, the idea that a photograph isn't just a picture but actually contains traces of its subject is augmented with a material dimension."⁹

Photogram (1991, re-enactment 2010) by Zoltán Szegedy-Maszák shows ten identical bottles of mineral water lying on their photograms—the objects and their images are simultaneously present in time and space. "The cylinders filled with water function, on the one hand, as lenses rendering the photogram's details visible; on the other hand, they show a 'moving image' that changes as the observer moves, the effect based on lenticular lenses known from the old 'winking photos.'"¹⁰

Hans Scheugl's *zzz: hamburg special* (1968) is a ready-made film in which a spool of thread is run through the projector so that the moving shadow of the thread is seen on screen. The projector does not project a series of photographic images of an object on a filmstrip, as is usually the case, but the object itself instead. Mathias Poledna's installation 1991 (2010), which consists of a series of 24 large-format slides showing a portrait of a model. The series is derived from a 35 mm film; each of the 24 individual slides originate from one second of footage. Although the running time of the original source material is exactly one second, its exhibition time takes 24 days, with only a single image/frame presented each day. In other words: one second is stretched to 24 days. While Wesely's works might be considered a *filmic* form of photography, Pandian and Poledna's installation bespeaks a *photographic* form of film. Both show how the photographic and the filmic dispositif merge.

Examples of the dispositif of reception, in which the spatial distance between spectator and image is abolished, are rare in contemporary experimental filmmaking. Gustav Deutsch's *Taschenkino (Pocket Cinema*, 1995), however, provides us with an interactive spectator who has the license to touch. In this performance piece Deutsch distributes Super 8 microviewers among the audience in a movie theater. Each person wears a black eye patch over one eye and holds up a small plastic viewer to the other, which contains a 30-second film loop. *Taschenkino* reduces the elemental distance between spectator and image to almost nothing.

Conventional photographic and filmic dispositifs presuppose that production and reception are clearly distinct temporal phases. However, various forms of contemporary live cinema and projection performances that explore the physical properties of film, such as those by Gibson + Recoder or Bruce McClure, are exceptions to the rule. Merging the moment of production with that of reception is less frequent in expanded photography. A particularly complex example in this regard is Edgar Lissel's photographic installation Light-Memory, Mnemosyne II (2007). The viewer enters a darkened room, where thin vertical strips of foil are mounted on a Persbex panel on the opposite wall, their surfaces alternatingly covered with mirrors and luminescent afterglow pigments. Due to the combination of the mirrored strips and a diffuse light source, viewers are first confronted by their own fragmented reflection. Suddenly, a flash of light, coordinated with the viewers' movements, casts their shadow onto the foil strips. These shadows are recorded by the pigments and preserved for some moments. While there is still a sketchy afterglow of the first shadow, new flashes are already being triggered at random intervals. The mirror reflection, as a real time image of the present, lies next to the shadow of the moment just experienced. In this upsetting of the conventional photographic dispositif and its temporal arrangement, the viewers, as they move, take their mirror reflections with them while their shadows remain behind.

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zzz: hamburg special Hans Scheugl, 1968 16 mm, 35 mm, 70 mm, or CinemaScope, any length, b/w, silent Courtesy of the artist

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Lenin's Lamp Glows in the Peasant's Hut Lina Selander, 2011 Installation, continuous b/w HD video (23 min), vitrine (steel, glass, and wood) with 22 radiographs ($90 \times 500 \times 36$ cm) and a stainless steel text plaque (90×50 cm) Courtesy of the artist

28

Photogram Zoltán Szegedy-Maszák, 1991 Object, PET bottles filled with water, photogram on baryta photo paper Courtesy of the artist







27

CREATIVE SUBSTITUTIONS

The list of photographic and filmic works that incorporate processes of creative substitution is long. There are numerous instances in which the mechanical or optical parts of the machinery as well as its basic materials and substances (such as the film material and emulsion) have been replaced. For example, the camera itself can take on various forms, among others: a washing machine, as in Steven Pippin's Laundromat-Locomotion (1997); the artist's mouth, as in Thomas Bachler's The Third Eye (1985); or a self-built assemblage of logs, sticks, leaves, and dirt found in a given landscape, as in Adam Donnelly and David Janesko's Site Specific Cameras (2012-present). These replacements are primarily based on a metaphorical operation, which means that choices are made among similar elements. Bachler's oral cavity, for instance, stands in for the camera obscura-both contain a dark space with an aperture. Less frequently, substitutions proceed metonymically, where the replacement is no longer similar to the replaced object but contiguous to it. Although much larger, the shape of Donnelly and Janesko's fully functional site-specific cameras might resemble "real" cameras, but the materials they are built of have no resemblance to those of which a camera is usually built. Rather, these materials derive from the very site where the camera was built and used. Donnelly and Janesko's camera is metaphorically related to the replaced camera's shape (by way of visual similarity) and metonymically commemorates the actual place (spatial vicinity) as it replaces the camera's usual materials with "site-specific" ones.

Such creative substitutions clearly reference the photographic or filmic dispositif, but they do so in a *conceptual* manner. When parts of the machinery are replaced by non-photographic or non-filmic materials, be it artifacts or natural objects, these replacements appeal to the *concept* or *generative idea* underlying the apparatuses, what Pavle Levi has aptly termed a "conceptual-materialist praxis."⁵⁵ Dealing conceptually with the elemental components of the photographic or filmic apparatus de-emphasizes the importance of that medium's material properties (its concrete realization) in favor of its idea (what we call the "photographic" and the "filmic"), but it does not necessarily result in a purely mental form, as Levi states. Rather than leading to its de-materialization, a conceptual perspective boldly inaugurates the artwork's re-materialization. ARTWORKS UNDER REPURPOSING THE HARDWARE Das dritte Auge (The Third Eve). Thomas Bachler, 1985 Stating the Real Sublime, Rosa Barba, 2009 Shadow Land or Light from the Other Side Zoe Beloff, 2000 Telefunken Digitale 201, Markus Burgstaller, 2016 FILM, Tacita Dean, 2011 Site Specific Cameras, Adam Donnelly and David Janesko, 2012-present Schussbilder (Shotimages). Walter Ebenhofer, 1994-2012 Lightline, Gibson + Recoder, 2011 Continuization Loop. Wim Janssen, 2010 Sunlight Recordings, Ulrike Königshofer, 2014 Brouillard - Passage #14, Alexandre Larose 2013 Räume – Fotografische Dekonstruktionen, Edgar Lissel, 1996-1997 Blue Noise, Lukas Jakob Löcker, 2015 Ameisenkino (Ant Cinema), Johann Lurf. 2009 cubes. Harald Mairböck. 2012-2015 Timing, Dóra Maurer, 1973–1980 Projections, Bruno Munari, 1950-1953 Marginal Perforation, Olena Newkryta, 2016 Laundromat-Locomotion. Steven Pippin. 1997 Sehmaschinen (Vision Machines), Alfons Schilling, 1960s-1980s Paper Landscape, Guy Sherwin, 1975 and 2016 Escape, Christa Sommerer and Laurent Mignonneau, 2012 Excavate, Christa Sommerer and Laurent Mignonneau, 2012 Sun. Claus Stolz. 1995-present

Fulguration #1 (Barack Obama) Julius von Bismarck, 2008 Inkjet print, 50 × 75 cm Courtesy of the artist



Nº 10: REPURPOSING THE HARDWARE

Repurposing the hardware is achieved by modifying the mechanical or optical parts of the technical equipment involved in the making of photography or film—in particular, the camera and the projector—or by replacing them with other tools. This frequently occurs in works that explore cinema's spatiality, be it in live performance or installation. The sheer range of inventiveness with which artists repurpose hardware, bestowing it with new and original functions, is remarkable. Inherent to these inventions is the artists' search for unforeseen results, which are not usually attainable with standard apparatuses. Besides rejecting standardized technical processes, repurposed hardware is also an expression of the artists' refusal to capitulate to the increasing commodification of their tools. It could also be seen as an act of resistance toward the inaccessibility of our digital gadgets' interiors, increasingly hidden from us under flat, shiny surfaces.

A compelling example for modifying the hardware—the 16 mm projector in this case—is Gibson + Recoder's installation *Light Spill* (2005). A take-up reel is removed from the projector, which normally has the role of winding the film that has been shown. Without the take-up reel the projector spills hundreds of meters of celluloid onto the floor. The size of the pile is determined by the amount of film material available (mostly films recently decommissioned by local schools and libraries) and the duration of the installation.¹¹

For his *Cinematographie* (2007, 2009) Philipp Fleischmann positions a custom-built pinhole camera in a forest—a circular structure approximately 30 meters in circumference. Two 16 mm filmstrips sit side-by-side in the camera with their emulsions facing toward the center as well as the outside of the circle. A number of people lift a manual shutter for a short instance so that the space surrounding the construction is imprinted on the two surfaces simultaneously. Rather than being fragmented into single frames, each filmstrip now holds a continuous image. Two 16 mm projectors are tilted when it is projected, and we see an image of space passing by from a specific point in time.

The *Image Fulgurator* (2007–2011) by Julius von Bismarck is a modified analog camera that inverts the normal function of capturing images and becomes a kind of a slide projector. In place of the film, a laser-drilled "image" or symbol on a metallic plate is positioned inside the apparatus. When the device is triggered by the flash of other nearby cameras, it projects the images onto a person or object. As the intervention happens in a very brief, nearly invisible moment, the manipulation only becomes visible later—in photographs taken by journalists, tourists, etc.





Repurposing the Hardware 30 Cinematographie Philipp Fleischmann, 2007, 2009 16 mm film installation. loop. Camera construction (photo: Susanne Miggitsch) and 16 mm filmstrips Courtesy of the artist

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Light Spill Gibson + Recoder, 2005 16 mm film projector, 16 mm film, screen, variable dimensions Celluloid: Tacita Dean, João Maria Gusmão & Pedro Paiva, Rosa Barba, Sandra Gibson & Luis Recoder, EYE Film Museum, Amsterdam, The Netherlands, September 17, 2016 - January 8, 2017 Photo: Hans Wilschut Courtesy of the artists

Scale & Format 32

Ameisenkino (Ant Cinema) Johann Lurf. 2009 16 mm installation. 6×4 mm. 1:00 min loop Courtesy of the artist

33

Untitled (Bildkreis) (Image Circle) Hessam Samavatian, 2016 Installation, photo-sensitive emulsion on latex Courtesy of the artist



Nº 11: SCALE & FORMAT

This TAG features artworks that challenge the industrial standards regarding scale and format in photography and film. Scale is the ratio between the size of the basic material (photo negative or film frame) and its appearance as a print or a projection. As enlargement in scale is the common practice in photography, its potential for artistic exploration is limited, unless the image is magnified to such a degree that its representational quality gets lost. The creative potential of scale also lies in the possibility to challenge filmic standards, whether by stretching the enlargement to its limits or, conversely, miniaturizing the projected image and abandoning enlargement altogether.

The primary characteristic of a film format, whether still or moving images, is its shape and the proportional relationship between its width and its height (aspect ratio). Film formats are industrially produced and thus standardized, and it is exactly this standardization which artists resist against. Unlike photography, which can switch easily between the horizontal landscape format and the vertical portrait format, "the film image has always been biased toward the horizontal."12 Depending on the respective medium, deviations from the accepted format are rare: for example, circular photographic prints or, more general, individually designed formats, manipulating the paper by folding it, or stretching the cinematic image in its vertical axis.

In Johann Lurf's Ameisenkino (Ant Cinema, 2009), a 16mm loop with a reversed lens creates a bright yet miniscule 6×4 mm projection, smaller than the image on the film itself. The palm of a viewer or any object introduced into the light beam of the projector serves as the projection screen. Additionally, a text is displayed: "Assuming that you dig a little deeper into the anthill and discover a cinema—what else would the moving images on the screen show but further ants?"



An example of enlargement in scale is Tacita Dean's installation FILM (2011), commissioned by the Tate Modern gallery in London. Standing 13 meters high, the installation appears as a giant strip of 35 mm film, instantly recognizable through the iconic sprocket holes on either side of the image. The vertical form of the work was the result of a simple but imaginative 90 degrees rotation of a 35 mm anamorphic lens, stretching the film from top to bottom rather than left to right, and thus producing "a portrait format film for a portrait format space."13

We are long accustomed to the rectangle as the typical format of photography-but, in fact, the image that passes through the (round) lens and contacts the film or sensor is actually round. In his work Untitled (Bildkreis) (Image Circle, 2016), with the knowledge of this discrepancy between the "image circle" and standardized photographic formats, Hessam Samavatian cast an oval out of latex, which was then coated with a photo-sensitive emulsion and exposed with an "empty" image circle.

PRODUCTIVE CONTAMINATIONS

Deutsch's Taschenkino, once again, reveals how far the productive mutual contamination of dispositifs can go. Taschenkino owes its origin to the cinematic dispositif in that it is performed in a movie theater and its specific setting (room plunged in darkness, seated body, and so on). Furthermore, the fact that the microviewers are supposed to be touched, looked through, and passed on to the next viewer transforms the viewers into performers and the piece into a live performance. While its temporal mode of the "here and now" pushes Taschenkino in the direction of the dispositif of performance, it also draws upon another, related dispositif, which Noam M. Elcott terms the "domestic." The domestic dispositif is based on images "enclosed in objects" (in this case the microviewer); its signature media range from nineteenth-century optical toys to televisions and other electronic or digital gadgets.⁵⁶ Taschenkino takes its point of departure from cinema and is, at the same time, a radical co-articulation of film, performance, and domestic sculpture. Lissel's Light-Memory, Mnemosyne II, in turn, is a subtle but decisive variation of the photographic image's temporality. The shadow as a moment of the past that continues to glow via delay makes reference to photography, while the mirror reflections are in real time and therefore bespeak another dispositif, whose most salient feature is simultaneity, namely the analog closed-circuit video installation.57

The interactive installation *Excavate* (2012) by Christa Sommerer and Laurent Mignonneau, first shown in a wet, dark cave that served as an air raid shelter during World War II, is also an illustration of revisiting the history of projection. Visitors were given the *Excavate* interface to explore the cave, which consisted of a modified magic lantern equipped with sensors, a computer program, and a micro-projector. When the lantern's light shone onto the humid walls, various dark particles appeared, which looked like isopods that eventually took the form of frightened children's faces. The images of these faces were dependent upon the viewers' movements and how she or he held the lamp. If held still, the images become clearer, if the viewer moved, they disappeared.

These virtual images existed in real time. Spectators and images (seemingly freed from a material support) are united in the same space and time. As Elcott has noted, the precise term to describe such an assembly is "phantasmagoria." Rarely recognized as a fundamental configuration of image and viewer, the phantasmagoric dispositif is, according to Elcott, deeply rooted in media archaeology and has remained surprisingly stable, ranging from the "ghost shows" of the late eighteenth century on to

SCALE & FORMAT Orange Space, Attila Csörgő, 2004 Reduction Print, Gibson + Recoder, 2014 Planfilme (Sheet Films), Philipp Goldbach, 2012-2015 Prototype I (Möbius Strip). Ole-Kristian Heyer, 2015 Naked Ilfochromes, Tamara Horáková and Ewald Maurer, 2003–2005 Remote/8, Björn Kämmerer, 2008 Timing, Dóra Maurer, 1973–1980 Vertical Cinema, project (various artists), 2013, 2017 113. Mariah Robertson, 2012 Der Voyeur, Hans Scheugl, 1968 Motion Picture (La Sortie des Ouvriers de l'Usine Lumière à Lyon), Peter Tscherkassky, 1984

ARTWORKS UNDER

34 FILM

FILM Tacita Dean, 2011 35 mm color and b/w portrait format anamorphic film with hand-tinted sequences, silent, continuous loop, 11:00 min. Installation view Turbine Hall, Tate Modern, London, 2011 Photo: Marcus Leith and Andrew Dunkley Courtesy of the artist, Frith Street Gallery, London and Marian Goodman Gallery, New York/Paris



contemporary video installations and virtual realities⁵⁸ such as *Excavate*. *Excavate* demonstrates that the use of a different technology and/or medium does not necessarily result in a different dispositif. Simple magic lantern slides, where the figures, painted or shot against a black background, are "freed" and projected in a dark environment on invisible screens, are not fundamentally different from the digitally "enhanced" device used in *Excavate*. Unlike Deutsch's *Taschenkino* and Lissel's *Mnemosyne II*, which clearly establish alliances with other dispositifs (performative, domestic, video installation), *Excavate* proceeds in the opposite direction: While technology and media have drastically changed, what remains constant is the dispositif.

WHAT DO CELLULOID MEDIA DO TO US?

What does a "return" to the photographic and the filmic mean in the present medium constellation? Today, as Erika Balsom has pointed out, photo-chemical images represent a "new reservoir of authenticity," whereas "digital media has usurped film's place as the exemplary inauthentic image."59 She goes on to say that "the photo-chemical image is more likely to be aligned with humanity and memory, while the digital image is described using viral metaphors that signal its ability to replicate, as if it possessed an uncontrollable, infectious, and inhuman animus."60 Such discourses are far from being new, Balsom explains, but attest to an unease with innovative forms of reproduction, as was already the case during the nineteenth century when photography and film made their appearance as "new media." But rather than pitting the "authentic" analog image against the "inauthentic" digital image, could they both not be seen, as Thomas Elsaesser recently suggested, "as ever-present resources that filmmakers and artists can deploy as options and possibilities?"61 Many of the practitioners featured in this book seize the freedom to switch between different media, formats, or art forms, or to alter core aspects of the apparatus and the dispositif. Given the fact that intermedia-and "interdispositif"practices are rather the rule than the exception today, an astute awareness of the differences between media and those between dispositifs has become all the more pressing.

The analog-versus-digital debate is not very useful if we want to understand how technological change relates to the body and its modes of perception and sensation. Drawing upon D. N. Rodowick's distinction between "transcribing" and "transcoding" media, Giovanna Fossati introduces the term "isomorphic" for those media that are immediately

ARTWORKS UNDER SITE SPECIFICITY

Screening Room, Morgan Fisher, 1968–present The Performative Wall Exposure, Birgit Graschopf, 2018 Eniaios, Gregory Markopoulos, 1947–1991, present

2'45", William Raban, 1973–1980

35 Site Specific Cameras – Point Reyes, CA Adam Donnelly and David Janesko, 2012 Gelatin silver print from 10.2×12.7 cm negative, 101.6×127 cm Courtesy of the artists



Nº 12: SITE SPECIFICITY

Site specificity seems to go against one of the inherent qualities of photography and film—their circulatory reproducibility. Site-specific works are usually made *and* exhibited in the same space. However, there are some cases—such as photographs with site-specific cameras made out of found materials—where the artwork's place of production and its place of exhibition are separated. Nevertheless, these works can be called site-specific because they show a profound material interrelationship with their location and could not have been made at another place.

In the early 1970s, after his move to Europe, the US-American filmmaker Gregory Markopoulos started developing his vision of an ideal projection space, which he named the Temenos, meaning "a place set apart or a sacred precinct." He found a beautiful spot of nature in Greece near Lyssarea, his father's birthplace, where—and

only there—he felt his work could be adequately shown. He took many of his older films and his newer work and turned them into a single film work, *Eniaios* (1947–1991), which lasts about 80 hours, organized into 22 cycles of two to five hours each. At the Temenos different orders of the cycle are projected over a three-day weekend to whomever takes the time to travel there. The next screening will take place in 2020.

Site Specific Cameras (2012–present) is a collaborative project between Adam Donnelly and David Janesko that combines photography and land art. They build cameras out of materials found in given landscapes and then use them to photograph the landscape. The physical components of the landscape feedback into the character of the camera and final photograph. intelligible to the user as opposed to those that require transcoding in order to allow intelligibility.⁶² For example, a celluloid film print is isomorphic because one can immediately look at its frames. An analog video's magnetic tape, however, would not be isomorphic, as the magnetic signal cannot be directly interpreted as moving images by our senses.⁶³ Fossati concludes that "analog photography and film, in the end, are a technological singularity since they are the only representation systems that are fully transcoding-free and isomorphic with the originating image."⁶⁴

Relating isomorphism to the user (artist or viewer) shifts the debate from ontology to perception. This slight but momentous move is equivalent to a turn toward the user's body and allows us to better grasp the reasons why contemporary artists opt for so-called "obsolete" media today. From this perspective, we might also ask what photo-chemical images do to us when we experience them with our bodies. Such an approach focuses on the affective dimension of art and resonates with recent debates in media theory concerning embodiment. Since the late 1990s "affect" has been a recurring topic within film studies, but it has not had a significant impact on photography studies. It is important to stress, as Jussi Parikka does, that "affect should not be directly reduced to emotion, but instead refers to the embodied, visceral, pre-conscious, but also relational, tuning of bodies of various kinds."65 Andy Birtwistle discusses an artwork's affective dimensions in relation to its materiality. It should be made clear that the materiality of a given medium does not merely reside in its physical substrate. Photographs have a material existence in space, and films take place in space and time, which means that these mediums' concrete spatial and/or temporal aspects also contribute to their materiality.⁶⁶ Photographic and filmic works are not only grasped by a cognitive act alone, they evoke a sensorium of experiences. The working procedures involved in the making of a photograph, for example, appeal to several senses: to the eye, of course (the dimmed light of the darkroom; the visual qualities of the print, its tone, contrast, light, and grain), but also to the sense of smell (the particular, but not always pleasant, odor of the chemicals in a photo lab), to the tactile sense (to identify the front or the back of the material)-in the diversity of the mechanical handling, the position of the hand depending on the respective camera-and even to the ear (the trigger click of the camera). Photo-chemical film and opto-mechanical apparatuses offer unique sensory-and sensual-experiences, which are unachievable with digital means, as Paolo Cherchi Usai's "confession" proves: "There is something depressingly safe, condom-like, in the digital image, and as much as I respect it and realize its creative potential, I cannot really feel anything when I experience it."67

ARTWORKS UNDER STILL↔MOVING Pasadena Freeway Stills, Gary Beydler, 1974 Telefunken Digitale 201, Markus Burgstaller, 2016 Untitled (Zoetrope) #1-13, Liz Deschenes, 2013 Cinematographie, Philipp Fleischmann, 2007.2009 La sortie, Siegfried A. Fruhauf, 1998 Vintage Print, Siegfried A. Fruhauf, 2015 Reduction Print, Gibson + Recoder, 2014 Anonimatografo, Paolo Gioli, 1972 Filmograms, Thomas Glänzel, 2017 32/76 an W + B, Kurt Kren, 1976 Und ich blieb stehen. (Thames, London), Susanne Miggitsch, 2017 Projections, Bruno Munari, 1950-1953 La persistance reptiliénne. Liz Rácz. 2017 Lenticular Photography, Alfons Schilling 1960s-1990s Slide Movie, Gebhard Sengmüller, 2006 Control in Motion, Clare Strand, 2013 Theaters. Hiroshi Sugimoto, 1976-present Outer Space, Peter Tscherkassky, 1999 Long exposure photography, Michael Wesely, 1997-present

36 *Closed Circuit, 2013* Sasha Pirker, 2013 16 mm film installation, 3:00 min loop with Polaroid print Courtesv of the artist

37 Walking Naked, Image 9 Steven Pippin, 1997 From the series Laundromat-Locomotion, twelve sequential photographs, captured on circular paper negatives Copyright: Steven Pippin



Nº 13: STILL↔MOVING

"Still↔Moving" highlights the numerous artistic attempts in photography to assimilate certain aspects of film and, vice versa, how film emulates the photographic. Filmic works that follow the photographic path often accentuate the qualities of the static single frame—for example, Chris Marker's *La Jetée* (1962), which is composed almost entirely of stills. On the other hand, photographs are able to mimic movement when ordered into a sequence of images, as Eadweard Muybridge's studies of human and animal locomotion demonstrate. Interferences between photography and film also address the materiality of these media—think of films printed on paper, for instance, or more generally, the artist's approach and the production method itself, which do not necessarily have to be in keeping with the chosen medium.

Steven Pippin found out that a laundry washing machine possesses all the relevant parts to function as a camera, including a light trap tank for a developing/processing machine, and that he only had to modify its glass front as a lens and shutter device and to add the proper chemicals. Pippin decided to realize his series *Laundromat-Locomotion* (1997) in a public laundromat with twelve converted washers aligned in a row. To shoot a Muybridge-like sequence of photographs he attached cotton trip-wires to each of the machines, which activated each of the cameras whenever something passed them.

In *Closed Circuit, 2013* Sasha Pirker films the gradual appearance of a Polaroid image. The installation draws on chance parallels between the two mediums—a Polaroid photograph takes three minutes to develop, the same duration of a 100 foot roll of 16 mm film. Filming the photo-chemical process allows the temporal regimes

and material substrate of both mediums to merge into a hybrid form, with the original image, displayed alongside the 16 mm projection, creating a tension between still and moving, the original and the record.

37

Peter Tscherkassky's three-minute 16 mm film *Motion Picture* (1984) is the result of projecting a single frame from *Workers Leaving the Lumière Factory* (1895) by the brothers Lumière onto 50 16 mm strips of unexposed film, which were mounted with nails onto a 50 \times 80 cm wooden plate. After processing Tscherkassky edited the film-strips starting with the first strip on the left and proceeding to the right. The film shows the particles of darkness and light that constitute the original Lumière image, emptied of all figurative content.





38 Motion Picture (La Sortie des Ouvriers de l'Usine Lumière à Lyon) Peter Tscherkassky, 1984 3:23 min, b/w, silent, 16 mm Courtesy of the artist 39 Motion Picture (La Sortie des Ouvriers de l'Usine Lumière à Lyon) Peter Tscherkassky, 1984/2008 Installation: object (wood, glass, 16 mm filmstrips), 16 mm loop projection. Installation view Galerie nächst St. Stephan, Vienna, Austria, 2008 Copyright: Galerie nächst St. Stephan / Rosemarie Schwarzwälder The term "materialist film," initially advocated by British film theorist and practitioner Peter Gidal,⁶⁸ has a long history, but it has not been often approached from a contemporary perspective. However, in "(Re)visioning Celluloid: Aesthetics of Contact in Materialist Film"⁶⁹ Kim Knowles maps out a renewed approach to materialism, one which clearly distinguishes itself from earlier manners. Materialist engagements with photo-chemical film today—be it the organic material of the film's body itself or the influence of the external material world on this body—have to be understood in the light of a disembodied digital era. For Knowles, the foregrounding of materials and materiality in contemporary works "demonstrates new forms of embodied knowledge through the sensuous encounter with matter,"⁷⁰—something that has largely gone lost due to digitization.

Affect is not just something an artist expresses through a work, it is produced in the relation between diverse bodies: the body of the artist/ producer, the body of the artwork, the body of the viewer. Many of the artistic examples gathered in RESET THE APPARATUS! question the primacy of the eye in favor of a corporeal involvement in the process of production and reception. In the realm of technical media, keeping in touch with materials and machines, even manipulating them by hand, is an aesthetic, if not political gesture—in its resistance and defiance toward standards—and one that plays against the rules (resets them, in fact) of the conventional apparatus.

 According to Friedrich A. Kittler, Nietzsche's writing "changed from arguments to aphorisms, from thoughts to puns, from rhetoric to telegram style." Friedrich A. Kittler, *Gramophone, Film, Typewriter* (Stanford: Stanford University Press, 1999), p. 203.

2. Quoted in Kittler, p. 200.

- Jonathan Walley, "Materiality and Meaning in Recent Projection Performance," *The Velvet Light Trap* 70 (2012): pp. 18–34, here p. 31.
- Lev Manovich, "Post-Media Aesthetics" (2001), http://manovich.net/index.php/projects/post-mediaaesthetics (accessed on Jan. 26, 2019).

5. Walley, "Materiality and Meaning," p. 18.

- Erika Balsom, Exhibiting Cinema in Contemporary Art (Amsterdam: Amsterdam University Press, 2013), p. 74.
- Jonathan Walley, "Identity Crisis: Experimental Film and Artistic Expansion," October 137 (summer 2011): pp. 23–50.
- 8. D. N. Rodowick, The Virtual Life of Film (Harvard: Harvard University Press, 2007), p. 78.
- 9. Giovanna Fossati, From Grain to Pixel. The Archival Life of Film in Transition (Amsterdam: Amsterdam University Press, 2009), p. 18.
- 10. Frank Kessler and Sabine Lenk, "Digital Cinema or What Happens to the Dispositif?," in Exposing the Film Apparatus. The Film Archive as a Research Laboratory, eds. Giovanna Fossati and Annie van den Oever (Amsterdam: Amsterdam University Press, 2016), pp. 300–310.
- 11. Kim Knowles, "(Re)visioning Celluloid: Aesthetics of Contact in Materialist Film," in *Indefinite Visions*. *Cinema and the Attractions of Uncertainty*, eds. Martine Beugnet, Allan Cameron, and Arild Fetveit (Edinburgh: Edinburgh University Press, 2017), pp. 257–272.

ARTWORKS UNDER TRANSPLANAR IMAGES Sculpture 17 I and Sculpture 17 II,

Saskia Fischer, 2017 Prototype I (Möbius Strip), Ole-Kristian Heyer, 2015 Remote/8, Björn Kämmerer, 2008

No Black in the Shadows, Hessam Samavatian, 2017 Spaceland/Flatland, Clare Strand, 2012

40 Line Describing a Cone

Anthony McCall, 1973 During the 24th minute. Installation view, Into the Light: The Projected Image in American Art 1964–1977, Whitney Museum of American Art, 2001. Photo: Hank Graber Courtesy of the artist

41 Orange Space Attila Csörgő, 2004 Camera (lens, wooden frame covered with paper, revolving parts, AC electric motor, adapter, ca. 80 × 60 × 60 cm) and a spherical image (b/w, spirally shaped photo stripes, diameter 20 cm) Courtesy of the artist



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Nº 14: TRANSPLANAR IMAGES

Transplanar images push the boundaries of the photographic print and the film screening situation beyond the two-dimensionality of the picture surface into a sculptural dimension. They demonstrate an interest in the physicality of the photograph or the film screening by focusing on the spatial quality as the decisive factor. Photographers who experiment with transplanar images withdraw from the realm of the traditional print by introducing a third dimension. In the case of cinematic images the projector's light beam no longer strikes a flat surface (the conventional screen) rather a three-dimensional object, or even becomes physical and occupies space itself.

In the expanded cinema work *Line Describing a Cone* (1973) Anthony McCall explores one of the basic conditions of film: the projection of light. In a completely darkened room, the air thickened by smoke machines, a line of light develops into a complete hollow cone of light over a period of about 30 minutes. "This tunnel-like, seemingly solid volume surrounds viewers who walk into it. McCall's work combines a multiplicity of media, using drawing as its point of departure, film as its means of realization, and sculpture as its result."¹⁴

For his *Orange Space* (2004) Attila Csörgő constructed a unique camera to record the surrounding space on an almost full spherical surface. In the words of the author, he connected two things in the design of the camera: "The conception of space as a sphere, and the approximate rotation of a sphere, its 'peeling' into flat plane. If space is conceived as a sphere, then it can also be peeled, like when you cut the rind of an orange in a spiral. The resulting photo is a two-armed spiral form with an unusual image of the space."

- Arild Fetveit, "Convergence By Means of Globalized Remediation," *Northern Lights* 5 (2007): pp. 57–74.
 The term "expanded cinema" has undergone a considerable shift in meaning during the last five decades, from a very broad, non-specific conception, which included all kinds of multimedia events, to a more nar-
- row understanding of "cinema expanding beyond the bounds of traditional uses of celluloid film." Walley, "Identity Crisis," p. 23. See also: Sheldon Renan, *An Introduction to the American Underground Film* (New York: Dutton, 1967), pp. 227–257; Gene Youngblood, *Expanded Cinema* (New York: Dutton, 1970). 14. As New York's Museum of Modern Art's 1970 exhibition *Photography into Sculpture* demonstrates, ex-
- pansive tendencies in photography are not a recent phenomenon, despite the fact that the terms "photography's expanded field" or "expanded photography" were coined later. Abigail Solomon-Godeau, "Photography After Art Photography," in *Art After Modernism: Rethinking Representation*, ed. Brian Wallis (New York: New Museum of Contemporary Art, 1984), pp. 75–85; George Baker, "Photography's Expanded Field," *October* 114 (autumn 2005): pp. 120–140; Lucy Soutter, "Expanded Photography: Persistence of the Photographic," *PhotoResearcher* 26 (2016): pp. 36–43.

15. Walley, "Identity Crisis," p. 29.

16. Ibid., p. 25.

17. Solomon-Godeau, "Photography After Art Photography."

18. Baker, "Photography's Expanded Field," pp. 122-123.

19. Ibid., p. 120.

- Charles Musser, "When Did Cinema Become Cinema? Technology, History, and the Moving Pictures," in *Technology and Film Scholarship. Experience, Study, Theory*, ed. Santiago Hidalgo (Amsterdam: Amsterdam University Press, 2018), pp. 33–49, here p. 46.
- 21. In the context of 1970s film studies the term "cinematic apparatus" became prominent with so-called "apparatus theory," which tried to elucidate the technological, ideological, and psychological operations involved in the situation of a conventional film screening. Broadly speaking, the apparatus encompasses three distinct components: the technical base of the camera, projector, and filmstrip; the spectator along with his or her "mental machinery"; and the representation, the film itself projected before the viewer onto a screen. Jean-Louis Baudry, "The Apparatus: Metapsychological Approaches to the Impression of Reality in the Cinema," in *Narrative, Apparatus, Ideology*, ed. Philip Rosen, trans. Jean Andrews and Bertrand Augst (New York: Columbia University Press, 1986), pp. 299–318.

22. Fossati, From Grain to Pixel, p. 126.

23. Ibid., p. 127.

24.Ibid.

25. Ibid., p. 129.

- 26. Gabriele Jutz, "Retrograde Technicity and the Cinematic Avant-Garde: Towards a New Dispositif of Production." Recherches sémiotiques/Semiotic Inquiry, eds. André Gaudreault and Martin Lefebvre, vol. 31, nos. 1-2-3 (2011): pp. 75–94.
- François Albera and Maria Tortajada, "Le dispositif n'existe pas!," in *Ciné-dispositifs. Spectacles, cinéma, television, literature*, eds. François Albera and Maria Tortajada (Lausanne: L'Age d'Homme, 2011), pp. 13–38, here p. 16.
- Noam M. Elcott, "The Phantasmagoric Dispositif: An Assembly of Bodies and Images in Real Time and Space," *Grey Room* 62 (2016): pp. 42–71, here p. 55. Our use of these concepts differs from Elcott's use.
 Jutz, "Retrograde Technicity."
- 30. Benoît Turquety also considers "the whole operation of assembling the machine" as part of the dispositif. Quoted from Benoît Turquety, "Forms of Machines, Forms of Movement," in *Cine-Dispositives. Essays in Epistemology Across Media*, eds. François Albera and Maria Tortajada (Amsterdam: Amsterdam University Press, 2015), pp. 275–297, here p. 290 fn 25.
- Philippe Dubois, Der fotografische Akt. Versuch über ein theoretisches Dispositiv (Amsterdam, Dresden: Verlag der Kunst, 1998), p. 121. Translated for this publication.
- 32. Wanda Strauven, "The Observer's Dilemma. To Touch or Not to Touch," in *Media Archaeology. Approaches, Applications, and Implications*, eds. Erkki Huhtamo and Jussi Parikka (Berkeley: University of California Press, 2011), pp. 148–163.
- Christian Metz, "Notes Toward a Phenomenology of the Narrative," in *Film Language. A Semiotics of the Cinema*, trans. Michael Taylor (Chicago: The University of Chicago Press, 1991), pp. 16–28, here p. 19.
 Musser, "When Did Cinema Become Cinema?," p. 43.
- André Gaudreault, Film and Attraction. From Kinematography to Cinema, trans. Timothy Barnard (Champaigne, IL: University of Illinois Press, 2011).
- Tom Gunning, D.W. Griffith and the Origins of American Narrative Film (Champaigne, IL: University of Illinois Press, 1991).

37. Elcott, "The Phantasmagoric Dispositif," p. 52.

 Sandra Gibson and Luis Recoder, Light Spill, ed. Elena Gorfinkel, exh. cat., Art History Gallery (Milwaukee, WI: University of Wisconsin-Milwaukee, 2011).

ARTWORKS UNDER VERY SLOW

Eureka, Ernie Gehr, 1974 Tom, Tom, the Piper's Son, Ken Jacobs, 1969 (revised 1971) 1991 Karthik Pandian and

Mathias Poledna, 2010 *Theaters*, Hiroshi Sugimoto, 1976–present

Long exposure photography, Michael Wesely, 1997–present

42 Slide Movie Gebhard Sengmüller, 2006 Black cube installation, 24 slide projectors, 35 mm film, screen Courtesy of the artist



Nº 15: VERY SLOW

The notion of tempo provides a critical framework for exploring aspects of deceleration in contemporary artworks that offer intense experiences in time and space. Despite the fact that photography can only *represent* but not *reproduce* movement, photographers have experimented with visualizing the flow of time. For example, the calculated use of open shutter techniques, resulting in prolonged exposure times that range from minutes to several years, provides a means to circumvent the frantic realm of homogenized instantaneity. Film as a time-based medium possesses several possibilities for reflecting upon alternate temporalities, for instance by changing the number of projected frames per second, the filming speed, or by adding/copying frames. The installation *1991* (2010) by Karthik Pandian and Mathias Poledna shows one second of 35 mm film footage, but at the extremely low speed of only one frame per day, instead of the standard 24 frames per second.

Gebhard Sengmüller's *Slide Movie* (2006) turns 24 slide projectors into inefficient movie projectors by cutting up a 35 mm filmstrip into its single frames and mounting them as slides, which results in a kind of (s)low-tech film projection. "The formula 'one projector per frame' thus gives rise to something that at least rudimentarily (and inevitably very inaccurately, due to the lack of precision of the mechanical devices) suggests a motion picture. The film soundtrack emerges as a byproduct—the mechanical clattering of the projectors changing slides."¹⁵ 39. Tom Gunning, "Flicker and Shutter. Exploring Cinema's Shuddering Shadow," in Indefinite Visions. Cinema and the Attractions of Uncertainty, eds. Martine Beugnet, Allan Cameron, and Arild Fetveit (Edinburgh: Edinburgh University Press, 2017), pp. 53–69.

40.Ibid., p. 57.

41. Ibid.

42.For example, Alejandro Bachmann's contribution in this volume takes its point of departure from the classical cinematic dispositif. By suggesting that we distinguish between "the filmic" and "the cinematic" we do not mean to exclude the cinematic.

43. Musser, "When Did Cinema Become Cinema?," pp. 45-46.

- 44. David Campany, "Photography, Encore." An essay written for the book *Time Present: Photography from the Deutsche Bank Collection* (2014), http://davidcampany.com/photography-encore, (accessed on Jan. 26, 2019).
- 45. Benoît Turquety, Inventer le cinéma. Épistémologie, problèmes, machines (Lausanne: Editions L'Age d'Homme, 2014); Turquety, "Forms of Machines, Forms of Movement"; Turquety, "On Viewfinders, Video Assist Systems, and Tape Splicers: Questioning the History of Techniques and Technology in Cinema," in Technology and Film Scholarship. Experience, Study, Theory, ed. Santiago Hidalgo (Amsterdam: Amsterdam University Press, 2018), pp. 239–259.

46. Turquety, Inventer le cinéma, p. 23.

47. Turquety, "On Viewfinders, Video Assist Systems, and Tape Splicers," p. 255.

48.Ibid., p. 248.

49. Peter Wollen, "Cinema and Technology," in *The Cinematic Apparatus*, eds. Teresa de Lauretis and Stephen Heath (London: Macmillan, 1980), pp. 14–25, here p. 20.

50. Turquety, "On Viewfinders, Video Assist Systems, and Tape Splicers," p. 243.

51. An outstanding exception in the field of exhibition catalogs is *Light, Paper, Process. Reinventing Pho-tography*, ed. Virginia Heckert (Los Angeles: The J. Paul Getty Museum, 2015). Each presentation of an artist's work is accompanied by insightful "technical notes" written by Marc Harnley and Sarah Freeman.

52. Balsom, Exhibiting Cinema in Contemporary Art, p. 16.

53. Walley, "Identity Crisis," p. 32.

54.Kim Knowles, "Blood, Sweat, and Tears: Bodily Inscriptions in Contemporary Experimental Film," NECSUS. European Journal of Media Studies 4 (2013), https://necsus-ejms.org/blood-sweat-and-tearsbodily-inscriptions-in-contemporary-experimental-film (accessed on Jan. 26, 2019).

55. Pavle Levi, "Cinema by Other Means," *October* 131 (2010): pp. 51–68, here p. 59.

56. Elcott, "The Phantasmagoric Dispositif," p. 53.

- 57. There is a striking similarity between Lissel's *Mnemosyne II* and Dan Graham's *Present Continuous Past(s)* (1974). Graham's closed-circuit installation involves a mirrored room and video equipment. The mirrors give a present time, while the video camera tapes what is immediately in front of it and the complete reflection on the opposite mirrored wall. Via a time-delay mechanism, the image seen by the camera (reflecting everything in the room) appears eight seconds later in the video monitor. The viewer's body is represented both live and on time delay, in mirrors and on monitors. Doug Hall and Sally Jo Fifer (eds.), *Illuminating Video—An Essential Guide to Video Art* (New York: Aperture, 1990), p. 186.
 58. Elcott, "The Phantasmagoric Dispositif."
- Erika Balsom, After Uniqueness. A History of Film and Video Art in Circulation (New York: Columbia University Press, 2017), p. 174.

60.Ibid.

61. Thomas Elsaesser, "Media Archaeology as Symptom," *New Review of Film and Television Studies* 14, no. 2 (2016): pp. 181–215, here p. 201.

62. Fossati, From Grain to Pixel, p. 18.

63.Ibid.

64.Ibid.

65. Jussi Parikka, What is Media Archaeology? (Cambridge: Polity Press, 2012), p. 31.

66. Andy Birtwistle, *Cinesonica: Sounding Film and Video* (Manchester: Manchester University Press, 2010), p. 15.

67. Paolo Cherchi Usai, "An Epiphany of Nitrate," in *This Film is Dangerous. A Celebration of Nitrate Film*, ed. Roger Smither (Bruxelles: FIAF, 2002), pp. 128–131, here p. 131.

68. Peter Gidal, Materialist Film (London and New York: Routledge, 1989).

69. Knowles, "(Re)visioning Celluloid."

70. Ibid., p. 271.

The CORPUS brings together a great diversity of photographic and cinematic practices, which demonstrate a critical engagement with the conventional apparatus/ dispositif. It shows how art-based research puts knowledge into practice and feeds into a virtual collection of artworks. Our aim was to compile an extensive, annotated archive that serves as a useful tool and reference point for scholars, artists, curators, and students.

More artworks can be found at http://www.resettheapparatus.net/corpus.html (accessed on Jan. 18, 2019).
 Verena Kuni, "F (ANALOGITAL)," in *Post-Digital Culture*, eds. Daniel Kulle et al. (Berlin: 2015), p. 2., http://post-digital-culture.org/wordpress/wp-content/uploads/2015/08/kuni_2015_fanalogital.pdf (accessed on Jan. 18, 2019).

- Hubertus von Amelunxen, "Andreas Müller-Pohle Digital Scores," http://muellerpohle.net/projects/ digital-scores (accessed on Jan. 18, 2019).
- 4. Pavle Levi, "Cinema by Other Means," October 131 (2010): p. 67.
- Annette Gilbert, "Quickpieces. Zu den Filmmitschriften des Künstler-Archivars Vadim Zakharov," in Schreiben als Ereignis. Künste und Kulturen der Schrift, eds. Jutta Müller-Tamm, Klaus Ulrich Werner, and Caroline Schubert (Paderborn: Fink, 2018), pp. 59–78.
- 6. Jonathan Walley, "Not an Image of the Death of Film?: Contemporary Expanded Cinema and Experimental Film," in *Expanded Cinema. Art, Performance, Film*, eds. A.L. Rees, Duncan White, Steven Ball and David Curtis (London: Tate, 2011), p. 241.
- Kim Knowles, "Blood, Sweat, and Tears: Bodily Inscriptions in Contemporary Experimental Film," NECSUS: European Journal of Media Studies (2013), http://www.necsus-ejms.org/blood-sweat-and-tears-bodily-inscriptions-in-contemporary-experimental-film (accessed on Jan. 18, 2019).
- Barbara Bolt, "Introduction," in Carnal Knowledge. Towards a "New Materialism" through the Arts, eds. Estelle Barrett and Barbara Bolt (London: I.B. Tauris, 2013), p. 5.
- Thomas Niemeyer, "Matthew Brandt," in Sun on Paper Art/Experiment/Photography, eds. Thomas Niemeyer and Andreas Krase (Nordhorn, Dresden: Städtische Galerie Nordhorn, Technische Sammlungen Dresden, 2016), p. 10.

10. Zoltán Szegedy-Maszák, "Works Concerning Images of Light," http://szmz.hu/images_of_light/works_ concerning_images_of_light.html (accessed on Jan. 18, 2019).

11. Cf. Walley, "Not an Image of the Death of Film," pp. 241–251.

12. David Bordwell, "Paolo Gioli's Vertical Cinema," *David Bordwell's website on cinema* (2009), http://www. davidbordwell.net/essays/gioli.php (accessed on Jan. 18, 2019).

- 13. Tacita Dean, "FILM," in catalogue for the exhibition *FILM*, October 11, 2011 March 11, 2012 (London: Tate Publishing, 2011), p. 16.
- 14. Gabriele Jutz, "Anthony McCall," in *Open Spaces, Secret Places. Works from the Sammlung Verbund, Vienna*, ed. Gabriele Schor (Brussels: BOZAR Books and Vienna: Sammlung Verbund, 2016), p. 108.
- 15. Gebhard Sengmüller, "Four Media Archaeological Artworks," in *Interface Cultures. Artistic Aspects of Interaction*, eds. Christa Sommerer, Laurent Mignonneau, and Dorothée King (Bielefeld: Transcript, 2008), p. 280.

PAR T NER S

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PARTNER COLLABORATIONS

PARTNER COLLABORATIONS 61

GIBSON + RECODER— JONATHAN WALLEY



TOWARD A CONCEPTUAL REMAPPING OF THE CINEMATIC: EXIT THE CINEMA IN ORDER TO FOLD IT BACK ON ITSELF (RESET THE APPARATUS!)

Text: Jonathan Walley

"The project (if we can call it that) is to question the 'expanded' cinematic forms that argue in favor of a certain crisis and perhaps overcoming in the concept of medium-specificity. What we desire is nothing more, and nothing less, than to inhabit the concept of medium specificity as if it had never been inhabited before."

Gibson + Recoder¹

INTERMITTENCY / TRANSPARENCY

Intermittency runs through cinema from the molecular to the global scale. The movement of film through camera and projector is intermittent; the opening and closing of the shutter is intermittent. The flow of electricity—into the camera, projector, lights, popcorn machines, movie marquees, digital devices—is intermittent. The illusion of movement is the result of intermittently visible still images that are, themselves, intermittent samplings of real movement. There is evidence that our own visual system might work similarly, sampling visual stimuli from the outside world discontinuously, or "discretely," even though those stimuli are imprinted upon the retina continuously so long as the eye is open. Cinema articulates schedules both tiny (the infinitesimally small oscillations of alternating current) and massive (the life cycle of a reel of film, or of "a film," or one's habitual return to a film one loves).

The first theory of cinema's illusory movement, "persistence of vision," in effect denied the intermittency of the "moving" image. The theory said, in essence, that retinal afterimages fill in the intermittent interval between frames, holding the first frame until the next one arrives, bridging the gap of darkness between those frames just as they bridged the gaps of distance or position between an object in one frame and the same object in the next. The arc of movement—say, of a waving hand or a train pulling into a station—implied by a sequence of still frames is limned by the lingering of those frames on the retina. The gaps filled in, movement can happen. Xeno's arrow makes it to the target.

The debunking of persistence of vision, which has had to be done over and over again, restored intermittency to the cinematic image. Neither the intervals between light (shutter open) and dark (shutter closed) nor between one static frame and the next are sewn up—closed—by retinal afterimages. Though the mechanics of the process remain invisible, cinema's intermittency can at least be "seen" now that the blur of superimposed retinal afterimages has been wiped away.

page 61 *Candle Projector (Projektor 2000 Project)* Gibson + Recoder, 2017 16 mm film projector, candle, valise, 81.3 × 38.1 × 30.5 cm Courtesy of the artists and AIR Krems

right Stacked Shutters (Projektor 2000 Project) Gibson + Recoder, 2017 Ink on paper, glass frames, 10.2 × 91.4 × 91.4 cm Courtesy of the artists and AIR Krems



The filmic image is characterized by degrees of transparency. If the film is utterly opaque, there is no image. If it is totally transparent, there is "no" image except for an undifferentiated field of white light. Hollis Frampton and Robert Smithson, in different ways, imagined every frame of every film ever made superimposed into the "eternal rectangle" of pure, unmodulated white light, total transparency; Smithson, revolted by this, retreated to the dark of his "Cinematic Atopia."² Across the filmic frame are fluctuations between varying levels of transparency and opacity. Transparency is a spatial analog of intermittency.

RE-PROJECTION

One way to describe so-called "expanded cinema" forms is as attempts to enlarge and/ or exteriorize the often very small, almost always invisible workings of the cinematic apparatus (whichever model of "apparatus" a given filmmaker has in mind). The projected image in any film is both an enlargement and externalization; the earliest film viewing systems—the Mutoscope and the Kinetoscope, for example—did not utilize projection. Spectators, one at a time, peered through a viewfinder at the surface of the photographic medium itself, its frames visible, one at a time, through an aperture. The joining of projection to cinema brought these interiors outside the machine, through the air, onto the screen.

One step in standardizing cinema exhibition was to seal the projector away into a booth, mitigating the sense of exteriority by putting the machine "back inside" and reorienting spectators' attention to the projected frame and nothing else (lights dimmed, audience made to be quiet, edges of frame softened and masked): that is, placing attention back into a box.

Expanded cinema has, among other things, looked to restore exteriority to cinema, often reclaiming projection as, precisely, a "casting out." This expanded cinema schema delineates a set of conceptual moves geared toward restituting what, for the moment, we shall mark as the "cinematic conditions of exteriority."

The joining of the magic lantern to cinema in the Cinematograph exteriorizes the earlier joining of celluloid to cinema in the Kinetoscope—as if the jointure of each and every new paracinematic condition of exteriority in the history of the medium eternally returns to the camera obscura, so as to further chisel away at its primordial condition of interiority. The camera obscura is an instance of introjection, or what Sandra Gibson and Luis Recoder have called "world projection," bringing the outside world inside through a tiny aperture, a model of the eye itself. And, paradoxically, a model of vision by intromission, contrary to the reigning notion of vision by emission—eyebeams casting out over the world's surfaces and casting them back to the perceiver—long held despite the camera obscura's existence for centuries.

Power Cord Gibson + Recoder, 2017 Vinyl tubing, galvanized steel wire, hardware, 81.3 × 45.8 × 66 cm Courtesy of the artists and AIR Krems









The project of exteriorization reverses and reprojects the internalized or introjected ray of nature's exteriority in the camera obscura back onto the outside world it pictures. If we follow the logic of exteriority all the way through, we would be forced to observe that our ever-expanding universe of so-called social media facilitates the consummation and end of any and all conditions of exteriority, the endgame of our projective imaginary of exteriority. Total transparency in such an over-exposed world is by no means "imageless" rather a new and startling image of the absolute in the deathly guise of the algorithmic sublime.

Neither intermittency nor transparency are "material" in the simple sense of "physical stuff" (i.e. celluloid, camera, lens, screen). Nor are they uniquely, or specifically, filmic or cinematic, as they are characteristics of countless other objects and processes. If anything, they are probably reducible to mathematical equations, or at least numerical measurements; any precise description of any particular instance of intermittency or transparency requires specificities like frames per second, hertz, image density curves, and the like. Their habitation of cinema, of the cinematic apparatus, is what Pavle Levi has evocatively named a "ghost in the [cinematic] machine, bringing together thought and technology, conceptual and mechanized labor."³ Levi's own example is the Latham Loop, not an object but an arc in space—only apparent when film is threaded through camera or projector. Though not as "specific" as the Latham Loop, intermittency and transparency are also measurements, articulations of space (and time), and at once conceptual and material—as when they "materialize" in cinema's machines.

Medium-specificity in any given medium works to specify not so much the medium per se but a specific dimension of meaningful experience flaring up and flickering in the intermittent transparencies projected therein between matter and idea. Moving image machines, then, are not necessary for a project of externalizing cinema's intermittency and transparency, of "projecting" these concepts—qualities, shapes, forces—out. Other objects or actions, quite outside the parameters of a moving image medium, will also work. Or we can isolate the tiniest, seemingly most irreducible mechanical part of such a medium—a spring in the projector—and locate it not in an exploded view of the machine (as in an operator's manual) but in a conceptual map of cinema, reprojected onto the nuts and bolts of the film machine.

GIBSON + RECODER

page 66 *Slim Line*

page 67

left

Hardware

Gearhead

Gibson + Recoder, 2017

(Projektor 2000 Project) Gibson + Recoder, 2017

attachment, hardware, 38.1 × 50.8 × 28 cm

(Projektor 2000 Project)

Gibson + Recoder, 2017 Film projector hardware,

(Projektor 2000 Project)

Gibson + Recoder, 2017 Film projector hardware, $15.2 \times 15.9 \times 17.8$ cm

(Projektor 2000 Project) Gibson + Recoder, 2017

Mechanism

 $18.4 \times 11.4 \times 7$ cm

16 mm film projector, acrylic cylinder, hardware, $35.6 \times 106.7 \times 30.5$ cm

Courtesy of the artists and AIR Krems

Film projector motor, optical sound

Courtesy of the artists and AIR Krems

Sprocket Assembly and Miscellaneous

Courtesy of the artists and AIR Krems Lamp Housing and Oil Absorbent Felt Strip

Courtesy of the artists and AIR Krems

Cogwheel Assembly and Intermittent

Film projector hardware, 21 × 8.9 × 5 cm

Courtesy of the artists and AIR Krems

The reprojection of a conceptual map of cinema onto the film machine itself is precisely the direction of Gibson + Recoder's nearly two-decade itinerary, especially with the more recent installation work. Their large-scale camera obscura installations *Topsy-Turvy* (Madison Square Park, NYC, 2013), *Obscurus Projectum* (Exploratorium, San Francisco, CA, 2016), and *Interviews* (Denison University, Ohio, 2016) take the camera obscura as the prototype for an "intermittentless" cinema in which the "negated" intermittencies


of Jean-Louis Baudry's cinematic apparatus can be critically contemplated and even reintroduced, beginning with the intermittent nature of the viewer navigating within the viewing space itself, literally breaking in and out of space so as to rupture the cinematic continuum. Anthony McCall, on his own variation of the camera obscura *Long Film for Ambient Light* (1975): "we ourselves are the division that cuts across what is essentially a sliding scale of time bases."⁴

Their works with the 35 mm changeover system *Stations of Light: Installation for Two Movie Theaters, One Audience, and Musician* (International Short Film Festival Oberhausen, 2014) and *Tense Nature: The Changeover System* (C.A.T.E., Chicago, 2017) spread across two movie theaters with an audience in constant flux, remapping the conceptual play of interiority/exteriority onto the film machine (projectors) and apparatus (theater, audience).

Electric Shadows (Milton Art Bank, Milton, PA, 2017) introduces, or externalizes, the intermittency of electricity, another force of (cinema's) nature, totally transparent (as in, invisible), made exterior. Gibson + Recoder re-imagine electrical current as a model for the sliding scales of intermittency running from invisibly small to invisibly—too big to see—large:

"Artworks that run on electricity and are intermittently turned on and off in compliance with a museum or gallery's exhibition schedule seem to beg the question whether their status as artworks undergoes a certain disequilibrium in the constitution of their spatiotemporal currency. Can you imagine that the artificial light works of major artists such as Dan Flavin, Keith Sonnier, and Jenny Holzer are switched on and off, day in and day out, to comply with museum exhibition hours worldwide? Can you imagine a permanent installation of fluorescent or neon light works at a prestigious art foundation flickering in and out due to a power surge or blackout? Can you imagine a light blowing out and a technician attending to the 'problem' while viewers eagerly await for the incandescent resuscitation of the artwork?"⁵

Filmmakers can certainly imagine this latter scenario of the projector bulb burning out, the film vanishing, the audience "eagerly awaiting" the "resuscitation" of the image made of light. But also of darkness—the temporarily out of order projector ("Technical Difficulties – Please Stand By") eventually re-lit—is conceived here as producing longer intervals between light and dark, between transparency and opacity, between one image and the next.

Candle Projector (2017), a modified 16 mm projector whose bulb the artists have replaced with a votive candle, also implies this expansion of intermittency. Candlelight is often described as "flickering," though the rhythms of flicker, and of each candle burning out and being replaced by a gallery attendant, are slowed down and opened up. *Knot Wire* is one of several works in *Electric Shadows* made of steel wire inside vinyl tubing shaped into a tortured series of curves, which passes out of one wall of the gallery to pass immediately into another, analogous to the intervals of on/off that the artists track from the intermittency of electrical current to the gallery's viewing schedule.

Alternating Current Gibson + Recoder, 2017 Ink on paper, 35.6 × 28 cm and Slim Line Gibson + Recoder, 2017 (see page 66 for specifications) Courtesy of the artists and Milton Art Bank

page 70

page 71 Candle Projector (Projektor 2000 Project) Gibson + Recoder, 2017 16 mm film projector, candle, Plexiglas plinth, 96.5 × 33 × 33 cm Courtesy of the artists and Milton Art Bank

right *Electric Shadows* Gibson + Recoder, 2017 Exhibition installation view Courtesy of the artists and Milton Art Bank



The projector model of *Candle Projector* is a Siemens 2000. During a residency in Krems, Austria, Gibson + Recoder disassembled the projector, piece-by-piece, generating an entire body of work based on this model. The Siemens 2000 features a variable shutter assembly with three different positions, three shutters in essence. It is a projector that literally exposed itself as an intermittent apparatus in the sense that it invited constant disassembly, reassembly, and modification. Intermittency in this case shades off into transparency—the exploded view of the projector, rendered in this case as an exhausted periodic table of the projector, and of projection itself: various shutter arrangements, stenciled and watercolor images of the shutter assembly, stacked frames; small found sculptures "discovered" in the act of disassembling, including the intermittent mechanism, cogs, lamp housing, etc.

Gibson + Recoder's ink on paper series, *Alternating Currents*, renders the ideas of intermittency and transparency on paper, the multicolored vertical ink lines criss-crossing, intersecting in an image of alternation. As a painted work on paper resonating with filmic and cinematic objects and installations in the same space, it recalls Paul Sharits's colorful film scores, exhibited adjacently to isolated filmstrips or "locational" film installations. Sharits's cinematic ontology was dualistic—cinema was at once an object and projection event, solid and weightless, with cinema ontologically "oscillating" between these two states in all its forms and elements, including light itself, at once particulate and wave-like: that is, intermittent and continuous, a solid (rectangle of light on screen) and a transparency (the beam through the air). His *Inferential Current* (1971), the basis for the later multi-projector installation *Soundstrip/Filmstrip* (1972), was an investigation of various types of movement in film, including the intermittent motion of filmstrip and apparently continuous movement of that strip's (illusory) image. Like Sharits, Gibson + Recoder are mapping the material, rhetorical, and conceptual terrain of cinema, in some instances casting off the medium entirely though retaining its conceptual shadow.



1. Gibson + Recoder, "Performative Contradictions," Millennium Film Journal 56 (autumn 2012): p. 58.

- 2. Hollis Frampton, "A Lecture," in On the Camera Arts and Consecutive Matters: The Writings of Hollis Frampton, ed. Bruce
- Jenkins (Cambridge, MA: MIT Press, 2009), p. 125; Robert Smithson, "A Cinematic Atopia," Artforum (September 1971): p. 53.

3. Pavle Levi, Cinema by Other Means (Oxford: Oxford University Press, 2012), pp. XI-XII.

4. Anthony McCall, "Two Statements," in *The Avant-Garde Film: A Reader of Theory and Criticism*, ed. P. Adams Sitney (New York: Anthology Film Archives, 1987), p. 253.

5. Gibson + Recoder, *Electric Shadows* [exhibition press release and artist statement], Milton Art Bank, PA, August 11 – October 7, 2017.

Knot Wire Gibson + Recoder, 2017 Vinyl tubing, galvanized steel wire, hardware, 38.1 × 22.9 × 28 cm Courtesy of the artists and Milton Art Bank

ROSÂNGELA RENNÓ— RUTH HORAK

FROM R TO R AND BACK, AGAIN AND AGAIN... A correspondence between Rosângela Rennó and Ruth Horak.

Summer 2018: Rosângela and I begin sending letters to one another as a means to approach the topic RESET THE APPARATUS! Rosângela had caught our attention, above all, with a project in which she came across a collection of 50,000 negatives¹ with political relevance for Uruguay. In turn, she projected them back into the collective memory with an "army" of old slide projectors "to provoke the spectator's senses." (RR) To escape from our digitally overdesigned everyday in a similar fashion, I bought an old typewriter for our correspondence—a German DM 4 from 1938—and began compiling initial observations about the material quality of analog applications, about noises, machines, and corporeality. I sent fresh lavender from my garden along with the mail, which triggered a first exchange: We wrote about decay and the imprint that the plants leave on paper, about the lavender oil that Nicéphore Niépce used to wash out the first photographs in the world—and the fragrance of the lavender perfume that Rosângela coincidentally bought on the same day still emanates from the archive box to this day: "I was always moved to respond to you with elements that couldn't be transmitted by the Internet or to suggest experiences to you that couldn't happen differently, like being taken by the smell." (RR)

Rosângela responded to an "analog spam" in the form of diverse flyers from Art Basel, on the one hand, by painting

over them, on the other, by sending me a selection of nine invitation cards to her exhibitions, which had been printed over the course of 30 years when it was still common to personally hand them out to people or to send them by mail. The stamp "O grande Jogo da Memória," added after the fact, prompts us to play with memory. Stamped and postmarked, the cards set forth on their journey across the Atlantic from three different post offices—Largo do Machado, Copacabana, and Laranjeiras—and all reached their destination 10,000 kilometers away the same day.

Our reactions to one another and our loose associations-about the "monkey of the inkpot" (El mono de la tinta), early CD gimmicks like a sun symbol representing the power of the people, stars embossed on film developer canisters, Kodachrome slides with a paper frame, a Mac-Mania Magazine-the only magazine for Mac computer users in Portuguese-from the early 2000s when Apple computers were hardly affordable in Brazil but in great demand, about stereotypical labels for photo albumswhich aimed to illustrate a RESET THE APPARATUS! against the backdrop of an increasingly immaterialized world, were abruptly interrupted by the fire at the National Museum in Rio de Janeiro on September 2, 2018: The disappointment about the incompetence of the responsible parties and the outrage about the loss of the cultural heritage of 20 million objects "that will be impossible to reset" (RR) impelled Rosângela to singe the mail and send me the smell of the burnt: "Destruction by burning is a concept that is only applicable to real objects and docs." (RR)

On the following pages we offer insights into our correspondence—again loosely associated and scanned in which we attempted to establish a "connection to a material world"² with its physical conditions. Of course, it would be impossible to represent and/or transcribe everything that was involved in the act of opening the envelopes and discovering what was inside. These were actions that cannot be repeated or emulated. They have become part of our own personal collection of memories.

Aurelius Gonzáles brought this inventory from the editorial office of the communist newspaper *El Popular* to safety and hid it before the 1973 Uruguayan coup d'état.

Andreas Spiegl, "Anatal and Digilogue Photography: Different but Indistinguishable," PhotoResearcher 19 (2013): p. 12.

Schwadorf, June 6th, 2018





LOVRENC KOSIA (forme Austria Hungary) is seed to be one of the inventors of adhesive

portmarks in 1885

To: Rosangela Renno Subject: Reset the Apparatus!

Dear Rosangela,

using a typewriter points out the phymical conditions of writing and the physical condition of paper. It is a noisy act on a roughrunning machine. In Microsoft Word one cannot chose between different papers. and copy-paste has no chance here.

A regular mail is not only about the content of the words and sentences like an electronic mail. On a screen everything has the same glassy surface, whereas a letter supplies us with additional experiences, it is haptic and about time, about slow-down, about travel and distances. 10.000 km between Rio and Vienna.

This wifference was a spaly to visages was welly

LETTERS REPRESENT MATERIAL AND TIM ET, A CONNECTION TO A MATERIAL WORLD. (Andreas Spiegl)

This difference does apply to images as well. W.J.T. Mitchell differs between the necessarily material quality of the PICTURE and its contrast to the intangible 'intellectual property' that maybe be extractable from an IMAGE. Fictures are dependent upon their physicality. Hidden negatives come into being in form of projected positives.

Spiegl mentions: In medial situations, what happens is not there: only the medium - the camera, the monitor, the mobile telephone is material; the motif is immaterial.

Images cannot be destroyed, pictures can.

An e-mail can be deleted, a letter can be rumpled... noisy again. A photograph can be shared or printed. Maybe it is time for new terms to comprehend the difference between photographic images and photographic pictures, at least for the German language...

'Reset the Apparatus!' suggests: The making of anartwork involves the body of the artist... as well as the mechanical parts of the machinery.

Kind regards from this guiet summe rnight,

Jup



Dear Rosangela,

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ion and in Kept their

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Cold and New

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together with mother

I hope you'll enjoy This new exprisence. Needless to say what is

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LUCH WAR RY

WE WE CHARL POLL

nodre

it was a great pleasure to receive your letter. I waited until everybody had left home and only then opened it - "in aller Ruhe", as we say in German, nobody disturbing me. I was surprised that you sent my letter back to me together with your answers - but of course, we are used to it. We are used to have the whole history of our conversation "attached" because Email-software-engineers have suggested that this could be useful... And in fact we are used to have all information always and immediately at hand.

And I was surprised how the lavender looks like! As you already mentioned it is astonishing how it doubled - the traces / imprints left on the folded paper are nearly as intense as the rotten plants themselves! And the lavender really has changed its colour! I suppose it doesn't like to travel far distances at least not squeezed between papers. All lila changed to the brown of decay. Some smell still remains - or is it your perfume that has spread in my whole house? Luckily you did preserve both: the vanished color and the vanished smell. When I look the word lila up - the dictionary suggested "lavendar" as one possible translation. In German there is the word fliederfarben coming from the Flieder (lilac). And in fact when I opened your letter I was in the garden and realized that after the spring blossom of lavender the new lilac in garden comes from the buddleia or summer lilac. The colour is very similar and both attract hundreds of butterflies.

But coming back to lavender: did you know that lavender oil was one of the first substances that was used to develop photographs? Nicephore Niepce washed out his asphalt-images with lavender oil and turpentine. Friends of mine - Pascal Petignat und Martin Scholz - engaged in Niepce's early experiments. They assumed that it is for sure that there have to be several stains of different substances at the floor in Niepce's house le Gras. A amongst them definitely the oil of lavender. In case they would not find any stain, I gave them two test tubes to make their own stains...

On Friday, the day I opened your letter, there was a special astronomical occasion: a total lunar eclipse. When I read about your perfume Halo Lunar, your description of the big winter moon in Rio saw your painted-black-cards with their round shapes highlightening the ironical image of the first footstep on the moon (interpreted by Jojakim Cortis & Adrian Sonderegger) I immediately decided that they have to come with me to see the so called blood moon. I send you some photographs with your moons at Neusiedlersee, but you cannot see the real moon - it was rather small and dark that night - only the last image was shot after midnight when he has recovered again from earth's shadow. And I took another moon with me that I found at home. As most of the visitors were kind of disappointed that the spectacle was not that remarkable, their reaction was funny, when they watched me photographing: "Ah, that's clever, you brought your own moons with you!"

RCH ATU AK .UG ACH OD JFT UG DU IND ÂN RÜH INT EISI ME SIE STE ALI JGO RAN **JRF** OST US' REU

Another thing that affected me was your embossing tool! *The feel of the surface of different materials* is the element of all not-digital appearances that strikes me most! Amongst them touching an embossed emblem is very special. As we are familiar with it from coins, we connect it with value. Not for nothing there is again the same term used for *the coin* meaning money and *the coin* as process of embossing a shape in a flat surface. One of my favourite objects in my small collection of photographic paraphernalia is an old developer tank from Kodak. The reel where films were loaded onto has a wonderful embossment, a six-corner star with three axis. I did a frottage from it for you. Maybe it was there because work in darkness is not eye-minded but haptic...

And to come back to the world of perfumes – at the airports the big players of the perfume industries have special cards, again embossed... I took some of them with me in spring, but they have lost the smell in the meantime.

And I am sending you another sheet that I found in between my collection – it was sold together with a plane photo album, dating from the beginning of the 1990les when it still was usual to store and arrange photographs in albums. In this list of words that were meant to introduce the different chapters or label the album itself, you can find all topics that were important for an average European photographer ... traveling to "Yugoslavia" (that was split after the Yugoslav War in five countries and was one of the main holiday places for the Austrians besides Italy), marrying, moving to a flat or building a house, founding a family, and being interested in nudes ("Aktaufnahmen"), cars and planes...



tenoon, M





Summer 2018: Rosângela Rennó and Ruth Horak begin sending letters to one another as a means to approach the topic RESET THE APPARATUS! — with elements and experiences that couldn't be transmitted by the Internet. On the extreme left, a page of Rosângela's book *Río-Montevideo* (Centro de Fotografía de Montevideo, 2015), which was on Ruth's desk, showing one of the 20 slide projectors she used in her installation in Montevideo in 2011.

The fresh lavender from Ruth Horak's garden: Its smell was transformed on the 20,000-kilometer journey to Rio and back, its shape and color as well; in exchange it has left distinct imprints on the paper. Rosângela Rennó complemented its scent with a perfume, derived from the same lavender, but synthetic and industrial. Nicéphore Niépce used lavender oil and turpentine to develop his first photographs, the first imprints of nature.

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A loose formal association: Another page from *MacMania* from the early 2000s with an accompanying shareware CD representing a sun along with the caption "Power to the People." Fixed on top of it, a real magnetic disk, taken from an old diskette. Both storage disks are obsolete today, gone like the Soviet era... Underneath, the star as a symbol on a historical film developer canister by Kodak. To the left, a page from a book by Rosângela Rennó documenting the performance/auction *Menos-Valia* [*Leilão*], realized with 73 objects from the universe of photography, all found and purchased in various flea markets for the São Paolo Biennial in 2010.

The correspondence was abruptly interrupted by the fire at the National Museum in Rio de Janeiro on September 2, 2018. The disappointment about the loss of 20 million objects "that will be impossible to reset" (RR) impelled Rosângela to singe the mail and send the smell of the burnt: "Destruction by burning is a concept that is only applicable to real objects and docs." (RR)

At the beginning of the 1990s plain photo albums were sold together with lists of topics that were representative for the average European photographer. Rosângela Rennó glued the whole sheet to a *MacMania* advertisement showing a (supposed) topless Brazilian indigenous beauty, adapted the German list of European holiday destinations with "Brasilien," and added Kodachrome slides (not readable anymore), which were sold in souvenir shops along with postcards at that time.

Nine invitation cards to Rosângela Rennó's exhibitions, which were printed when it was still common to personally hand them out to people or to send them by mail. The stamp "O grande Jogo da Memória," added after the fact, prompts us to play with memory; similarly, the colored circle segments were glued on later to encourage Ruth Horak to play (and puzzle).

GEBHARD SENGMÜLLER-ANDY BIRTWISTLE

BIG PAUL: THE DEATH OF VIDEO AND THE RETURN OF THE REPRESSED

Text: Andy Birtwistle and Gebhard Sengmüller

"I believe viewers would rather see an actual scene of a rush hour at Oxford Circus directly transmitted to them than the latest in film musicals costing £100,000."

Gerald Cock, BBC Director of Television, 1936.¹

The first feasible idea for how a moving image could be broken down into lines and frames, and thus prepared for electrical transmission, was developed in 1883 by the Berlin baker's son and signal engineer Paul Nipkow (1860–1940). His patented Nipkow Disk enabled electro-mechanical television for the first time in history, and in an astonishingly simple way. In the transmitting device a focused beam of light shines through holes arranged in a spiral on a rotating disk. This scans the image object line by line with the resultant moving point of light. The number of holes in the disk corresponds to the number rotating disk. This scans the revolutions per second of the perforated disk determines the number of scanned images per second. A start rotating disk. It his scans the revolutions per second of the perforated disk determines the number of scanned images per second. A photo-electric cell of image lines produced, and the revolutions per second of the perforated disk determines the number of scanned images per second. A photo-electric cell measures the fluctuating brightness that is reflected from the scanned object, transforming the reflected light into an electrical signal with continuously measures the fluctuating brightness that is already the complete television signal, is then transmitted through an electrical signal with continuously measures the incomment of the continuously with the complete television signal, is then transmitted through an electrical conduit to the television variable strength. This flow of current, which is already the complete television signal, is then transmitted through an electrical conduit to the television variable strength.

receiver The received expression of non-standard by the camera signal and flickers in time with the photocell reading the image. Through from behind by a light source hyperantifying glass, the moving image of the scanned object now appears the holes in the disk, and enlarged by a magnifying glass, the moving image of the scanned object now appears. The receiver device is built exactly like the camera: A second Nipkow Disk with the same rotation speed and arrangement of holes is illuminated

Whereas representation of the succeeded in constructing a functional mechanical television system with a camera and screen based up 26 the Scottish inventor John Logie Baird succeeded in constructing a functional mechanical television system with a camera and screen based up 26 the Scottish inventor in the two provides the televisor. By the end of the 1930s, however, developments in the second screen based by the second screen based of the 1930s. on Nipkow's idea. Baird called his invention the Televisor. By the end of the 1930s, however, developments in electronic scanning had rendered on Nipkow's idea. Baird called his invention the Televisor. By the end of the 1930s, however, developments in electronic scanning had rendered Whereas Nipkow only sketched out this idea in the nineteenth century as a possibilityand was never able to implement it practically—in

on Nipkow's idea. Barrd cancer in 5 for consigned in most accounts of the medium to history. Nipkow's invention a dead technology, consigned in most accounts of the medium to history. With the installation *Big Paul* Gebhard Sengmüller takes a fictive detour along the path of media history and constructs a Televisor for modern times. *Big Paul* is a functional electro-mechanical television system, which retains the original Nipkow Disk but enlarges it to a diameter of 1.5 meters, thus substantially increasing the number of transmittable image lines and therefore also the achievable image resolution. This means that for the first time a system of television is created which retains Nipkow's original idea but allows it to function in contemporary quality. At the same time, the installation shows an apparatus that—like cinema film and the phonograph, but unlike electronic television—can be comprehended and immediately experienced by the viewer.

be comprehended and minicourse, it is a comparatuse of the second by a short length of cable. Each consists of a large, rapidly rotating disk Big Paul features two nearly identical apparatuses connected by a short length of cable. Each consists of a large, rapidly rotating disk protected by a steel cage, and each disk has 240 small holes bored into it and arranged in a spiral. One apparatus forms the camera and transmitter side of the installation, the other the receiver and screen side. Technically Big Paul largely follows Baird's original Televisor, and although the Nipkow Disk is extremely enlarged and the number of lines of video increased, the original manner of generating and rendering images is retained. Here a beam of light shining through holes on a rotating disk scans the face of an exhibition visitor standing in front of the transmitting apparatus. A photo-sensor generates a signal that passes to the receiver apparatus through a cable. A second in front of the transmitting apparatus through a cable. A second difference to the historical model is the much more defined image and the seemingly unrealistic size of the installation. Yet this system visitor, looking through the rotating disk on the receiver, sees a small but high resolution live image of the transmission. The main is also as transparent as possible and set up to be looked into, so that its basic mechanism is revealed

Sengmüller's media archaeological reanimation of mechanical television can be seen to make a critical intervention in contemporary art practice at a particular moment in the evolution of video's identity. Although *Big Paul* makes no direct reference to cinema, the significance of its reclamation of a dead form of television can be usefully understood by situating it within a contemporary audiovisual environment, in which cinematic modes of representation of a dead form of television can be usefully understood by situating it within a contemporary audiovisual environment, in which cinematic modes of representation of a dead form of television can be usefully understood by situating it within a contemporary audiovisual environment, in which cinematic modes of representation form of television can be determined forms of visuality unique to video. Writing in 1996 on the differences between cinema and video, John Belton are in the process of omedia are defined, in part, by their relationship with one another. Furthermore, he argued, this relationship is characterized by its proposed that the two media are defined, in part, by their relationship with one another. mutability:

[T]he existence of cinema forces us to rethink our notions of video [...] this mutual codefinition is a continuous process; it takes place over time, [T]he existence of currents were place of film and video is constantly changing. What they mean at any given point in time is the product of the and, as a result, our understanding of film of the orduct of the unique relationship of each technology not only to the other but to a field of different representation formats that is itself constantly changing.²

At certain points in history distinctions between television and cinema, and film and video, may appear to have been clearly defined, and within At certain points in more for a second of the part ontological essences can be seen to have motivated the pursuit of "film as film," as well as the focus on medium and art context an interest in the focus on medium. an art context an interest of the early video work of the 1960s and 70s. In an age of media convergence, however, such disfinctions may no specificity that marked much of the carly video work of the ablurring or blending of two formerly disfind and inviting te specificity that marked much we witness what appears to be a blurring or blending of two formerly disfinct audiovisual forms. Hence, television longer be so easily drawn, as we witness while the phrase "the end of celluloid" signals cinema's widespread adoption of video technology. Within has become increasingly cinematic, which refers us to the early history of television, also returns us to Belton's observation that the medium of this context Sengmüller's work, which it remesents are all subject to change and always have been 1f the mode. his context sensitive of it, and what it represents are all subject to change and always have been. If the most recent of these mutations has video, our understanding of it, and what it represents are all subject to change and always have been. If the most recent of these mutations has video, our understanding of the analog and the digital technology, it does not follow, however, that these are best understood through reference to a simplified distinction between the analog and the digital. Rather, notions of media convergence and specificity might usefully be considered by way of the evolving relationship between cinematic and televisual forms of visuality and their respective modes of representation. And it is this relationship that *Big Paul* illuminates through Sengmüller's pursuit of an alternative (and fictive) history of television, resulting in what might be described as video's "return of the repressed."

might be described as a reserved with a dead technology for the twenty-first century, Sengmüller's *Big Paul* uncompromisingly foregrounds Resuscitating and reanimating a dead technology for the installation, and its sheer mechanical presence, confront the viewer in the material apparatus of video image production. The scale of the installation, and its sheer mechanical presence, confront the viewer in a way that makes the apparatus supporting the transmission and reception of video images highly visible and audible, territorializing the a way that makes the apparatume of the material technology of image transmission competes with the video image itself for the space in which the work is installed. Here the material technology of image transmission competes with the video image itself for the viewer's attention. In a phenomenological account of human-machine relations the philosopher Don Ihde expresses the commonly-held view that technology works best when it effaces itself, suggesting: "the better the machine the more 'transparency' there is," in the sense that "it itself does not become objectified or thematic."³ In *Big Paul* Sengmüller engineers the opposite effect, relocating the hardware that. "it itself does not become objectified or thematic."³ In *Big Paul* Sengmüller engineers the opposite effect, relocating the hardware

top John Logie Baird demonstrates a prototype of his mechanical television system (1924). Copyright: Daily Herald Archive / National Science and Media Museum / Science & Society Picture Library

bottom Baird Televisor, 1929 (replica by Denis Asseman, 2008) Copyright: Auction Team Breker, Cologne, Germany, 2018

page 96 A Successful Attempt To See By Wireless Illustration by George Horace Davis, from *The Graphic* magazine, published February 28, 1925. The illustration explains John Logie Baird's mechanical television system.

of media technology to the foreground of the viewer's perceptual experience. As Sengmüller explains, the media mechanism that normally provides the media mechanism time for the spectacle, we have a set of the oversized Nipkow disks, and also by the intense and inescapable mechanical drone that this effect is achieved, in part, by the mesmerizing rotation of the oversized Nipkow's invention becomes a lethal niece of the set of the overating. In Sengmüller's hands Nipkow's invention becomes a lethal niece of the set of the se fills the gallery when the installation is operating. In Sengmüller's hands Nipkow's invention focusing wholly on the image produced, as is installations. This factory aesthetic serves to further heighten the viewer's awareness of television potential health and safety risk to gallery visitors. perhaps our usual experience of the medium the content and otherwise remains in the background, n Sengmüller's hands Nipkow's invention becomes a lethal piece of kinetic sculpture that presents His solution has been to encase *Big Paul* in large steel cages, similar to those used on industrial as , here becomes the foreground and the spectacle. v_4 "I [...] transpose 'figure' and 'ground', so to speak: machine--a material assemblage rather than

focusing wholly on the masser of the installation's mechanical elements, the video image generated by *Big Paul* is modest and insubstantial. In contrast to the power and solidity of the installation's mechanical elements, the video image generated by *Big Paul* is modest and insubstantial. Visibly deformed by the circular path of the Nipkow disk's scanning pattern, the 240 vertical lines that constitute *Big Paul*'s flickering images appear on a screen measuring only four by six centimeters. The resulting image is comically out of scale with both the hardware and effort required to produce it. a screen measuring only for of the second required to produce it. Generating images through mechanical rather than electronic scanning, *Big Paul* resurrects a lost form of video whose very unfamiliarity inscribes Generating images through mechanical rather than electronic scanning, *Big Paul* resurrects a lost form of video whose very unfamiliarity inscribes the second se as the latter does to a noiseless, immaterial transparency. If Sengmüller's media archaeological installation resurrects Generating images unougo meaning incommutative inservices in a way that is unlikely to be the case with contemporary high definition digital video, aspiring its material qualities on the spectator's consciousness in a way that is unlikely to be the case with contemporary high definition digital video, aspiring its material transparency.

If Sengmüller's media archaeological instantion second image in an audiovisual landscape that is becoming increasingly cinematic—a then *Big Paul* might be understood to stake a new place for the video image in an audiovisual landscape that is becoming increasingly cinematic—a then *Big Paul* might be understood to stake a new place for the video image in an audiovisual landscape that is becoming increasingly cinematic—a then *Big Paul* might be understood to stake a new place for the video image in an audiovisual landscape that is not limited to mainstream television but is also encountered within the darkened spaces of the white cube. Claims for a landscape that is not limited to mainstream television but is also encounterintuitive, given that so much has been made of the so-called "death of landscape that is not more than the content of the so-called "daths for a contemporary expansion of cinematic visuality may at first seem counterintuitive, given that so much has been made of the so-called "death of contemporary expansion of cinematic visuality may at first seem to decline of celluloid, whereby cinema's photographic identity is seen to have been cinema." Central to the discourse on this topic has been the decline of celluloid, whereby cinema's photographic identity is seen to have been cinema." Central to the discourse on this topic has been the latter has impacted not only on the way in which circuits is seen to have been cinema." radically threatened by digital technology's electronic image. The latter has impacted not only on the way in which cinema's moving images are recorded but also how they are edited, post-produced, distributed, and exhibited—each one a nail in the coffin for a narticular of the mages are edited on Avid Media Composer, projected digitally in cinemas, or distributed digital. Put another way, in the digital age cinema becomes a form of video. recorded but and the interminal decline, if not already deceased. When feature films are shot on Arri, Alexa, or Red Epic digital cameras, now understood to be in terminal decline, if not already deceased. When feature films are shot on Arri, Alexa, or Red Epic digital cameras, now understood to be in terminal decline, if not already deceased. When feature films are shot on Arri, Alexa, or Red Epic digital cameras, now understood to be in terminal decline, if not already deceased. and resuscitates Nipkow's invention for the age of high definition television, and viewed online, then cinema has undoubtedly become

ngital. Fur another the wave of the wave in which the electronic moving image has consciously achieved to be a specific mode of representation and a form of visuality. The development of increasingly high definition video and the adoption of a now commonplace 16:9 representation and a form of visuality. The development of increasingly high definition video and the adoption of a now commonplace 16:9 Although John T. Caldwell has identified the 1980s as a period when broadcast television actively sought to emulate the production values of digital technology a decade later. Marketing professional Digital Betacam equipment in the 1990s, the Sony Corporation emphasized Although your of the state of t or anguar sectory of their video cameras to achieve filmic effects,⁶ while camcorders sold for amateur use during this the capacity of their video cameras to achieve filmic effects,⁶ while camcorders sold for amateur use during this presentation and the source of the ways in which the electronic moving image has consciously aspired to a cinematic aesthetic spect ratio for television are but two of the ways in which the electronic moving image has consciously aspired to a cinematic aesthetic spect ratio for television are but two of the ways in which the electronic moving image has consciously aspired to a cinematic aesthetic spect ratio for television are but two of the ways in which the electronic moving image has consciously aspired to a cinematic aesthetic What we witness, as a result, is video's own deaths period also evidence

A SUCCESSFUL ATTEMPT TO SEE BY WIRELESS

Mr. J. L. Baird, who demonstrated the transmission of moving Shadowgraphs by wireless strip this year, is now perfecting a machine designed to transmit actual images. In the Baird system of television the light is projected on to a sensitive cell by means of a softem of lenses revolving on a disc at 500 revolutions per minote. Passing through a serrated disc whirling found at 5000 revolutions per minote. Bailing through a serrated disc whirling found at 5000 revolutions per minote. Bailing and is interrupted, and next falls on a colloidal cell invented by Mr. Baird, and is converted into a current of varying intensity. The pulsating current is then transmitted in the ordinary way to the receiving station, and being amplified controls a lamp whose light, passing through the lenses of another revolving disc, traveruse a ground glass a treen on which the image is reproduced by a series of line strips of varying shades. At present the invention is in its inlancy, but already it is possible to note the person at the transmitting and wishing or openior his mouth a distinct advance.

use of digital single-lens the lure of the cinematic unceed. The further promoted and supported the widesbread adoption of a cinematic aesthetic built on video technology, reflex cameras, such as the Canon 5D, has further promoted and supported the widesbread adoption of a cinematic aesthetic built on video technology. -the Here the use of prime results finding its way even into television news coverage. In 2012, for example, a series of news reports from rebel-held areas in cinematic sensibility that results from rebel-held areas in cinematic sensibility that are more contents from rebel-held areas in cinema than use trantices and time-lapse cinematography.⁷ Thus, we witness something of a paradox: As the technology supporting of the between shots in a montage sequence, and time-lapse cinematography.⁷ Thus, we witness something of a paradox: As the technology supporting of the between shots in a montage sequence. between shots in a more second of the production moves from celluloid to video ("the death of cinema"), the aesthetics of video begin to transform radically, vast majority of moving image production moves from radically. by ia broaucase of the tradition of television news reporting. These included the use of extreme wide angle lenses, improvised tracking shots, long cross-fad cinema than the tradition of television news reporting cinematography a cinematic sensionity that the BBC featured shots with a noticeably shallow depth of field, along with other effects that are more familiar from photography Syria broadcast by the BBC featured shots with a noticeably shallow depth of field, along with other effects that are more familiar from photography reflex cameras, such as the set of delivering a film-like restricted depth of field has led to a particularly noticeable change in the video image. Here the use of prime lenses capable of delivering a film-like restricted depth of field has led to a particularly noticeable change in the video image. the lure of the cinematic through the inclusion of 16:9 cropping and "Movie Mode" on some models. In more recent times the transmuting under the gravitational pull of cinematic audiovisuality.

auting unuer two seconds on the use and perception of video in the gallery. The widespread adoption of video projection by both This same transmutation also impacts upon the transmutation also impacts upon the history but history and a second s This same transments that increasingly rarely is anything but historical work displayed on video monitors out of choice rather than necessity. curators and artists means that increasingly rarely is anythin the gallery environment has been rendered virtual vi wrators and a tree to be norm, the technology of video within the gallery environment has been rendered virtually invisible, particularly when With projection becoming the norm, the reconstruction of video within a subjection becoming the network of the subjection becoming the network of the subjection becoming the network of the subjection of the subjection becoming the network of the subjection becoming the With projection comments and increasing in power, are mounted on gallery ceilings. In this environment the spectator is drawn like a moth to the projectors, decreasing in size and increasing in projectors. decreasing in size and increasing in projection is drawn like a moth to the projectors, ucutating and a countering large-scale high definition images that transpose something of the cinema to the white cube. Compare light of the screen, regularly encountering large and non-second formers and homers are defined. ight of the screen, resurgence of 16 mm film in the gallery, wherein projectors and loopers are placed on conspicuous display, and in this, then, with the contemporary resurgence of 16 mm the shace where the installation is situated Writting and in the shace where the installation is situated Writting and in the shace where the installation is situated Writting and in the shace where the installation is situated Writting and in this, then, with the contemporary receiver states throughout the space where the installation is situated. Writing on Tacita Dean's 16 mm installation which the whirr of the projector often radiates throughout the space where the installation is situated. Writing on Tacita Dean's 16 mm installation which the which the whirr of the projector [as] an intrinsic musical undertone" in a piece that "had none of the Bubble House (1999), Simon Schama describes "the pure describes—signaling a kind of contamony." signaling a kind of contemporary dematerialization of video—is a far cry flick virtuality of view and early development of video art. In Nam June Paik's groundbreaking 1963 show at the Galerie Parnass TV sets modified by from the origins and early development of video art. Active visible a key dimension of felevision's technological matched by rom the original material form, rendering visible a key dimension of television's technological materiality (image on page 99, bottom), the artist assumed a sculptural form, rendering on page 99, bottom). he artist assumed a set of the origins of video art. Here, once again, we have the origins of video art. Here, once again, we have the the the origins of video art. Here, once again, we have the In this respects of a point in the source of light rather than looking with it. The effect is to rematerialize video at a point in time when its cinematic opportunity to look into the source of viscolity unique to the medium and formerly characterialize of a point in time when its cinematic The history of the medium suggests that what is understood at any particular moment as video is subject to change and that the dependence of the medium, and formerly characteristic of it. (dis)guise begins to obscure a mode of visuality unique to the medium, and formerly characteristic of it. slick virtuality of video art."8 The virtuality that Schama describes—

The filter of it, as well as its meaning, also mutate over time. As Belton suggests, these meanings and perceptions are informed by viewer's perception of it, as well as its meaning, of remesentation including cinema. Thus, we might solve at viewer's perceptions of the presentation, including cinema. Thus, we might ask the question, if the qualities and video's changing relationship with other forms of transformation, when is it is the question of the qualities and rideo s changues comments for the process of transformation, what is it precisely that *Big Paul* reclaims, and what is at meanings attributed to video have always been in the process of transformation, what is it precisely that *Big Paul* reclaims, and what is at stake in this return of the repressed?

In this return of the return of the return of the standing television and video's particular mode of visuality and is, of course, The notion of liveness is perhaps central to understanding television and video's particular mode of visuality and is, of course, The notion of more than the sum as of course, what Gerald Cock, BBC Director of Television, was celebrating in 1936 in his comment above. Sengmüller's installation reminds _{us}

top How image scanning with the Nipkow Disk and photo-electric cells works. Illustration from Radio News from April 1928 (detail)

ARC LIGHT

bottom Nam June Paik at his Exposition of Music – Electronic Television. Galerie Parnass, Wuppertal, March 11-20, 1963. Photo: George Maciunas (1931-1978) Copyright: New York, Museum of Modern Art (MoMA). Gelatin silver print, image: 48 × 47.9 cm; sheet 60.7×50.5 cm. The Gilbert and Lila Silverman Fluxus Collection Gift. Acc. n.: 2396.2008. © 2018 Digital image, The Museum of Modern Art, New York / Scala, Florence

page 100, top Big Paul Gebhard Sengmüller, installation, as of June 2018. A light beam scans the object to be televised. Copyright: Gebhard Sengmüller

page 100, bottom Big Paul Gebhard Sengmüller, installation, as of June 2018. Looking through the spinning Televisor disk, the image is reproduced. Copyright: Gebhard Sengmüller

that television developed originally as a form of transmission—in contrast to cinema, whose photographic roots locate it as a means of recording. Thus, the medium's prefix "tele" aligns it with the telephone and the telegraph, both of which enabled the virtually instantaneous transmission of a signal over distance. In shrinking television's etymological "seeing from afar" to the constrained space of the gallery. Sengmüller comically foregrounds the liveness distance. In shrinking television howing into the screen on *Big Paul*'s receiving device is likely to be in close physical provinsion. distance. In structure vectors, for each other screen on *Big Paul's* receiving device is likely to be in close physical proximity to, and acutely aware of, of transmission, whereby a person looking into the screen on *Big Paul's* receiving device is likely to be in close physical proximity to, and acutely aware of, of transmission, whereby a person look than two meters away. the subject of the image standing less than two meters away

the subject of the image success. It should be pointed out, however, that television's sense of liveness and immediacy is not limited only to live transmission but is also perceived as a distinctive feature of recorded video. As Belton puts it, "for the average viewer, it is impossible to distinguish between a 'live' broadcast and a videotaped a distinctive feature of recorded, whether live or recorded, whether broadcast television or video art, has a temporal quality that distinguishes it from recording of it." Thus all video, whether scinema. Video's characteristic present-tense sense of "nowness" is indicated in the scinema. photography's indexternormer of the particular with television; but according to Belton this quality might also have a technological basis, due to the scanned cultural associations, and in particular with television; but according to Belton this quality might also have a technological basis, due to the scanned cultural associations, and in particular with television; but according to Belton this quality might also have a technological basis, due to the scanned cultural associations, and in particular with television; but according to While it own realization. Their association with immediacy and presentness nature of the electronic image: "Video images are always in the process of their own realization. Their association with immediacy and presentness of the scanned in the process of the scanned in the pr recording of the finance of pastness, and thus cinema. Video's characteristic present-tense sense of "nowness" is undoubtedly due in part to its photography's indexical sense of pastness, and thus cinema. Video's characteristic present-tense sense of "nowness" is undoubtedly due in part to its nature of the electronic image. The process of coming in to being, "10 While it is true that cinema has made its own claims to the present tense, " is partly because they are always in the process of coming in to being," While it is true that cinema has made its own claims to the present tense, " this is complicated by photography's ontological status as a record of the past—its complex form of temporality signaled by the phrase "this was this is complicated by photography's ontological status as a record of the past—its complex form of temporality signaled by the phrase "this was now."¹² Hence, when video aspires to emulate the cinematic, its sense of liveness is one of the qualities that is it often sacrificed (particularly when now."¹² Hence, when video aspires to rames per second "flicker"). However, it is precisely this experience of "normality of the particularly when now." Hence, when these of mechanical television. foregrounded in Big Paul's resurrection of mechanical television.

Jussi Parikka has Provide and It is this simple formulation that suggests the potential for Sengmüller's work to make an intervention into the contemporary audiovisual environment rather than simply revisiting the past. Sengmüller's reanimation of a dead technology is purposefully framed within an alternative history of television. In documentation accompanying the installation Sengmüller sketches a convincing, but fictional, account of the development of mechanical television, proposing that rather than being abandoned in the 1930s Nipkow's system remained in use until the 1960s in "developing countries within the Soviet sphere of influence."¹⁴ Thus, Sengmüller creates a counterfactual history that eases the 1960s in developme communication into the contemporary audiovisual environment. Rather than dealing with technological the re-emergence of mechanical television into the contemporary audiovisual environment. Rather than dealing with technological the re-emergence of mechanical television into the contemporary audiovisual environment. Rather than dealing with technological the re-emergence of mechanical television into the contemporary audiovisual environment. Rather than dealing with technological the re-emergence of mechanical television into the contemporary audiovisual environment. Rather than dealing with technological change in a linear, teleological, and purely historical manner, *Big Paul* situates the present state of video, and our perception of it, change in a linear, teleological, and what is at stake here is precisely the way in which modes of view linear in the second state of the second state of video. and the spectator's perception of that representation. To take one example, if the sense of liveness and presentness associated with change in a mixery server of the precise of the way in which modes of visuality inform representation within currents of ongoing change. And what is at stake here is precisely the way in which modes of visuality inform representation within currents of ongoing change. And what is at stake here is precisely the way in which modes of visuality inform representation. video is lost from television news coverage, then as viewers we may become further distanced—and insulated—from what is represented on the screen. In reclaiming a specific mode of visuality that is currently in the process of being forgotten, *Big Paul's* otherness creates a vantage point from which we can observe the way in which video's visual qualities, and what they mean, have not only changed historically, but continue to do so. Jussi Parikka has proposed that media archaeology involves "thinking the new and the old in parallel lines,"¹³ and it is this simple

GUSTAV DEUTSCH & HANNA SCHIMEK— HUBERTUS VON AMELUNXEN

PHANTASMAGORIAS OF THE REAL

Text: Hubertus von Amelunxen

"Cinema brings it to light: Realism is also just a system of signs; hence, its claim to truth is not limited to reflecting an already known outside world."

Frieda Grafe¹

Both make images, and the making of images is innate to the images in their art. As a film director, Gustav Deutsch films images about images—seeks, observes, thinks, edits, splices, and presents. As an illustrator, painter, and photographer, Hanna Schimek draws lines, spreads colors, adds light, transforms things, imbues them with meaning, and gives them back their meaning; she constructs the images through interaction with what they represent. Gustav Deutsch and Hanna Schimek have been working together and separately for almost 40 years now—they are not two sides of an art, rather they give art more than two sides.

Hanna Schimek and Gustav Deutsch are presenters. They manufacture, project and publish, they invent beautiful stories with precisely that magic which also breathes such life into their art. Moreover, they are media archaeologists, entomologists, curators, actors—they perform and present whatever they find important, or at least what should not be neglected, when it comes to an understanding of the images and worlds before or behind the images.

Thanks to Aileen Derieg for English translations of parts of the text.

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- John Belton, "Looking Through Video: The Psychology of Video and Film," in *Resolutions: Contemporary Video Practices*, eds. Michael Renov and Erika Suderburg (Minneapolis: University of Minnesota Press, 1996), pp. 61–72, here p. 62.
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- Chris Dickson (ed.), Digital Cinematography Guide (Weybridge, Surrey: Sony Broadcast & Professional UK, 1996), pp. 6–7.
- 7. News at Ten, BBC 1, Jan. 20 and Feb. 24, 2012.
- Simon Schama, "Simon Schama talks to Tacita Dean," *Financial Times*, Sept. 30, 2011, https://www. ft.com/content/b94bfcb4-e973-11e0-af7b-00144feab49a (accessed on Oct. 22, 2018).
- 9. Belton, "Looking Through Video," p. 66.
- 10. Ibid., p. 67.
- 11. Pier Paolo Pasolini, "Observations on the Long Take," October 13 (summer 1980): pp. 3–6.
- 12. Laura Mulvey, *Death 24x a Second: Stillness and the Moving Image* (London: Reaktion Books, 2006), p. 57. 13. Jussi Parikka, *What is Media Archaeology?* (London: Polity, 2012), p. 2.

14. Sengmüller, "Big Paul brochure."

Together with an architect, Gustav Deutsch built a rotunda as a camera obscura, an image house, "capsula, cui imago inclusa est," which is situated on a crest of the Greek island of Aegina and affords a panorama view of the surroundings, calming the gods with its inversion of images. Hanna Schimek has drawn films, transferred the film frame to paper, but did not animate the images; on the contrary, she placed them silent and motionless next to one another, so the eye can enjoy the tranquility of exploring them. And both have humor, a special kind of humor accompanies their work, their findings, the projects they undertake, or, to quote Walter Benjamin: "The humorous act is the act of a non-judgmental execution."2

In the framework (and the word seems apposite) of their RESET THE APPARATUS! research project, presentations of a different kind have emerged: scientific investigations, public experiments with discourses, with letters that dissolve before our eyes in Petri dishes, with images projected onto a wall, with gloves that avoid infection by the power of images while preventing any skin contact with the images, and they shoot pictures, curate the work of a shooting gallery owner, and make use (in all three theatrical experiments) of gestures and images, acts and words.

They call these "Lecture Performances" #1 to #3, one performance each year: Throwing Images (2016), The Living Image & Beekeeping (2017), and Shooting Pictures (2018).

unttld contemporary, Vienna

EQUIPMENT AND UTENSILS:

IINAGE2

НКОМІИС

Lecture Performance #1

An overhead projector, an episcope, a screen. A trolley, two plastic boxes with Petri dishes and utensils: Colored paper in foil, petals, a bouquet of Aster amellus, autumn leaves, water, oil, eggs, margarine, pasta, letters made of dough, Curcuma zanthorrhiza, China Pudding Drink, bath paints, Alka Seltzer, Vitamin C effervescent tablets, sodium hydrogen carbonate, tincta aqua, tubes of acrylic paint.

ROLES AND THEIR PERFORMERS:

August Flicker, employed by Liesegang Technology Vertriebsgesellschaft mbH: Gustav Deutsch An artist: Hanna Schimek

STORY / COURSE OF EVENTS:

A representative of the Liesegang company explains, and an artist uses, an overhead projector and an episcope. Enter Mr. Flicker, in a blue jacket, gray trousers, gray shirt with Elvis Presley tie, brown shoes and headset: "Good evening. My name is August Flicker-'Flicker' as in 'Film', as I always say-I work for Liesegang Technology Vertriebsgesellschaft mbH, a section of TAS Media.Com.GmbH, based in Mühlheim an der Ruhr, and I'm responsible for public relations [...]."

Enter the artist, in black blouse with white dots, orange skirt, orange apron with railway motifs, black stockings with white dots, black shoes. She goes to the trolley, takes a Petri dish containing the letters made of dough, goes to the overhead projector, switches the light on, and places the Petri dish on the glass plate.

On the screen we see the outline of the sentence that the letters form: RESETTHE APPARATUS. She pours water from a bottle onto the letters. The shadows start moving [...].

October 17, 2016, 6:00 pm

Together with an architect, Gustav Deutsch built a rotunda as a camera obscura, an image house, "capsula, cui imago inclusa est," which is situated on a crest of the Greek island of Aegina and affords a panorama view of the surroundings, calming the gods with its inversion of images. Hanna Schimek has drawn films, transferred the film frame to paper, but did not animate the images; on the contrary, she placed them silent and motionless next to one another, so the eye can enjoy the tranquility of exploring them. And both have humor, a special kind of humor accompanies their work, their Walter Benjamin: "The humorous act is the act of a non-judgmental execution."²

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They call these "Lecture Performances" #1 to #3, one performance each year: *Throwing Images* (2016), *The Living Image & Beekeeping* (2017), and *Shooting Pictures* (2018).

EQUIPMENT AND UTENSILS:

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On the screen we see the outline of the sentence that the letters form: R E S E T T H E A P P A R A T U S. She pours water from a bottle onto the letters. The shadows start moving [...].

Each time the audience takes part in a phantasmagoria, which lines up images and presents them within the logic of a spectacle. Throwing Images explains and informs: A nameless artist, played by Hanna Schimek, places objects on an episcope and an overhead projector and casts their images onto a canvas—loading the episcope indeed brings to mind placing balls in a cannon-while a representative of the Liesegang company, August Flicker, played by Gustav Deutsch, explains the process of secondary dematerialization, as it were. Here, the magic of the items being projected relativizes the disenchantment of the projection, and a trace of the magic of shadow theater or magic lanterns is upheld in this marvelous contrast. And latest when Hanna Schimek, with a serious mien and great concentration, pours a liquid into the vessel on the overhead projector are we befallen with the imagination of an alchemist workshop, where instead of metals being mixed to create gold, all types of ingredients are combined to create pictorial works. And lest we forget: An older meaning of "projection" was used in alchemy for the transmutation from one nature to another, from a lower to a higher order. However, when speaking of the performances by Hanna Schimek and Gustav Deutsch, in the first projection things are transformed into images only to then undergo the essentially

EQUIPMENT AND UTENSILS:

2 cardboard boxes bearing the words "The Living Image" (Das Lebende Bild) and "Beekeeping" (Die Bienenzucht). 60 glass slides $(8 \times 9 \text{ cm})$, 1 mobile phone, 1 laptop. 1 table, 2 chairs, 2 microphones, 1 transparency viewer, glass plate. Projection using the cinema projector onto the screen.

ROLES AND THEIR PERFORMERS:

A media archaeologist: Gustav Deutsch An entomologist: Hanna Schimek

STORY / COURSE OF EVENTS:

In the not so distant future: A media archaeologist and an entomologist identify and archive historical pictorial material from obsolete formats and of extinct species.

The two scientists, wearing white overalls, walk from the back of the hall, down the steps, and go to the table in front of the screen, carrying white gloves and boxes containing glass slides. They sit down, place the boxes on the table, put the gloves on, and open the boxes. The projectionist switches the hall lights off. The ento-

mologist and the media archaeologist switch on the transparency viewer and the mobile phone. The projectionist switches the projector on. The entomologist and the media archaeologist simultaneously place two slides on the viewer and read the labels on the slides. The process ends at the end of the 60 slides. The entomologist and the media archaeologist close the boxes of slides, take the gloves off, switch off the viewer and the mobile phone. The projectionist switches the projector off, and the hall lights on. The performers stand up, walk up the steps, and leave the hall.

RAFFER VIDEO

FOTO

THE LIVING IMAGE & -ecture Performance #2 BEEKEEPING

EQUIPMENT AND UTENSILS:

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. 1 start = 1 start1 table, 2 chairs, 2 microphones, 1 transparency viewer, 1 glass plate. Projection using the cinema projector onto the screen.

ROLES AND THEIR PERFORMERS: order. However, when speaking of the perfor-

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Each time the audience takes part in a phantasmagoria, which lines up images and presents them

within the logic of a spectacle. Throwing Images

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explains and informs: A nameless artist, played by Hanna Schimek, places objects on an episcope and an overhead projector and casts their images onto a canvas—loading the episcope

STORY / COURSE OF EVENTS:

In the not so distant future: A media archaeologist and an entomologist identify and archive historical pictorial material from obsolete formats and of extinct species.

Austrian Film Museum

May 29, 2017, 10:00 am

HAR

The two scientists, wearing white overalls, walk from the back of the hall, down the steps, and go to the table in front of the screen, carrying white gloves and boxes containing glass slides. They sit down, place the boxes on the table, put the gloves on, and open the boxes. The projectionist switches the hall lights off. The ento-

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highest form of projection, namely to imbue people, the audience, through the transmutation of their senses, with the power of imagination. Confusion is stirred up, new angles revealed.

In Shooting Pictures the phantasm takes center stage: People can shoot an image of themselves, which can be equated with an act of killing, as a sign on the booth says: "If a bullet hits the 12, you will automatically be shot." The fusion of photographic and ballistic apparatuses has been widely known ever since Étienne-Jules Marey's photographic gun for chronophotography (here Gustav Deutsch bears an image of him on his T-shirt), whereas the yearning for death may have reached its media technological apotheosis in the photo-shooting galleries on fair grounds, which enjoyed great popularity until the introduction of the smartphone. Thomas Bernhard's statement that photography is the most misanthropic of all inventions perhaps highlights the morbid quality of this form of amusement. This dispositif of the show booth as shooting gallery now belongs to the past, and "selfies" have shot the very last residues of possible reflexivity into the orbit of the "Instagrammar." That said, many generations loved these self-portraits that required nothing less than a "12" in order to get the Polaroid of the one eye taking sight and the other pinched closed.

EQUIPMENT AND UTENSILS:

Video, 30 min Original photos from the photo shoot Advertising panels 3 air guns 2 wooden targets with ignition mechanism, cardboard target discs 3 Polaroid cameras 1 flash Ignition mechanisms

ROLES AND THEIR PERFORMERS:

Two museum curators: Gustav Deutsch, Hanna Schimek Fairground family and shooting gallery operator on video: Karl Schmelzer-Ziringer, his wife Angelika, and children Klara and Jakob

STORY / COURSE OF EVENTS:

Two museum curators are setting up an exhibition on photo shooting, in the background a video of an interview they made with a fairground family.

The projectionist switches the hall lights off and projects a still image with the title "shooting pictures" onto the screen. A spotlight casts subdued light onto three tables below the screen and the utensils on the floor, still unpacked. The two museum curators enter the hall from the door at the back, walk up to the screen, and stand behind the table. They are wearing white T-shirts with images: Etienne-Jules Marey with his chronophotographic gun and Simone de Beauvoir with a shooting gallery rifle. The video begins. The curators begin to unpack the utensils and set switches the hall lights on; the title of the performance remains displayed. The two museum curators return to behind the table and invite the visitors to come to the behind the table and invite the visitors to come to the

Austrian Film Museum June 12, 2018, 6:00 pm

11 0/ UDEIWall 29.8 - 6.9.1987 highest form of projection, namely to imbue people, the audience, through the transmutation of their senses, with the power of imagination. Confusion is stirred up, new angles revealed.

In Shooting Pictures the phantasm takes center stage: People can shoot an image of themselves, which can be equated with an act of killing, as a sign on the booth says: "If a bullet hits the 12, you will automatically be shot." The fusion of photographic and ballistic apparatuses has been widely known ever since Étienne-Jules Marey's photographic gun for chronophotography (here Gustav Deutsch bears an image of him on his T-shirt), whereas the yearning for death may have reached its media technological apotheosis in the photo-shooting galleries on fair grounds, which enjoyed great popularity until the introduction of the smartphone. Thomas Bernhard's statement that photography is the most misanthropic of all inventions perhaps highlights the morbid quality of this form of amusement. This dispositif of the show booth as shooting gallery now belongs to the past, and "selfies" have shot the very last residues of possible reflexivity into the orbit of the "Instagrammar." That said, many generations loved these self-portraits that required nothing less than a "12" in order to get the Polaroid of the one eye taking sight and the other pinched closed.

SHOOTING PICTURES Lecture Performance #3

Austrian Film Museum June 12, 2018, 6:00 pm

EQUIPMENT AND UTENSILS: Video, 30 min Original photos from the photo shoot Advertising panels 3 air guns 2 wooden targets with ignition mechanism, cardboard target discs 2 tripods 3 Polaroid cameras 1 flash Ignition mechanisms

ROLES AND THEIR PERFORMERS:

Two museum curators: Gustav Deutsch, Hanna Schimek Fairground family and shooting gallery operator on video: Karl Schmelzer-Ziringer, his wife Angelika, and children Klara and Jakob

STORY / COURSE OF EVENTS:

Two museum curators are setting up an exhibition on photo shooting, in the background a video of an interview they made with a fairground family.

The projectionist switches the hall lights off and projects a still image with the title "shooting pictures" onto the screen. A spotlight casts subdued light onto three tables below the screen and the utensils on the floor, still unpacked. The two museum curators enter the hall from the door at the back, walk up to the screen, and stand behind the table. They are wearing white T-shirts with images: Étienne-Jules Marey with his chronophotographic gun and Simone de Beauvoir with a shooting gallery rifle. The video begins. The curators begin to unpack the utensils and set up the exhibition. At the end of the video the projectionist switches the hall lights on; the title of the performance remains displayed. The two museum curators return to behind the table and invite the visitors to come to the exhibition and view the exhibits.

From the morphology of the immediacy of pressing the shutter and releasing it to that of the camera case and function: In the performance *The* Living Image & Beekeeping one wonders whether the bees with their dance and the act of making honeycombs are the "living image" or the cinematographic apparatus involved. That is left for the viewer to decide after watching the presentation of 60 slides each by entomologist Hanna Schimek (Beekeeping) and media archaeologist Gustav Deutsch (The Living Image). With an elaborate analog dispositif of cameras, light box, screen, and lights, two slides are shown simultaneously, one from a box of slides on a found lecture about bee populations and the other likewise from a found lecture on the cinematographic apparatus. The slides are placed on a lightbox with a smartphone, which projects the two images via camera onto the screen and then snaps a shot, as if for some future archive. The period of time that they all belong to is irrelevant, although the performance is intended to be shifted slightly from the present into the future, but everything seems so beautiful "as the chance meeting on a dissecting-table of a sewing-machine and an umbrella," to resort to Lautréamont's famous exclamation.³ The images are screened without commentary, the bee's hive and the projector workings, the honeycombs and the mechanical film advance, organic production and inorganic reproduction reveal quite astonishing analogies, which we previously would not have even noticed metaphorically. And now, in analog-numerical technology, we suddenly realize that Maurice Maeterlinck's remark on the life of the bee-that the hive can be "charged perhaps with dreadful surprise, as a tomb"4-could easily also be an account of the cinematographic simulacra.

The projections of these artists bring it to light: In order to counter the execution of a world that is being emptied by images that require no technological apparatus, we need phantasmagorias to blossom on the walls and, just as film was once reversed, to physically present us with the real. These are the ingenious and fabulous phantasmagorias of the real that Gustav Deutsch and Hanna Schimek create.

- Frieda Grafe, ed. Enno Patalas (Berlin: Brinkmann & Bose, 2004), p. 45. Translated for this publication.
 Walter Benjamin, "Der Humor," in *Fragmente, Gesammelte Schriften VI* (Frankfurt a.M.: Suhrkamp, 1991), p. 130. Translated for this publication.
- Comte de Lautréamont, Lautréamont's Maldoror, trans. Alexis Lykiard (New York: Thomas Y. Crowell, 1972), p. 177.

4. Maurice Maeterlinck, The Life of the Bee, trans. Alfred Sutro (New York: Dodd, Mead & Co., 1901), p. 26.

pages 106–109 *Throwing Images*, photos of the artists' performance by Michael Hassmann; photos of the objects by Gustav Deutsch and Hanna Schimek

pages 110–113 *The Living Image & Beekeeping*, all photos by Amelié Chapalain

pages 114–117 *Shooting Pictures*, all photos by Marlene Karpischek

EDGAR LISSEL— BARNABY DICKER

"...A GREEN TINCTURE.

^{1.} Frieda Grafe, "Realismus ist immer Neo-, Sur-, Super-, Hyper-. Sehen mit fotografischen Apparaten," in: Ausgewählte Schriften in Einzelbänden, vol. 5, Film/Geschichte. Wie Film Geschichte anders schreibt,

[In the late 1820s,] N. Niépce [...] employed sheets of silver [...] covered with bitumen [...] dissolved in oil of lavender, the whole being covered with a varnish. [Once] heat[ed,] [...] the oil disappeared, and there remained a whiteish powder adhering to the sheet. This sheet thus prepared was placed in the Camera Obscura; but when withdrawn the objects were hardly visible upon it. Niépce then resorted to new means for rendering the objects more distinct[,] [...] put[ting] his sheets [...] into a mixture of oil of lavender, and oil of petroleum. How N. Niépce arrived at this discovery was not explained to us.

Anonymous, 1839²

Lavender Illustration/chromolithography Copyright: QUAGGA The technical and durability and market pl already set to society. Chlor vity, responsiv of a more subt beyond and be

Leaning Tower of Pisa, Skeleton-Leaf, France, 1817, Courtesy of Sammlung Nekes

Dictyota dichotoma, in the young state; and in fruit, Anna Atkins, 1843, in: Photographs of British Algae: Cyanotype Impressions

> Photograms are as old as the world. When the apple was still green, a little leaf got stuck to its surface. The sun shone, the apple reddened, but not under the little leaf. And when Eve took the apple, which was pleasant to the eyes, she flicked off the little leaf, but she didn't notice that a beautiful pale shape of the little leaf was created there, on the peel of the apple. Neither did the serpent notice it. Nor did Adam. Nor did the author of Genesis (otherwise he would have mentioned it, and he didn't).

Stefan Themerson, 1983⁴

The technical sensitivity, responsiveness, reliability, and durability deemed satisfactory to announce and market photography by the pioneers was already set to a high baseline dictated by industrial society. Chlorophyllography, too, involves sensitivity, responsiveness, reliability, and durability, but of a more subtle order that nods towards what lies beyond and before the industrial project.

Bakterium-Selbstzeugnisse, Edgar Lissel, 1999–2001, light-sensitive cyano bacteria moving toward the light, copyright: Edgar Lissel

Purple snail Illustration / wood engraving, 1885 Copyright: QUAGGA

The first description of the "dye" that can be extracted from a leaf with ethanol—

[Over 2000 years ago,] Aristotle noted that light was necessary for the pigment of the purple snail to develop. Heinrich I. Houben, 1922⁶

1. Physautographie – Tableau de la nature même [ein Bild der Natur selbst] 2. Physautotype – Type de la nature même [Abdruck der Natur selbst] 3. konotauphyse – image de la natjurej même [Abbildung der Natur selbst] 4. Paratauphyse – Représentation de la natjurej même [Darstellung der Natur selbst] 5. Alethophyse – Véritable nature [wahrhafter Natur] 6. Phusalethotype – Viai type de la nature [wahrhafter Abdruck der Natur]

Niépce's list of potential names for photography, ca. 1832.3

But then, maybe the photo-sensitive powers of the Edenic apple *were* noticed. Perhaps the photogrammatic rule they illustrated through the reddening process was so obvious, so pervasive, so reliable that it was not recognized as conveying a specific quality, replete with potential and plasticity, quite aside to questions of communication or aesthetics.

Installation view of the exhibition *Edward Steichen's Delphiniums*, Museum of Modern Art (MoMA), New York, June 24 to July 1, 1936. Photo: Edward Steichen. Copyright: The Museum of Modern Art, New York. Acc. n.: IN50.2 © 2018. Digital image, The Museum of Modern Art, New York / Scala, Florence

Ulva lactuca (Meersalat), Phycoseris smaragdina, Phycoseris gigantea, K. k. Hof- und Staatsdruckerei Wien, nature print 1855, courtesy of Album Images / Milaneum collection

The gesture of chlorophyllography always entails an irony, well put by Themerson, that playfully questions the *discoverability* of photographic processes. Pioneers of photography were not blind, in all their earnestness, to this zoösemiotic aspect of photographic picture-making—"physautographie," "pencil of nature," etc.; only subsequently did it dip out of view.⁵ Certainly, chlorophyllography requires its human actors to extract, refine, coerce, and control natural materials. But, by the same token, the natural potentialities of the chlorophyll and the ambient lightwaves impose their own limitations and restrictions.

-(ethyl alcohol) and decomposes when exposed to light can be found in the writings of Heinrich Friedrich Link. See instructions on page 133.

The autogenic qualities of light-sensitive materials are fascinating; not least because their effects can be controlled, shaped. Perhaps, then, the deeper fascination is the troubled reconciliation between autogenic nature and human agency.

top Screenshots from a video documentary by Barbara Eisner-B., 2017

Photos (if not indicated otherwise): Edgar Lissel, 2018 Copyright: Edgar Lissel Once the cycles of nature are admitted into the material conditions of communication, variability, ephemerality, and contingency loom into significance. Moreover, this situation emphasizes that the material terms and contents of communication are not fixed. This we are familiar with at the conceptual and social levels of usage. And we are equally aware of the entropic potential of decay. But the idea that material signs and symbols actually change state—that decay can belong to a message rather than undermine it—is less easily grasped.

True, there are limits to the scope

of communicative possibilities: These are contact prints-chlorophyllogrammes-of well-defined shapes or forms. But this equally-

The proposition does not reside with an authored body of work, but with a process, a tentative, provisional (sub-)medium; a sharing of possibility, potentiality.

To work with a most basic photographic process, to force this "medium" so associated with modernity, industry, precision, and high resolution back to a primeval state, is a thrilling proposition. When the now-traditional material trappings of photography are stripped back, what remains of it philosophical promise? What changes? What service are such prints put to? Which aesthetic, pictorial tropes will endure? Which will be replaced?

-suggests ease and accessibility-use of fine motor skills over artistry. It is non-prohibitive.

top, center Levin Lissel, 2018

bottom Aurelia Bartussek and Barnaby Dicker, 2018 126

The human process actualizes semiotic processes that it did not make and that it did not shape. Our cultural codes, no matter how sophisticated and multivalued, are what they are by riding on the back of [...] self-recording nature. Robert S. Corrington, 1994⁷

My hand rests over a tray filled with chlorophyll. It protects a specific area from the light. After more than three hours you can clearly distinguish the contrast between the still bright green and the now bleached out, brown chlorophyll. Physical presence, the extreme duration of the individual's involvement, plays a central role in the participative imaging process.

> Myself Edgar Lissel, 2005–2008 Imprint of my own skin bacteria cultures in agar solution Copyright: Edgar Lissel

For Corrington, we must be "unrelenting in [our] drive to overcome the privileging of the human standpoint" and, in its place, "honor [...] the ways in which nature encompasses and enables the human process."⁸ Chlorophyllography may be seen to lean away from a limited *anthroposemiosis* towards an expansive *zoösemiosis*.

Cave of El Castillo, Puente Viesgo Paintings, ca. 40,000 BCE Photo: Pedro Saura

We have developed [...] effector images for each of the functions which we perform with the objects in our specific Umwelt

[or environment]. Th[ese] effector image[s] [or functional images] we inevitably fuse so closely with the receptor image[s] [or perceptual-

23 September 2018. The wind animates a tussle between summer and autumn. Both seasons are visible in the juxtapositions of different trees, but also, too, on individual branches. The green vitality of summer clashes with the desiccating shift to autumn. This leafy tussle reminds us of the ever-cycling encounter between the sun's rays and the trees.

Time, which frames all happening, seems to us to be the only objectively stable thing in contrast to the colorful change of its contents, and now we see that the subject sways the time of his own world. Iakob yon Uexküll, 1957¹⁰

— images] furnished by our sense organs, that in the process the objects acquire a new quality, which convey their meaning to us,

Chlorophyllography is an abstractive process in which plant photo-sensitivity is reconfigured. This mirrors the way humans consider ideal shapes; perfect circles, spheres, cubes, and cones. Garden design has a history of staging the clash between natural botanical forms and distribution and human ideals of shape and order. Bushes grown along perfect lines, trimmed into perfect pyramids or cones.

With the future of current photographic norms in question on environmental grounds, processes such as chlorophyllography do not only offer a tonic, but also different communicative modalities. These are not foreclosed, but rather must be encouraged in and by upcoming generations. What new formats might gain in currency? How might they attract meaning?—less in any final/fading image, but rather in terms of practice, process, and rationale.

The slow fading of a chlorophyllographic print generates a duration for the statement(s) it temporarily preserves as well as those it embodies. The slow fading elegantly echoes the comparably rapid initial exposure that "cures" the fresh light-sensitive solution.

Accepting the principle of evolution, we can observe that nature has developed a wide range of photo-sensitive substances; each of which contribute in different ways not only to their immediate organisms or environments but also to nature as a whole. Silver-based photographic processes rely on non-renewable, finite materials, which are impressive for not only their versatility but also their ability to alchemically fossilize, to lock-up, their photo-sensitivity. Chlorophyll, more limited in terms of photo-sensitivity, if taken in direct comparison with silver, has a hugely shorter shelf-life. If silver speaks to geological time, chlorophyll speaks to lunar and seasonal time.

and which we shall briefly term the functional tone. If an object is used in different ways, it may possess several effector images, which then lend different tones to the same perceptual image. Jakob von Uexküll, 1957⁹

Ascribing to humans the "discovery" of natural affordances—here, the photo-sensitivity of the natural world—can only be of limited value. Analysis of the workings of nature is, of course, always potentially welcome. But this must not be confused with the *a priori*—archaically prior—existence of such affordances and, indeed, their recognition by humanity. Chlorophyllography could well have been in use by humans for thousands of years...

From a letter by Sir Robin Greenwood to Mrs Mary Somerville, dated 1 May 1839:11

Dear Mary,

I write to you with news of an intriguing footnote to our history of experiments concerning the light-sensitive wonders of nature. During my recent sojourn in France, I was introduced to the botanist M. Turpin by a mutual acquaintance. M. Turpin mentioned the existence of some novel Medieval manuscripts held in the *Archives nationales de l'industrie rurale*, Nevers. Being in the region, I reasoned to visit the archive and consult the manuscripts M. Turpin had brought to my attention.

There, I lighted upon a Medieval compendium on Classical Botany lacking title and author. It contains a letter from Pliny the Elder which I copy out here in full, without adornments. The original was, of course, given in Latin. The only hindrance in its reproduction here thus lies in my own command of that language. I preface Pliny's letter by noting that it appears in the Medieval compendium amid an account of the great Roman natural philosopher's botanical studies. I wager the letter is as unknown to yourself and other scholars, as it was for me when I chanced upon it.

To Rectina, wise and beautiful,

As you know, I am currently stationed at the very edge of the Empire. It is truly so. On foot I can pass beyond the signs of our civilisation – such as we have been able to import them – and on horse, very soon leave behind even local villages and dwellings. The campaigns of three years ago have brought great placidity to the province, and, now, save for the occasional unwanted attentions of isolated groups of savages otherwise wedded to mountain caves and the like, we enjoy peace here.

In my duties I must record the region in all its variety. It is this task, more than any other, that takes me to the absolute edge of the Empire and, excluding my own presence, even beyond it. These trips are usually topographic, ethnographic and, on occasion, diplomatic – in an unimaginably rustic way. These concerns do not, however, preclude more sensitive studies into the flora and fauna of the land. It is with a particular botanical point of interest in mind that I am spurred on to write to you as it recalls to me a long discussion we had in your lush garden several summers past regarding

So would be the case with the foliage used in chlorophyllography... No longer ornamental in a garden or vase, no longer edible, no longer simply *there*, as reminder of nature-as-backdrop to the human theatre. The commodification of DIY activities therefore appears to obscure certain "tones" and to strip back experimentation and pre-determine process.

the relationship between plants and the sun. In one of the friendly native outposts, I met a curious old man, versed in Latin that he must have picked up many years earlier as it had become heavily corrupted. This fellow told me of a most extraordinary plant abundant in a single nearby place that is greatly esteemed and closely guarded by a tribe who make special use of it. So important is this plant to this people that it shapes all aspects of their society.

The plant was described to me as being highly and uniquely light-sensitive. Different to other plants which must be vigorously crushed and made more liquid so as to extract their light-sensitive matter, this rare plant, which I am told resembles *aloe*, offers such a serum readily after one simply cuts off one of its stalk-like leaves.

In possession of this serum the tribe who guard it have adopted many novel uses for it. The number, diversity and extent of the uses the tribe find for the sun-plant suggests ancestral habits begun long before even the great Greek age.

When childhood is left behind, the tribe's young are painted completely with the green serum. Their backs are not exposed to the sun, while upon their front, various hand-sized shapes carved in bark are held to their skin. This means that the sun cannot touch these covered areas, like it does where the skin is exposed. After a day, the shapes are removed and the body retains their outline. The effect is rather like we have seen on the bodies of some Celts, but less permanent.

An excellent use of the serum is made in the storing of records. Again, using bark symbols, certain tribesmen record trade and entitlements, and other such official matters, by laying them on large dried leaves that have been covered with the serum. This way, as many copies can be made as are needed, without occupying a scribe. The validity of these documents and contracts last as long as the markings are legible. These records are kept in dedicated huts without windows.

The old man has given me a detailed description of where to find the plant and the tribe. I intend to visit that region at the first possible opportunity.

Loyally, Pliny

After the method described by Heinrich Friedrich Link in his *Grundlehren der Anatomie und Physiologie der Pflanzen*.¹³ Illustrations by Lion & Bee, Imme Leonardi

 "...A green tincture..." is taken from Heinrich Friedrich Link, Grundlehren der Anatomie und Physiologie der Pflanzen (Göttingen: Danckwerts, 1807), p. 36.

2. Anonymous, "The Daguerreotype," *Galignani's Messenger*, no. 7620, morning edition, (August 20, 1839), n.p., reproduced at: http://www.daguerreotypearchive.org/texts/N8390015_DAGUERREOTYPE_GALIGNANI_1839-08-20.pdf. (accessed on Feb. 23, 2019) This anonymous piece paraphrases François Arago's lecture on the Daguerreotype of the previous day. For the full French text of Arago's lecture and its German translation, see: [François] Arago "Le Daguerréotype," in *Comptes rendus hebdomadaires des séances de l'Académie des sciences*, Second Semestre (1839), pp. 254–257; and [François] Arago, "das Daguerréotype," in *Annalen der Chemie und Pharmacie*, vol. 31–32 (Heidelberg: C.F. Winter, 1839), pp. 220 and 229. Niépce had refined his method involving lavender oil by 1827. See: Stulik, Dusan, Art Kaplan, and Herant Khanjian, "The first scientific investigation of Niépce's images from UK and US collections: Image layer and image formation," *The Imaging Science Journal* no. 61, 8 (November 2013): pp. 602–628.

- See: Aaron Scharf, Pioneers of Photography: An Album of Pictures and Words (New York: Abrams, 1976), p. 39.
- Stefan Themerson, The Urge to Create Visions (Amsterdam: Gaberbocchus and De Harmonie, 1983), p. 59.

 See: Scharf, Pioneers of Photography, p. 39; Geoffrey Batchen, Burning with Desire: The Conception of Photography (Cambridge, MA: MIT Press, 1999), pp. 62–69, 177–183.

 Cf. Heinrich J. Houben and Theodor Weyl, *Methoden der Organischen Chemie*, vol. II, 2nd ed. (Leipzig, Thieme Verlag, 1922), p. 913. Translated for this publication.
 Robert S. Corrington, *Ecstatic Naturalism: Signs of the World* (Bloomington, Indianapolis: Indiana University Press, 1994), p. 180.

8. Ibid., pp. 180–181.

 Jakob von Uexküll, "A stroll through the worlds of animals and men: A picture book of invisible worlds," in *Instinctive Behavior: The Development of a Modern Concept*, ed. Claire H. Schiller (Madison: International Universities Press, 1957), p. 48.

10. Ibid., p. 13.

- Reproduced in H. Oakes, Your Garden Laboratory (Bromyard: Gardeners' Press, 1918).
- 12. See: Malin Fabbri, Anthotypes: Explore the darkroom in your garden and make photographs using plants (Stockholm: AlternativePhotography.com, 2012); Museum of the History of Science, "Herschel's Phytotypes (Vegetable Photographs)," http:// www.mhs.ox.ac.uk/collections/imu-search-page/narratives/?irn=5533&index=0 (accessed on Nov. 19, 2018).
- 13. Link, Grundlehren, pp. 36-37.

FRAGMENTS OF MEMORY: A PERSONAL DIALOGUE WITH THE FILMS OF DAVID GATTEN Text: Kim Knowles

Writing a text on David Gatten is both a privilege and a challenge: a privilege because his work has been a constant source of inspiration for me as a scholar focusing for the past ten years on celluloid film practice and questions of material engagement, agency, and interactions with the natural world; a challenge due to the fact that this work is also difficult to obtain. Not readily available either online or on DVD, it resists the contemporary culture of instant and easy access that comes with an always on(line) digitally networked society. Separated by the Atlantic Ocean, our paths have crossed only a few times, but the films that I've had the pleasure to experience in 16 mm projections have resonated in quite profound ways. In an increasingly virtual world Gatten's sensitivity to the tactile, embodied qualities of celluloid and its ability to translate sensuous experience has been influential in my own thinking about the past, present, and future of this medium now deemed obsolete. For Gatten, and for many of the filmmakers that choose to journey with film, technological reinvention opens up a range of alternative perceptual pathways.

I first encountered Gatten's works in the context of image-text relations in experimental cinema. Researching the different ways in which written text could take on expressive kinetic qualities outside its purely linguistic signification, I stumbled upon a film that I can now only recall in fragments:

textures of pages, printed words that pass by too quickly to be read, the curves of letters, the shapes of inky inscriptions, and the overwhelming sense of feeling, or the feeling of touching. I can't even be entirely sure if my recollection relates to one film or several, since the time elapsed between experiencing and remembering has merged these fragments into a work that exists perhaps only in my imagination. It's also possible that images from films I haven't seen, but have been evocatively conjured up for me through a plethora of critical writings, have somehow made their way into this melting pot of memories. Gatten has a tendency to bring out the poet in any academic writer. The challenge of finding words that do justice to the finely crafted images, textures, and fleeting impressions that fold us into the multiple layers of time and history can only be met through a very personal creative dialogue with the work.

What I experienced, undoubtedly, were segments from his ongoing series of films *Secret History of the Dividing Line, A True Account in Nine Parts*, based largely on the life, writings, and vast literary collection of the eighteenth-century writer and plantation owner William Byrd II. Byrd led the expedition that established the border between the states of Virginia and North Carolina in 1728, detailed in both the official account *The History of the Dividing Line Betwixt Virginia and North Carolina* and his own private account *The Secret History of the Dividing Line.* Gatten's fascination with personal and colonial history, and with both real and imagined borders, provides the starting point for an extensive exploration of intermedial exchanges that weaves a thread throughout these films. The constant presence of printed words, the tangible surfaces of paper, and the oscillation between spectatorial modes test the boundaries of two art forms that often overlap but rarely in such physical terms. In this sense, Gatten's works are, to quote Holly Willis, "expeditions to the edges of film as a medium."¹

In the past few years I've been interested in another kind of physical inscription that manifests in the series of underwater films: What the Water Said, Nos. 1-3 (1998) and What the Water Said, Nos. 4-6 (2007). Placing unexposed celluloid in crab traps and submerging it in the Atlantic Ocean for periods of time, Gatten opened up a conversation between the film material and the water, minerals, animal and plant life; the visible and audible marks on the surface of the celluloid translate an experience otherwise inaccessible to human perception. However, this is the opposite of the familiar anthropocentric quest for knowledge and mastery of the natural world, which one finds in both nature documentaries and scientific studies. In stark contrast to what Anat Pick describes as "ocular inflation,"2 Gatten draws out a sensuous awareness of nature through an emphasis on the unseen-the indeterminate, indefinite image that throws attention back to the surface as the site, not simply the carrier, of meaning.³ What does the water say? It speaks a non-linear, non-human temporality that the celluloid registers through its complex organic layers. It is the most attentive interlocutor, absorbing each wave as a phrase, each tidal movement as a tactile thought. The sea is the poet and film is the page. In this artistic collaboration with nature the question of material agency that has recently gained traction in academic scholarship

rises—literally—to the surface.⁴ The mysteries of the sea, its capacity to plunge us into the unknown, are thus captured not through a traditional appeal to the vastness of scale but via the intimate representation of micro-changes that occur in a process of becoming. Gatten's work demonstrates more than anything that only by activating a deeper bodily awareness and sensitivity can we truly understand and inhabit the world around us.

This engagement with the world on a microlevel can also be seen in one of Gatten's first cameraless films Hardwood Process (1996), sections of which were made by picking up dust from around his home with cellophane tape and contact printing it onto film. The approach recalls Man Ray's Le Retour à la raison (1923), in which the artist created imprints or traces of everyday objects by placing them directly onto strips of film, exposing them to light, and then processing them as normal. In this way, Man Ray developed a new way of seeing (or sensing) matter, such as salt and pepper, which would otherwise be difficult to render photographically. By privileging the surface of the film in the production of images, these gestures engage in a reversal of perceptual hierarchies and give rise to what I have elsewhere called "aesthetics of contact."5 Here, traditional lens-based visual regimes of legibility are replaced with forms of representation that not only equate vision with touch, but also, in doing so, embrace a whole world of small and hitherto insignificant things and give them a form in which to express themselves.

In ways not dissimilar to Man Ray's creative process, a series of happy accidents and chance material encounters led to the technique that has been a key part of Gatten's exploration of the bridge between the arts of cinema and literature and the acts of viewing and reading. When a piece of tape fell onto a newspaper, Gatten discovered that the words could be detached from one surface and carried over onto another. Thus, in Moxon's Mechanick Exercises, or, The Doctrine of Handy-Works Applied to the Art of Printing (1999)—the first film in the Dividing Line series-ink from book pages is transferred directly onto the filmstrip through a time-consuming and labor-intensive process. Tom Gunning has referred to this as "anti-printing," effectively "reversing the act of printing by lifting ink off the paper rather than impressing it."⁶ For Gunning, this "invok[es] a liberation of letter into spirit as if releasing the creative power of the word and letter from its technological framework and linear clarity."7 One of the books in Byrd's extensive library (now held largely in the Library of Congress), Joseph Moxon's 1683 text was the first instructional manual for typesetters of the new printing press, which Gatten uses as a guide for deconstructing and recomposing the Gutenberg Bible.8 Although Gatten is most often discussed in relation to his American predecessors such as Stan Brakhage and Hollis Frampton, this film has echoes of the British artist Guy Sherwin's Newsprint (1972-1977)—a similar attempt to turn words into semi-abstract moving images, this time by gluing sections of newspaper onto clear leader and then reprinting onto another strip of film so that the marks of the text register on the optical soundtrack.

But *Moxon's Mechanick Exercises* is more than just an exploration of the concrete visual properties of printed words released from their literary meaning. It is also a

reflection on communication technologies and their transition from one physical form to another. As Gatten states: "I was thinking about the transition in print culture from scribal reproduction to mechanical reproduction as a way of thinking about what was happening in the late Nineties in terms of the transition in moving-image culture from sprocketed media to digital media. [...] I wanted to look back at this earlier transition, and to work with the material through this process."9 The celluloid material facilitates (even demands) a particular way of working, which in turn enables a reflection on historical parallels and draws together practices from across the centuries. "What I do as a filmmaker," says Gatten, "is not specific to the art of cinema, nor the technology of film. How I do what I do, is."10 I think of this artist as a craftsman, constructing and modifying his tools of expression, working through his own material and temporal relations to the world and inviting us to do the same. And so, as I craft this short article, fingers poised on computer keys that give in to my touch, I imagine myself in a different place, at a different table, tapping these same words on a shiny black typewriter. The ink stains the paper, and my mind shifts back to the films, the textures of pages, and the images of words from another time.

Many thanks to David Gatten for supplying me with texts and research materials for the purposes of this article.

- Holly Willis, "The Pleasure of the Text: Avant-garde filmmaker David Gatten transforms writing into cinema, one word at a time," *Film Comment* 49, no. 2 (March/April 2013): p. 49.
- Anat Pick, "Three Worlds: Dwelling and World on Screen," in Screening Nature: Cinema beyond the Human, eds. Anat Pick and Guinevere Narraway (New York and Oxford: Berghahn, 2013), p. 25.
- See Martine Beugnet, Allan Cameron, and Arild Fetveit (eds.), *Indefinite Visions:* Cinema and the Attractions of Uncertainty (Edinburgh: Edinburgh University Press, 2017).
- 4. See, for instance, Estelle Barrett and Barbara Bolt (eds.), Carnal Knowledge: Towards a 'New Materialism' through the Arts (London: I.B. Tauris, 2013); Jane Bennett, Vibrant Matter: A Political Ecology of Things (Durham and London: Duke University Press, 2010).
- 5. Kim Knowles, "(Re)visioning Celluloid: Aesthetics of Contact in Materialist Film," in *Indefinite Visions*, eds. Beugnet, Cameron, and Fetveit, pp. 257–272.
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 Ibid.
- Scott MacDonald, "Interview with David Gatten," in Adventures of Perception: Cinema of Exploration: Essays/Interviews (Berkeley: University of California Press, 2009), p. 311.
- 9. Quoted in Willis, "The Pleasure of the Text," p. 50.
- David Gatten, "That Taking What Is Mine, with Me I Take You," unpublished presentation at Images Symposium, 2011.

THE HEART IS THE RESIDENCE OF THE SPIRIT

David Gatten on his work process

In the summer of 2017 I took light-struck film and fixed it out to make a clear base. I stapled the approximately 900 feet of base to dozens of $2 \times 4s$ in a work shed outside our cabin here in the old mining camp of Salina, Colorado. First, I let annual pollen from the Ponderosa pines in our area to fall and coat the filmstrips. Then, using a series of fixatives designed to keep charcoal drawings intact, I fixed the pollen to the strips—with varying degrees of fixing. Next, I applied translucent inks and some more opaque paints (all poured into a series of old unwashed bleach bottles, still containing remnants of the bleach) to the still-wet pollen and fixative coated strips.

I tried to time all of this work to the "monsoon season" here in the canyon, so that there was a chance of raindrops hitting the strips, which were still wet or tacky (it took several days for the layers to dry). As storms came and went during the monsoon rains the individual droplets of water worried their way into the strips of film, open pooling displaced ink and pollen, creating a record of the rainfall—much in the same way the ocean worked on the strips in the *What the Water Said* series. Then, after fixing those results with more layers of different fixatives, I let the strips remain outside as the hail, freezing rain, sleet, and eventually the snow fell. The strips were actually frozen to the $2 \times 4s$ for weeks at a time, resulting in additional patterns and mixing of colors. I fixed these reactions as well.

Summer of 2018 came, and then I brought the strips inside. Some of them are optically printed—but without the gate, so there is a misuse of the optical printer, resulting in an even more dynamic motion of the film frames.

Unlike the *Water* series, this film is silent, as I found the results of the painting were too uniform to be of true interest and detracted from the micro-rhythms of the world's work on the strips. Also unlike the *Water* series, I took a much stronger editorial hand in both the spraying of the inks and bleach solution—and, of course, in the optical printing and A/B/C roll editing.

The work deals with Taoist practices of Internal Alchemy and their accompanying texts. The inter-titles were mostly adapted from *The Secret Text of Green Fluorescence* (ca. eleventh century CE) by Zhang Boudan and *The Book of the Master Who Embraces Spontaneous Nature* (ca. third century CE) by Ge Hong.

Al images show the process of making of *The Heart is the Residence of the Spirit* (2017–2019) by David Gatten.

Translated chapter headings from *The Book of the Master Who Embraces Spontaneous Nature*, 2019.

2, 3

Gatten's exposure test notes for the optical printing of the "Spontaneous Nature" section of the film, 2018.

4, 5 Filmstrips showing the condition of original printed strips as well as strips of step printed frames, 2018.

6 (page 140) Gatten A/B/C rolling the original filmstrips, which were then printed to an internegative stock to produce release prints.

Translated chapter headings and sub-headings from The Book of the Master Who Embraces Spontaneous Nature









10, 16 Gatten's working strips, pre-edit, 2018.

11, 14 Final frames of film, 2018.

13 Gatten holding a small strip of pigmentcoated, rain-splatted, frozen-thenthawed film, 2018.







13







Barris .



15 After the initial outdoor "Spontaneous Nature" images were fixed onto clear leader, Gatten rephotographed and, in some cases, hand contact-printed these images using expired and discontinued film stocks, in conjunction with expired photo-chemistry, 2018.

17 (page 146) Gatten's homemade darkroom on the lofted second floor of the 1891 former gold mining cabin where he lives in Salina, Colorado (population: 53), 2018.





THE ART SCHOOL AS A RESEARCH LABORATORY

WHY DO DIGITAL NATIVES GO FOR THE ANALOG?

Ruth Horak

It was no coincidence that the Department of Photography at the University of Applied Arts Vienna was invited to join the RESET THE APPARATUS! project. Led by Gabriele Rothemann since 2001, the department's teaching program fosters a media-reflexive discourse around the imaging media of our time. Rothemann: "Departing from the photographic view and an analysis of the medium of photography, students develop utopias and ideas and test out artistic strategies. This leads to experimental formats like Reload the Apparatus in which photography opens up to all other artistic realms and generates new aesthetic synergies and atmospheres." This imaging medium, in particular-together with numerous other aspects of our everyday lives (above all, communication)-has been confronted with rapid digitalization since the mid-1990s. Users realized that photography and film would do without chemistry in the future, that the archiving and distribution of data images would be much easier, and the image itself considerably less expensive. Hence, a "digital aesthetics" that strives to capture the widespread digitalization of our culture¹ quickly gained terrain in the artistic field,² and there was a shift in terminology: It became common practice to equate "data images" with "photographs." The short currency³ of this technology-savvy aesthetics was juxtaposed with the stability of old media,⁴ the longevity of the analog, tradition, handcraft, quality, and authenticity, and coupled with the general question of what the analog, as a social attitude, means in contrast to the digital. While data scandals and surveillance scenarios soon triggered a more sobering view or at least skepticism among digital immigrants toward this techno euphoria,5 the phantom "transparent society" only provokes, at best, a shrug of the shoulders for the generation who grew up with digital media, and for whom the intelligent technologies within "smart devices" and their applications are a given. However, analog devices, with their usage methods and characteristic looks, seem to have a surprising appeal, which can be read from the omnipresent vintage and retro trends: analog photo effects on smartphones, Polaroid cameras, portable record players, analog cameras, etc., and in exhibitions the presence of the simple recording techniques and experiments by young artists is plain to see.

As the main replacement for the camera, the smartphone has imbued photography with an unimagined immateriality—today the vast majority of all photographs are JPEGs, which no longer rest in the hand





but in the cloud. They are sent and commented but rarely printed, and when they are, then not in a "developed," "enlarged," or "finished" form. Digital technology has superseded the analog in most areas of application and thereby rendered countless heretofore understood materials, hand movements, processes, and apparatuses obsolete. "Obsolescence is the logical consequence of technological progress."⁶ But precisely in the artistic realm the manual handling of the medium and its products, the physical relationship between camera, artist, and image, remains important. The advancing immateriality of photography has provoked the artistic community to once again take photography literally.

Accordingly, this generation, which only has second-hand knowledge of analog devices, strives for a revival of these archaic image machines, with special attention to qualities (generally attributed to the analog) like haptics, deceleration, and independence. For the longest time photography was bemoaned that it did not require any craftsmanship, for it all originated from an apparatus. Today, however, analog photographs are stylized into artisanal artifacts, endowed with image captions on gallery handouts that read: "hand-printed analogue C type print."⁷ So a new aura has enveloped these "real" photographs, which have been exposed to film, developed, and enlarged in the darkroom in a relatively time-consuming procedure. While each pixel of a digital photograph can be changed, the exposure of a film, the chemical reaction, is irreversible.

This revival also concerns the promising air that radiates from old cameras and other paraphernalia of photography. Their beauty entices one to create new still lifes because their technological obsolescence shifts the focus away from the functional dimension and to the object. "Technology is only visible when it is completely new or at risk of disappearing. As Martin Heidegger said, only when the hammer is not in use anymore is it perceived as an object."8 The currency of an object (and its design) define the degree of its visibility. "A contemporary device was hardly visible at the time of its invention, whereas a long obsolete or, on the contrary, a proactive device profited from greater visibility."9 Moreover, these defunct devices have the advantage that they are comprehensible, they can be disassembled and reassembled anew. They do not keep their users (stuck) on a "user-friendly" interface, where they are only allowed to navigate within predefined parameters and applications. Therefore, it is attractive for digital natives to explore analog apparatuses, to deconstruct and (re)build them, and to take the image production process into their own hands, to reduce it to its most basic conditions, to experiment-and not least, to retrace the original fascination that the invention of an own imprint of nature must have triggered in its discoverers.



all-in-one Matthias Köck, 2018 Construction consisting of printers, scanners, and multifunctional devices, ca. $60 \times 60 \times 120$ cm, which were modified into an instant camera Courtesv of the artist





Courtesy of the artist

Pretend to be ein Schienenfahrzeug Christian Kurz, 2018 Visitors can ride a bicycle coupled together with an analog film projector, which activates a short film loop in which railway tracks are seen—a reference to the early days of cinema. Photo: Jorit Aust



In this light, it seemed rather appropriate to adapt an exhibition title informed by the research project RESET THE APPARATUS! with the term "reload." On the one hand, the intention of this reformulation was to refer to specific applications in the realm of analog photography, such as "load the camera" or "load the reel"—namely, with a film. It frames that part of photographic history which was truly deleted without substitution films, development, and photo enlargements from the negative. This perspective provoked multifaceted projects that investigate precisely such topics like light-sensitive materials, positive-negative process, or work in the darkroom.

On the other hand, the title also captures a recurring theme that runs through the research project RESET THE APPARATUS!: the misuse of apparatuses, usages that transcend the original purpose, above and beyond just anachronistic approaches. Apparatuses are used differently than the inventor intended, for example, to elicit something that is inherently there but not given a purpose (yet). Moreover, this form of misuse intertwines digital and analog principles, leads to hybrids, which, for example, switch between analog and digital recording and output ECHO Sebastian Eder, 2018 C-print, 110 × 138 cm, showing elements of the sound installation (Hasselblad, microphone, effect device, amplifier) The sound of the shutter release is unmistakable, light enters into the camera through it. But instead of an image the sound is recorded, amplified, and endlessly looped. Courtesy of the artist possibilities or combine early photographic devices with aspects of digital photography (e.g. pixels). In the exhibition Felix J. Frühauf constructed a camera obscura grid for a Sinar F2 camera, which simultaneously projected 200 small images onto a 8×10 inch black-and-white film with an exposure time of approximately twelve minutes. Seen together, they constitute an overall image. But unlike a digital pixel, each single cell is already in itself a camera obscura image (upside down and inverted). Two elements of photography are combined, which each represent a condition of (old and new) photography. In the work by Matthias Köck, on the other hand, the "classical" unity of digital image and the screen that displays it is subverted—in place of the screen, an instant print is made on paper, thus serving as an improvised instant camera.

In most of the very elaborate projects the work does not exist, so to speak, without the apparatus and/or the process in between. Some projects began at an earlier phase, with perception, and emphasized the importance of the apparatus for the experience of seeing (Peter Hoiss), devised closed circuits of recording and playing (Sebastian Eder), demanded the physical participation of the visitors if they wanted to see the images (Christian Kurz), or set up a darkroom to demonstrate the similarities between the camera obscura and the human eye (Hessam Samavatian). Views were redirected or cast back, the difference between representation and reality was put in question, the power of the gaze performed, the phenomenon of the illusion unveiled.

All of the employed tools, devices, and displays were more than just props; voluminous, sculptural, serial—they were consciously selected as counterparts to a digital world characterized by immateriality. In his text "Glanz und Elend des Photographen" [The Photographer's Glory and Misery] from 1979 Rudolf Arnheim stated that the essence of an artwork "is not primarily determined by the depicted subject but by the means needed to create its form: the sheet of paper, the canvas, the block of stone, and the tools and materials. The modes of perception that arise from the respective means stimulate and influence the ideas of the artist."¹⁰ In the exhibition, too, the chosen means often determined how observers encountered the interpretations of themes in RESET THE APPARATUS! It is a response to the needs of our time, for awareness, for conscious action and authenticity, for deceleration and careful execution, for haptics, materiality, weight, perceptible surfaces and dimensions.

Sensory overload, on the one hand, and simulation as a surrogate for real experiences, on the other, seem to manifest in a longing for authenticity. There is a readiness to exchange the simple for (temporal and material) effort, the prefabricated for the (utterly) vague, or to reactivate



Untitled Hessam Samavatian, 2018 Walk-in, interactive black box with remote release, flashbulbs, and afterimages. Installation consists of a dark room and lights. 280 × 380 × 280 cm Courtesy of the artist







Preparations for *a childhood-recollection* in the darkroom Mira Klug, 2018 Courtesy of the artist After Dark, a childhood-recollection / win98 Mira Klug, 2018 Contact print, 12 inch Courtesy of the artist the forgotten and lost and lend it new form and substance. Mira Klug, for example, reactivated a screensaver from the early 2000s, the 3D Pipes Screensaver, which ran on Microsoft's Win XP operating system. She then made analog screenshots, so to speak, of the different movement patterns of this screensaver, contact prints on light-sensitive photo paper in the darkroom. The image inscribes itself as a photogram, appears true to scale yet negative and inverted. She also staged the "making-of" her project in the darkroom in such a manner that the pipes in the motif and the water pipes leading to the wash basin were in close proximity to one another, which allowed a real counterpart a place in the picture. Mira Klug's project is exemplary for the rapid obsolescence of digital applications and devices. In ever shorter windows of time new updates are released, new features replace the old. The latter disappear until someone discovers their cult status and tries to emulate them, to "reload" them. Albeit, sufficient time must pass until the once scornfully discarded item posthumously receives such a legendary reputation.

The red thread that connects the contributions to *Reload the Apparatus* is the reference to the early days of photography and film—the camera obscura, the Lumière brothers, Eadweard Muybridge, the silver in the "silver gelatin" products of the nineteenth century (Johannes Raimann) or, more generally, the reference to mechanical and photo-chemical processes: to the bicycle as an early form of independent accelerated motion; the possibility to project images; the dominance of the camera apparatus; the interleaving of analog devices with digital topics; or the visualization of data transfer processes in a concise, reduced, yet sophisticated material form (Paul Spendier). In this way, the projects can also be read as tributes to important events in media history. This historical interest evidences a respect toward the origins of the medium, which, as a phenomenon of natural sciences, is owed to the longstanding research of private scholars.

A "reset," the return to primordial functions, making underlying processes visible and materials "graspable" in the truest sense of the word, reminds us what (filmic) photography actually is: light that inscribes itself on a light-sensitive carrier medium, and "the materiality that already manifests at the moment of the shot."¹¹ Olena Newkryta's contribution belongs to this category. She placed light-sensitive sheets of photo paper near the windows of the exhibition space and exposed them to the wandering incident light for two to five minutes at different times of day. Hence, the resulting abstract photograms "carry" the fleeting nature of light but also very specific geographical and astronomical information (position of the sun, rotation of the Earth, date). Here the "reset" means returning to the basic elements of photography: light and light-sensitive paper.



MOCAP_SCULPTURES Paul Spendier, 2018 Detail of a porcelain sphere Courtesy of the artist





From the series Latente Bilder Bastian Schwind, 2016–present Exposed but not developed negatives, variable dimensions, light-proof packaging, framed behind glass, 53 × 43 cm Courtesy of the artist

The making of *Until we finally meet again* Olena Newkryta, 2018 Courtesy of the artist This also includes the "latent" image, the important state in analog photography, which required many experiments and—as word goes—above all, a coincidence¹² to elicit it from the image carrier. The latent image remains invisible—protected by the darkness of the camera or the darkroom, as any exposure to light would imply its damage or, worst case, its destruction—until someone develops it. Bastian Schwind leaves it in its latent state. Packed in a light protection cover, framed and sealed behind glass, only an inscription tells of the (supposedly) photographed scene. A comparison with the latent data image comes to mind: It is subject to a similar invisibility when there is no screen to show it, but even on the screen its presence is only virtual, simulated by an image viewer program.

The contributions in the exhibition speak of a desire to better understand the medium, to appropriate it and grasp its former "magic," to expose its inner logic, but also to counteract the rules and limitations of the apparatus, to use it in other ways, against the distancing of electronic technology, in favor of new interpretations. Ultimately, improvisation and experimentation are the main traits of *Reload the Apparatus*. After all, any reflection upon how photography would really feel, if one were to press the reset button, could only be achieved through experiment.

The exhibition *Reload the Apparatus* took place from October 6 to 24, 2018 at the Angewandte Innovation Laboratory (AIL) in Vienna. Curator: Ruth Horak.

1. Cf. Clemens Apprich, "Ora et labora (et lege)," Kunstforum International 242 (2016): p. 83.

- 2. Cf. Hubertus von Amelunxen et al., Photography after Photography: Memory and Representation in the Digital Age (Amsterdam: Overseas Publishers Association, 1996), catalog for exhibitions at Aktionsforum Praterinsel, Munich, Kunsthalle Krems, Fotomuseum Winterthur, among other places, or the photographic work of Thomas Ruff, to name but two examples among many.
- Cf. Ignacio Uriarte in conversation with Franz Thalmair, "Ganz genau auf etwas ganz Banales schauen," Kunstforum International 242 (2016): p. 157.
- 4. Apprich, "Ora et labora (et lege)," p. 83.
- 5. Ibid.
- 6. Cf. Cécile Dazord, "Zeitgenössische Kunst und technologische Obsoleszenz," in digital art conservation Konservierung digitaler Kunst: Theorie und Praxis, ed. Bernhard Serexhe, ZKM Karlsruhe (Vienna: Ambra V, 2013), p. 215. Translated for this publication.
- 7. Seen on the handout for Anita Witek's exhibition at the gallery l'étrangère in London.
- Bazord cited here in: Xavier Guchet, *Les Sens de l'évolution technique* (Paris: Édition Léo Scheer, 2005), pp. 10–11. Translated for this publication.
- 9. Ibid., p. 216.
- 10. Rudolf Arnheim, "Glanz und Elend des Photographen," (1979) in Die Seele in der Silberschicht. Medientheoretische Texte. Photographie – Film – Rundfunk (Frankfurt a.M.: Suhrkamp, 2004), p. 46. Translated for this publication.
- 11. Definition from a discussion at the Friedl Kubelka School for Artistic Photography Vienna in winter 2017.
- 12. Allegedly, mercury vapors in Henry-Fox Talbot's chemical cabinet were responsible for the first development of a latent image. See: Wolfgang Baier, A Source Book of Photographic History (Leipzig: VEB Foto-kinoverlag, 1965).

MOCAP_SCULPTURES Paul Spendier, 2018 30 porcelain spheres hanging from the ceiling translate the motion capturing recordings of a galloping horse into a three-dimensional coordinate system.

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+ Until we finally meet again Olena Newkryta, 2018 Site-specific installation, exposures on b/w PE photo paper, variable dimensions Photo: Jorit Aust





Schichtung (all colors will agree in the dark) Elke Seeger, 2018 Analog color enlargements, each 140×180 cm Courtesy of the artist

THE PHYSICS OF PHOTOGRAPHY Elke Seeger to RTA!

Building upon her background in graphics, Elke Seeger has been experimenting with photography as an artistic medium for many years now. She explores the physical-chemical processes in analog photography with a special focus on the aesthetic parameters of materiality, structure, color, and form. Not the depicted rather the process of depicting itself is central in her work. A representative project for Seeger's approach is Schichtung (all colors will agree in the dark) (2018). Schichtung (Layering) consists of two levels: on the one hand, the photograph of a drape, which is rudimentarily visible as an autonomous form and color composition. On the other, the materiality of the image carrier is emphasized through unintentional signs of usage and consciously inflicted damage to the film emulsion-in an analogy to the graphic process-and thus inscribed into the depicted image. These damaged surfaces are of interest to Seeger. She refers to them as the "opaque side of photography" as they compete with the transparency of the depicted. Schichtung is not only close linguistically to the German word "Vielschichtigkeit" or "multilayered," it also references how the two sides of photography, the transparent and the opaque, correlate.

We asked Elke Seeger about the role that retrograde photographic techniques play in teaching today, given the rise of virtual and digital culture.

Elke Seeger: Today "photography" is a medium without clearly delineated fields of artistic expression; they are constantly changing. In light of photography's opening to other artistic practices—in other words, transmediality—knowledge about the historical evolution of the medium becomes indispensible. Interestingly enough, one can notice that students, now so-called digital natives, currently express great interest in the analog work processes of photography. This leads to in-depth, critical explorations into the imaging qualities of photography. Besides the visible world, ideas about the technical and material character of the medium increasingly play a prominent role in the finished works. Today analog and digital go hand-in-hand and permeate one another. An exclusive "either-or" mentality has been clearly replaced by a "one-and-the-other" approach.

In *Towards a Philosophy of Photography* Vilém Flusser advocates a new way of seeing photography. Especially since photography, as an automatic apparatus, does not leave much room for freedom, a return to the qualities of its technical components is all the more urgent. "Freedom,"







Apparatus for Auditory Perception of Light Raphael Janzer, 2017 Hex inverter, photo resistor, circuit board, Hasselblad 500 C/M Courtesy of the artist

Untitled IV (gazes) Vivianne Pärli, 2017 HDF on Lambda print, $10 \times 23 \times 23$ cm Courtesy of the artist



From the possibility to get away with something Tabea Borchardt, 2016–present Variable dimensions, tableau 2.30×2.30 m Courtesy of the artist



Presentation of the works by students from Folkwang University of the Arts in Essen at the Department of Photography of the University of Applied Arts Vienna, May 30, 2017.

for Flusser, "is playing against the camera." If we apply the notion of the apparatus to the complete photographic process—from exposure and development to the finished image and the presented form—then it becomes clear that the freedom that Flusser calls for has far-reaching consequences. For artistic education this implies that the focus is no longer on the depiction of reality but on the conditions of the photographic. An equally medium-specific as well as transmedial approach to photography dissolves the borders of the photographic and provides almost unlimited potentials of artistic expression for the medium.

In the framework of the Erasmus-Socrates study program works by students from Folkwang University of the Arts, under the direction of Elke Seeger, were developed for RESET THE APPARATUS! and presented at a work-in-progress exhibition in Vienna in 2017.

In *Untitled IV (gazes)* Vivianne Pärli examines the zoetrope, an early technical apparatus to mechanically create an illusion of movement. Pärli designed a box with a viewing window in which 36 different pairs of eyes can be seen. The eyes originate from Instagram profiles. The observer can personally control the tempo of the rotation with the crank arm mounted on the side while viewing the different eyes through the window. Hence, Pärli contrasts the digital act of taking a selfie and scrolling through a profile with something analog and tangible.

The departure point for Raphael Janzer's *Apparatus for Auditory Perception of Light* is an analog medium format camera, which—as the title explains—he uses for the auditory perception of light. The basis of the apparatus is a simple oscillator circuit by Nicolas Collins; with diverse modifications it can be used to transform light impulses into sounds. The mechanical functions of the camera, a standard issue Hasselblad, remain unchanged. Only the film is replaced in the adapted magazine. What you hear is the light passing through the lens into the film chamber.

The haptic side of photography plays an important role in Tabea Borchardt's *From the possibility to get away with something*. In various tableaus she presents different photographic materials and equipment, which describe the history of analog and digital photography from a personal perspective: fragments from her own collection of imagery, found footage photos and sculptural items, such as wood and slide frames, passepartouts and color tables. The presentation consists of rhizome-like arrangements, which manifest in three flat presentation surfaces and a three-dimensional object.

The work *a vague promise* by Johanna Senger takes a similar approach, placing photographic material in relationships with other





Shown, Showing Eva Olbricht, 2017 Analog C-prints, variable dimensions from 11 × 18 to 85 × 110 cm Courtesy of the artist a vague promise Johanna Senger, 2017 C-prints, PE-prints, wax, foam, acrylic glass, glass, cork, paper, wood, undeveloped photo paper, acrylic paint, spackle, cement, watercolor, sand paper, Plasticine Courtesy of the artist materials and expanding the two-dimensionality of photography into the space. Senger creates artistic constellations that associatively combine everyday materials like wax, foam, glass, cork, paper, and wood together with various photo papers.

The grain structure of an analog negative, which emerges upon high magnification of a photographic print, forms the basis of the project *Shown, Showing* by Eva Olbricht. Two forms of materiality, says Olbricht, become apparent in the final analog magnification: the "shown"—textiles, skin, wood—and the "showing" material—the materiality of the image carrier itself. Her images oscillate between the recognizable and the immaterial, between memory and seeing anew.

The interplay between content – form – materiality – presentation is a constant. The technical aspects of photography continue to play a vital role, from a clearly visible to a marginally visible to an even invisible reference, but with clear emphasis on the apparatus. Through conveying new forms of readability, observers must discover modes of reception that transcend classical notions of photography.

RESET THE APPARATUS!

FRAMING RTA!

...TO GET A SENSE OF THE CINEMA DISPOSITIF. Architectural and Filmic Interventions as Defamiliarization of the Cinema Space Alejandro Bachmann



Peter Kubelka's Invisible Cinema at the Anthology Film Archives in New York Photo: Michael Chikiris Courtesy of Anthology Film Archives, New York The cinema space of the Austrian Film Museum bears the name "Invisible Cinema 3." It is the third version of filmmaker Peter Kubelka's concept of an "ideal cinema," as he calls it. It was first realized in 1969 on the occasion of the opening of the Anthology Film Archives in New York. A corresponding manifesto by the collective reads: "The original ninety seat Cinema of Anthology Film Archives was designed by Peter Kubelka as a *machine for film viewing*." And below: "The art of the film depends upon machines. Before the spectator sees a film, it has passed through a camera, a developer, a printer, an editing machine and a projector. The room in which one sees a film is another machine."¹ The notion of the cinema space as a machine provides fertile ground for a project such as RESET THE APPARATUS! Like any other, it is a machine that can be reset, reused, repurposed. It is interesting that special emphasis is placed on the machine character of the cinema space, for it is precisely the aspect of the technical, designed, and constructed that cinema spaces usually try to conceal. In his historical treatise of the cinema dispositif² Jörg Brauns explains how this was not intended from the very beginning and rather occurred in the moment—around 1910—when buildings were specifically constructed for viewing films. Besides isolating the cinema space from the outside world, Brauns sees the disappearance of the mechanical parts of the cinema as a main design feature. These cinema spaces were "consequently designed in such a way that the technical process of the projection was subsidiary to its aesthetic effect. This achieved a coherent orientation of the audience toward the film, which could now be entranced, fixated, and riveted by the screening."³

It is astounding that the concept of the Invisible Cinema comes from no one less than a filmmaker whose artistic work places so much emphasis on the underlying apparatus. In the moment of projection films like Schwechater (1958) or Arnulf Rainer (1960) refer to its very conditions: that a machine casts 24 individual frames per second onto the screen, that they set in motion a play of light and darkness, that the ghostly apparitions have a material basis (the filmstrip). Although the abovementioned manifesto emphasizes the mechanical character of the cinema, the actual realization of the cinema space, however, seems to be more about disguising precisely these aspects: "All elements of the Cinema are black: the rugs, the seats, the walls, the ceiling. Seat hoods and the elevation of the rows protect one's view of the screen from interception by the heads of viewers in front. Blinders eliminate the possibility of distractions from the side."4 In contrast to Kubelka's films, which reveal the entire realm of the cinema apparatus in the aesthetic experience, the Invisible Cinema attempts to make the audience forget the space itself and its conditions and enable a viewing experience completely devoted to the film. As Kubelka himself claimed in an episode of the series "Apropos Film" produced for Austrian and German television: "Here it will really be the case that the spectator is presented with the world the author wants to offer in its purest form. One sees nothing but the screen, hears nothing but the sound coming from the screen. The whole world is the film."5

So the Invisible Cinema is a paradoxical space: On the one hand, it is about making one forget the concrete situation of the cinema. On the other, this happens in an act where the space shifts to the center of our attention again. The peculiarities of the architectural space⁶ in combination with a special manifesto for this cinema contribute to this fact. Hence, the Invisible Cinema draws attention to a contradiction, an inner tension and indistinguishability, which are inherent to any cinema space and constitute the cinema dispositif, which is, namely: "a constellation, whose artificiality was—and still is today—completely apparent and invisible at the same time."⁷ This act of drawing attention takes place through a shift, which Viktor Šklovskij called "defamiliarization," that breaks with the automatism of going-to-the-cinema to let us see it with different eyes: "If we start to examine the general laws of perception, we see that as perception becomes habitual, it becomes automatic. Thus, for example, all of our habits retreat into the area of the unconsciously automatic; if one remembers the sensations of holding a pen or of speaking in a foreign language for the first time and compares that with his feeling at performing the action for the ten thousandth time, he will agree with us."⁸ According to Šklovskij, art—be it architecture or, as will follow, the film—is there "to make one feel things, to make the stone stony. The purpose of art is to impart the sensation of things as they are perceived and not as they are known."

However, the concrete redesign of the cinema space represents but one possibility of defamiliarizing the cinema as dispositif and thereby reconfiguring it in our heads. In the history of experimental film there are recurring examples of works that involve—in the process of their creation—a reconfiguration of the cinematographic apparatus and, at the same time—through their projection—allow us to see the cinema dispositif anew.⁹ Whereas the alternative architecture of the Invisible Cinema invites us to experience the cinema dispositif in a different "state," these film works are to be read as shifts of the cinema dispositif in "action." To watch these films in the cinema means—in keeping with Šklovskij—to enter into a movement that allows us to re-feel, to re-experience, to get back a sense of the cinema dispositif.

Morgan Fisher's concept film *Screening Room* (1968/2012)¹⁰ explicitly addresses the cinema space. In one continuous shot we follow the way through the 1st district in Vienna



Screening Room Morgan Fisher, 1968 (Vienna version 2012) 16 mm, b/w, silent, 5:00 min Frame enlargement Austrian Film Museum approaching the Invisible Cinema 3. Upon arrival we enter the cinema hall, which is deserted and completely dark, choose a seat, sit down in it, and then, with one pan of the camera, focus on the brightly lit screen. The black frame around the white rectangle of the screen gradually becomes smaller until we see nothing else than a full-screen depiction of the screen in the very cinema we are sitting in. Scratches and dust occasionally appear on the otherwise completely white film image, until they suddenly vanish and only white light is cast onto the screen. This last effect is the result of an intentional manipulation of the cinema apparatus: Unlike common

practice, *Screening Room* has no end strip, the extra strip usually attached to the last frames of a film in order to help handling the reel. Instead of the end strip that gives the projectionist time to fade out, the pure light of the projector hits the screen immediately after the last frame.¹¹ This direct transition—from the filmic image on the screen to the screen simply lit by a light source—makes the viewer aware of this element of the cinema dispositif that "fundamentally lacks any perceptibility in cinema" because it "constantly takes on the shape of something else."¹² Hence, *Screening Room* modifies our perception

of the cinema dispositif, whose historical genesis also coincided with the dematerialization of the screen: "In the cinema theaters after 1910 the screen was no longer an object placed in the room or hung on the wall. Instead, it had turned into a window that allowed a view into another world as if through a glass panel. [...] The site of the image had changed. It was now withdrawn from the immediate reach of the audience, it became impossible to step closer to the screen, to see it from up close, or let alone touch it."¹³

Screening Room makes the material screen in the cinema visible by freeing it from the veil of the filmstrip in a sensual gesture and brings it to the fore. Gary Beydler's *Pasadena Freeway Stills* (1974), on the other hand, could be described as a mirror-like gesture of defamiliarization by

presenting on the screen what is actually happening on the opposite side of it—in the projection cabin. A static shot shows a square marked with tape on a glass panel. Behind it a man steps into the image, sits down (we only see his torso, not the face) and begins positioning individual black-and-white photographs—views onto a freeway from the per-spective of a car driving on it—into the square, and then removes them one after the other. The process gradually accelerates; the movement of his hands and arms becomes less fluid and more fragmented and choppy. At the same time the individual images alternating in the square now appear more like a continuous movement, until we can discern a car driving on the Pasadena Freeway. At a pace of 24 times per seconds, interrupted by darkness, the "projector" behind us casts individual images onto the screen before us where we perceive them as movement. *Pasadena Freeway Stills* visualizes both the processes in the cinema dispositif that surrounds us as well as the dialectics of stand-still and motion inherent in the space "beside each other" on the screen: The man's body becomes the projector, whose jumpy mechanical movement is presented outside of the square, while the illusion of continuous movement it creates takes place inside the square.

While Fisher offers a new perspective on what we always see in the cinema but never consciously look at and Beydler mirrors what is behind us onto the screen in a poetic translation, Philipp Fleischmann's *The Invisible Cinema 3* (2017) deals with the phenomenological quality of the space surrounding us: With a specially designed camera Fleischmann measures the space of the Invisible Cinema 3 from the perspective of the screen. A 16 mm filmstrip was placed along the perimeter of the screen and exposed to light with a camera construction that completely covered it. In the projection we see the temporalization of a spatial snapshot; we walk in time once around the filmstrip that encircled the screen. There is hardly anything to see. Depth, unreadable darkness with a few dabs of light, which perhaps bled into the hall from the projection cabin, float by us. The art of light meets the space of darkness—the screen shows how it always is and must be around us in the cinema: "In the darkness an ambivalent space emerges, which evokes the proximity of the immediate neighbor, on the one hand, and utmost vastness, infiniteness, on the other. In this respect, in the oscillation between close and far, the dark hall of the

The Invisible Cinema 3 Philipp Fleischmann, 2017 16 mm, color, silent, 0:36 min Courtesy of Philipp Fleischmann



Pasadena Freeway Stills Gary Beydler, 1974 16 mm, color, silent, 6:00 min Courtesy of Mike and David Beydler





cinema refers to the film space, which can comprise both density and proximity as well as vastness and limitlessness.³¹⁴

Projected one after the other, *Screening Room*, *Pasadena Freeway Stills*, and *The Invisible Cinema* 3 reveal the cinema dispositif to us (which essentially strives for invisibility). The screen becomes an object again in an act of unveiling, the projector a rattling machine through mirroring, and we become aware of darkness again in a paradoxical gesture of visualization. In this light, these films are interventions that found their way into the cinema disguised as films, where they reveal its nature as dispositif and make it visible in the first place.

- 1. P. Adams Sitney, "Introduction," in *The Essential Cinema*, ed. P. Adams Sitney (New York: Anthology Film Archives and New York University Press, 1975), vii.
- Jörg Brauns, "Die Geburt des Kinos," in Schauplätze. Zur Architektur visueller Medien (Berlin: Kulturverlag Kadmos, 2007), pp. 236–258. Translated for this publication.
- 3. Ibid., pp. 242-243.
- 4. Sitney, "Introduction," vii
- 5. Helmut Dimko and Peter Hayek, Apropos Film: Kubelka in New York, 1970, 16 mm, 11:00 min.
- 6. In the first version the design of the seats envelopes the head in a shell, which should capture the sound from the screen and direct it to the ears of the spectator, while separating him/her from the neighbor. In the current version at the Austrian Film Museum this part of the cinema architecture is gone, whereas the lack of a curtain, for example, fixes the spectators' gaze on the empty screen upon entering the hall. Similarly, the black austerity and serenity of the space draws attention to itself as opposed to retreating into the background.
- 7. Brauns, "Die Geburt des Kinos," p. 258.
- Viktor Šklovskij, "Art as Technique," in Russian Formalist Criticism: Four Essays. trans. Lee T. Lemon and Marion J. Reis (Lincoln: University of Nebraska Press, 1965), pp. 3–24, here p. 11.
- 9. On the distinction between the (production) apparatus and the (projection) dispositif: "In a general way, we distinguish the basic cinematographic apparatus [*l'appareil de base*], which concerns the ensemble of the equipment and the operations necessary to the production of a film and its projection, from the apparatus [*le dispositif*] [...] which solely concerns projection and which includes the subject to whom the projection is addressed. Thus the *basic cinematographic apparatus* involves the film stock, the camera, developing, montage considered in its technical aspects, etc., as well as the apparatus [*dispositif*] of projection." Jean-Louis Baudry, "The Apparatus. Metapsychological Approaches to the Impression of Reality in Cinema," in *Film Theory and Criticism: Introductory Readings*, eds. Gerald Mast, Marshall Cohen, and Leo Braudy (New York/Oxford: Oxford University Press, 1992), pp. 690–707, here p. 696.
- 10. The film exists in diverse "states," which were all realized according to the instructions written by the artist in 1968. Each state was produced for a specific cinema space and must only be shown there. A message at the beginning of the film indicates this aspect, which is also dealt with in the RESET THE APPARATUS! CORPUS under "site specificity." The version described here was made for a 2012 retrospective of Morgan Fisher's film works in the Austrian Film Museum and shows the Invisible Cinema 3.
- 11. It must be added that projectors usually turn off immediately after the last frame on the reel. The projectionist is instructed to manually block this automatic process so that light continues to be cast onto the screen.
- 12. Dennis Göttel, *Die Leinwand. Eine Epistomologie des Kinos* (Paderborn: Wilhelm Fink Verlag, 2016), pp. 17 and 23. Translated for this publication.

13. Brauns, "Die Geburt des Kinos," pp. 253-254.

14. Ibid., p. 251.

A SET FOR RESET Miklós Peternák

The entire surface of the human body reacts directly to light when sun rays color the skin. But sunlight doesn't just tan our skin, it divides our body's surface into various spaces, depending on which parts we intentionally cover from the sun and for how long. One might refer to this kind of effect as "culture." As a metaphysical substitute for skin shielded from sunlight, man created the intellectual epidermis—in other words, the tabula rasa, a clean sheet, an empty surface for a written text or an image. For a long time he used stone, clay, flattened plants, and carefully prepared skins (dog, lamb, and calf skins) to record, with his curious signs, everything he was unable to comprehend or wished not to forget. Occasionally he scratched his jottings from the parchment and covered the cleared surfaces with writing again (creating palimpsests) as there were ever more things between heaven and earth. Given the growing demand for these indispensable surfaces, the patient search for new techniques led—through other materials such as cellulose produced by photosynthesizing plants and even clothing no longer in use—to paper. As a culmination of sorts in the evolution of this new paper-based intellectual epidermis, we covered this surface with light-sensitive material, but more on this later.

The human body allows light to enter it in two places—the eyes. This process, however, does not result in pigmentation, as skin does not cover these two apertures, although the body does protect the delicate, transparent spheres from rays of light that would otherwise be unbearable. Light passing through the eyes allows us to perceive the world not just as shifts in colors but as a whole. We call this para-epidermic transsubstantiation sight or vision. After the exposure of the vision process the concepts, as the photograms of the brain, develop the image for us, which is fixed by the critique of judgment. Behind closed eye lids, behind the optics now covered with shutters of skin and withdrawn from the process, the phenomena of inner vision are at work: the afterimage, phosphene, on the one hand, and imagination, on the other, like the invisible scanning motion of the theodolite of a "third eye" on the strata of consciousness.

Photography, as the first technically achieved image, fundamentally changed not only our notion of pictures but also our relationship to (sun)light, as we became capable of capturing light information for other purposes than just starting a fire. We could use a tiny hole (camera obscura) or a glass lens (photo camera) to control the process of recording light, or use its direct effects with photograms or contact printing, which were essential methods for the first 50 years in the history of photography. But the goal was always the unique post-alchemical transmutation of a light-sensitive surface, which had been prepared with chemicals, to transform the empty page into a meaningful surface.

Historically seen, the creation of an illusion of motion predates the photograph. In other words, the question of "what really happens between images" (Werner Nekes)¹ arose before the discovery of the photo-chemical process to transform phenomena into

pictures created with light. There is no doubt that the apparatus and cult of what we refer to as film-the process of recording pictures on light-sensitive strips-have close ties with photographic technology. Yet, it was the early techniques employed to create moving images, as "philosophical toys," which revealed previously disregarded aspects of our vision. For example, the experimental presentation and initial explanations of stereopsis² and the demonstrations of the perception of apparent movement³ were elemental findings of research on vision, which was pursued with increasing intensity from the 1820s onwards (and not labeled neuroscience at the time). The results of these experiments in scientific academies also had direct parallels with a new array of playthings in children's rooms.

When two images that differ only slightly are shown separately to each eye of a viewer, the brain creates a spatial situation, whereas if they are exposed in rapid sequence to both eyes, the brain perceives this as motion. Similarly, people can perceive images as moving regardless if they know why these images appear to be moving. Or perhaps they arrive at an incorrect explanation for this illusion of movement, as was the case, for instance, with the perception of stereo images. For quite some time—up until the 1960s—it was explained with reference to high-level neural processes. It turned out, on the contrary, that the brain had no need for semiotics in this process. This example clearly illustrates the rift between phenomenon and knowledge, between the world of experience and the world of experience, or, more precisely, their separation makes them easier to grasp.

In my view, this gap, this break, this vacant territory belongs to the field of inquiry in the RESET THE APPARATUS! artistic research project. Art is never preoccupied with demonstrating or disproving scientific tenets, nor is it concerned with making its experiments reproducible in an exact manner. Moreover, it does not care how "new" or "old" the tools used in a given work are—or put differently, if they are viewed as antiquated or obsolete in the ideology of innovation in the creative industries (which are fixated on the pursuit of market success).

The development of technological media was fairly rapid from the outset—and looking back it always seemed like a continuous acceleration. Nonetheless, we cannot say that the emergence and global spread of the daguerreotype was "slower" than the emergence and wide use of the Mosaic browser, for it only makes sense to view these processes from contemporaneous perspectives of time. However, as with all medial innovations, there is never enough time to comprehend and investigate their inherent potentials Thaumatropes From the collection of Werner Nekes Courtesy of Ursula Richter-Nekes



Timinø

Dóra Maurer, 1973–1980

16 mm. 10:37 min. silent

Courtesy of Dóra Maurer

because in next to no time they are replaced by a version declared newer and better. But as a given technical medium is accessible in any day and age, there is nothing preventing us from taking it up again whenever some artistic objective or other reason calls for its use. (Incidentally, the Hungarian Society of Photographic History recently established an award where a daguerreotype is made of the winner.) Those who decide to (re)use these tools, which are often only preserved as a part of our cultural memory by media archaeology, are no longer bound to the constraints of customs and habits or the mandate of so-called proper usage. They are no longer continuously corrected by contemporary "professional" users. But their task is to discover the potentials of these tools, and sometimes this means learning everything anew.

ANTIZOETROPE

The RESET THE APPARATUS! research archive (CORPUS) includes the film titled *Timing* by Dóra Maurer, in which the previously mentioned "empty page" manifests as a white fabric, a white bed sheet that fills the entire surface of the screen at the beginning. The theme of the film is simple: how we fold a white sheet before putting it away. A daily occurrence, perhaps. The film is silent, there are no cuts; the film was made with precise calculations, focused attention, and several masks. Thus, the process of simple, repeated gestures of folding a sheet in half, as the film image is divided with masks that split it into halves, quarters, and eighths, creates an aleatory effect, which is unpredictable compared to the exact, calculable picture frame sequence of the film.

Antizoetrope, the third part of Dóra Maurer's film Inter-Images (and in part the preparatory work Antizoetrope sketch), also deals with the differences between continuity and sequentiality and the relation with perception, but in a completely different manner. The tiny discrepancies between the individual frames are the essence of the film. The image is set into motion when the sequence of still images is projected at a pace that our brains perceive as motion and not individual images. This technique of moving images first appeared between 1832 and 1834, when the pioneers-for instance, Joseph Antoine Ferdinand Plateau, who invented the phénakistiscope, Simon Stampfer, who invented the stroboscope, and William George Horner, who invented the Daedaleum⁵-ordered series of images into cycles. Interestingly, these innovators independently arrived at similar conclusions without any knowledge of one another's endeavors (the stroboscope and the phénakistiscope appeared in the same year). Plateau and Stampfer placed the images on a circular dial, which could be viewed by one person at a time, while Horner placed a strip inside a drum with slits on the side, which could be viewed by several people simultaneously. In the 1860s an apparatus that can be equated with Horner's discovery was patented as the zoetrope. In order for the eyes to arrange the individual images into a series, which the brain perceives as continuous motion, the images must be shown periodically and not continuously, which is why there are dividing lines between the frames on the image band and the slits on the zoetrope. Dóra Maurer's Antizoetrope refers to this device but works in the opposite manner: Two boxers moving inside a large human-scale drum are filmed from outside through intermittent slits by a camera on a track. The result is short still-like images similar to photographs that capture separate phases of the movement, as if motion has been exiled to the border of the still image, while the rhythmically recurring mask creates the impression that our eyes are slowly blinking.

PHOTORALIA, PHOTOMANUGRAPHY

In Thomas Bachler's work Das dritte Auge (The Third Eye, 1985) from the RESET THE APPARATUS! CORPUS, which he created as a university student, he used the inside of his own mouth as a camera obscura. A decade later another university student enrolled in the Intermedia Department of the Hungarian University of Fine Arts and made a similar discovery without any knowledge of Bachler's images and technique. József A. Ádám (1970-2009), who died tragically young, did not stop after his first self-portrait. Expanding upon his body art technique, he worked with this concept for many years, naming each process individually, and developed this project into the work he submitted for his diploma. He provided the following explanation of the name and descriptions of the main typologies:

"The term *photoral* comes from combining the words 'photo' and 'oral'.

Photoralia. A: I put a piece of photographic paper in my mouth, I make a hole in the piece of cardboard placed in front of my mouth, and the exposure is made through it.

Photoralia. B: I put a piece of photographic paper in my mouth, and I make a tiny hole with my mouth (by pursing my lips) in order to create the effect of a camera obscura.

Photomanugraphy: I clench my hands together tightly in order to make sure there is no aperture through which light might come in with the exception of a tiny hole. The piece of photographic paper placed between my palms faces the opening. Initially, I made the recordings on negative film in the following manner: I fastened the negative film onto a

Photoralia

József A. Ádám. 1995 Apparatus documentation Courtesy of Janka Ádám and Gabriella

plastic sheet with scotch tape. I placed the plastic sheet inside my mouth and held it with my teeth to make it stable. I held a piece of cardboard in front of my mouth which I had pierced with a needle. The exposure is made through this hole. The advantage of the photoralia negative is that it produces a fairly detailed, nuanced image, like images created with a box camera obscura. [...] The next version is a simplified continuation of the photoralia negative. I place a piece of photographic paper inside my mouth, then I form a very small hole with my mouth (by pursing my lips) for the duration of the exposure. I call this version the photoralia positive. This is the method least reliant on an implement that can create a perspective image of reality known to me. The positive process can be performed with the same instruments one needs for a photogram (light, light-sensitive material, artist). In the image created in this manner, objects from both the outside space and the 'inner space' appear as photogram imprints. These elements can include, for example,

> teeth, the edge of the mouth, and textures, such as the effect made by saliva dripping on the negative. The piece of photographic paper is between the teeth. Accordingly, the light-sensitive material can be placed a unit forward or a unit back and the viewpoint can be varied (for example, there is wide angle at the canines)."7

CAMERA OBSCURA PERFORMANCE

Miklós Bölcskey's picture Zero Axioma to Photography⁸ features the house of William Henry Fox Talbot (Lacock Abbey) and is an exceptional example of the "unified apparatus." The artist created a camera obscura by folding light-sensitive photographic paper. The inner wall of the box served as the darkroom itself and recorded the trace of light that penetrated the pierced paper. Unfolded again it is a sheet of paper-a temporary apparatus thus transforms into a work to be exhibited. Of Bölcskey's many camera obscura projects, he is perhaps best known for the Camera Obscura Performance,9 which has been performed at a number of locations around the world. For this work he only needed a large black tarp and an audience. Participants crawl into the black tarp together and shape it into a large tent. While their eyes slowly adjust to the darkness, they use their hands to search for images of the outside world that enter through small openings. The images can be recorded with essentially any kind of aid, any surface, for instance a handkerchief.



Zero Axioma to Photography

Folded camera obscura. William Henry Fox Talbot House, Lacock

Miklós Bölcskey, 1999

Abbey, Wiltshire, England

Courtesy of Miklós Bölcskey

PSYCHOGRAMS, PHENOMENA

For nearly two decades Péter Türk¹⁰ created images using light-sensitive materials-also in the dark, but in a solitary manner without an audience. His investigations were subject to individual, personal attention, positive or negative, coming from the most varied sources, investigations one could call meditative. His technique, in short, consists of using a selected image as a base motif, such as the photo of a cabbage leaf, which was placed in an enlarger. Türk then examined the most typical aspects of it:

"If I place pierced cardboard paper, a mask, in the path of the light ray projecting the photo negative, then it will only allow a small detail to pass through onto the photographic paper. These small spots selected by the masks are the base elements of my images. They are optical units, which are familiar and dear to my eyes. They are such small points of emphasis, cropped tidbits of 'reality,' that almost nothing is seen. They are rich in variety, and

they can be combined to form any new whole without the parts being obtrusive. Anything can be formed from them.

With the mask I try to follow the movement of my eyes. I place the mask where it is pleasant to look at the image. I rely on the joy of looking, or sight, without any prior plan. I look at a picture as long as it feels good.

This is how, after it has been developed, the so-called *psychogram* is created. This is a system consisting of darker and lighter patches, depending on where the light is allowed to pass through the mask and how long it remains somewhere. The process can be repeated and thereby new series can be formed."11

Péter Türk studied invisible images through psychograms and phenomena, the photographic phenomena of emerging pictures, of catching a glimpse.

MÖBIUS SPACE

Attila Csörgő¹² designs unique cameras for capturing new types of spaces on light-sensitive materials. One self-made image recording device is a moving-slit camera, which enables him to capture panoramic landscapes on a Möbius strip. Not only the camera but also the "film," i.e. the transparent strip which has been stuck together, moves while the picture is being made. His earlier devices were also moving cameras. One of them, the Semi Space camera, exposed the image onto the surface of a transparent hemisphere covered with emulsion.¹³ The base of the hemisphere, its circumference, is essentially the

Color Psychogram Péter Türk, 1980 Cibachrome, 20.5×12.5 cm Photo reproduction: József Rosta Copyright: Heirs of Péter Türk

Attila Csörgő, 2004 Black and white spirally shaped photo stripes presented in two stages (twodimensional image, 50×130 cm and spherical image, 20 cm in diameter) and a camera (lens, wooden frame covered with paper, revolving parts, AC electric motor, adapter, ca. $80 \times 60 \times 60$ cm) Courtesy of Attila Csörgő

Orange Space

surrounding horizon line. In the work Orange Space¹⁴ the paper strip forms a sphere, a photographic sculpture of sorts which resembles the spiraling form of an orange peel when spread out. This format also serves as the "negative" of the (contact) positive image. It is as if the captured events in the surrounding space were evenly turned inside out onto the photo sculpture: A spherical solid inside the camera creates a single 360-degree image, which is facilitated by the rotary motion of the camera lens. In all three cases we are confronted with an image that humans cannot directly perceive, as our field of vision is roughly 180 degrees. Nevertheless, we are compelled to accept these images as "realistic," like all images created with a lens, because we have no unequivocal scientific definition

than another.15

of an image that "corresponds to reality" or why one optical image would be more real







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Taschenkino (Pocket Cinema) Gustav Deutsch, 1995 Expanded cinema performance, 100 film loops (color, no sound) for 100 Super 8 microviewers Copyright: Hans Labler

CINEMA THINK

Gusztáv Hámos¹⁶ has been exploring photofilms as an artist, curator, and author for a long time now and poses the question *Moving/Non-Moving?*¹⁷ in his works. One characteristic of photofilms is that the scenes or the key images of scenes—one might say single emphasized frames or series of frames—are shown slightly longer than usual in cinematography. We see the moving picture when it is still and still images because the eye moves. The field of discernment is fairly small. Our brain projects a static image for us and creates a hypothesis based on previous experiences of how we perceive the world.

Moving from detail to detail in this spectacle, we decide when to scrutinize this light information. Gusztáv Hámos' work offers insights into how photofilm provokes the audience to not just "watch a film" but to "think cinema."¹⁸

There are only a few emblematic pictures that depict an audience in the space of a cinema so well as the documentary image from Gustav Deutsch's work *Taschenkino* (*Pocket Cinema*).¹⁹ 100 Super 8 microviewers were passed out with unique 30-second film loops, simultaneously recalling the loop films of early cinema and the later plastic optical toys with 8 mm films that one had to wind by hand. Everyone sees his or her own movie, which transforms the situation of the collective watching a movie into an individual experience. The image of *Rien ne va plus* Katja Pratschke and Gusztáv Hámos, 2005, 30:00 min Courtesy of Gusztáv Hámos







Text Parts to be Learnt by all Means Anna Barnaföldi, 2012 Installation, mixed technique, ca. 90 × 45 × 25 cm Courtesy of Anna Barnaföldi the collective as individuals engaged in similar activity nevertheless emphasizes the dominance of the apparatus.

In a certain manner, the scene described above is reminiscent of a school classroom. It has similarities with another example of "cultura experimentalis,"²⁰ Anna Barnaföldi's installation Text Parts to be Learnt by all Means, which makes a poetic connection to film and a personal sense of time. The sight of a textbook might summon the image of students sitting in orderly rows in a school and looking in the same direction. Two history textbooks covering the same time period but written 25 years apart served as the raw material for this installation. The most important lines, which the authors regarded as absolutely imperative to memorize, are highlighted in bold. The artist clipped out these passages from the books and taped them together into two long strips that were coiled onto a film spool. As one of the books was written during the artist's parents' youth, namely during "real socialism," and the other when the artist herself was in school, after the fall of the "Eastern Bloc," the two visually similar letterfilms offer entirely different perspectives on history, although both were deemed worthy of being printed and learned at the time. This unique interpretation of parallel editings, which easily provoke discernible contradictions

in the mind of the reader or viewer, reveals the enigma of personal and historical time, of the individual defenseless against apparatuses and knowledge to be acquired, knowledge that serves the needs of the prevailing power and is written from the perspective of a manipulative worldview and the rulers of school book history.

A LIFE TO SEE

Historical time, personal time, film time, and life time have been placed in relation to one another in a single work, *A Life to See*, a composition by the now defunct artist group Société Réaliste, or more precisely one of its artists, Ferenc Gróf.²¹ *A Life to See* is an online film that lasts 885,768 hours. The artist's objective description of the work and its title:

"Over the course of her career Leni Riefenstahl shot and edited 10 hours, 1 minute, 19 seconds, and 10 frames of motion picture. She lived for 101 years and 17 days. *A Life to See* is a film composed of the 901,985 frames authored by Riefenstahl, edited in order to last as long as her life, 885,768 hours. The frames are projected randomly, and each one appears only once, for a duration of 59 minutes. The complete 601-minute soundtrack

of Riefenstahl's filmography is edited in chronological order and accelerated to a duration of 59 minutes, repeated over each frame. The projection of the film began on Friday, 17 February 2012 and will finish on Tuesday, 7 March 2113."22

Hence, a film frame can be accessed on the Internet for almost an entire hour, thanks to this "analogital" approach,²³ however each frame only appears once over the course of the entire film. We don't know which frame will be next, whether a still image from Triumph of the Will will be followed by a scene in color showing deep sea coral worlds or one of the shots from the 1936 Olympic Games in Berlin. As the length of the "very slow" projection time exceeds the average human lifespan, including the lifespans of the authors themselves, the overall realization of the project relies on unstable apparatuses and the curatorial focuses in the future, which are difficult to anticipate. This deconstruction-which imbues each single frame with a *durée* the length of a feature film and presents them torn from their original contexts and sequences and as part of a random seriesrevisits an exceptional fate and oeuvre, a phenomenon full of contradictions, simultaneously attractive and repelling, which remains part of our cultural memory,

bypassing any didactic element and entrusting the given viewer with the task of drawing any morals.

Société Réaliste (Jean-Baptiste Naudy & Ferenc Gróf), 2012 Online film. 885.768 hours Courtesy of Société Réaliste

DIGITAL MACHINES

Tamás Waliczky²⁴ is a noteworthy representative of new media art. Photography and film have continuously played a role in his works,²⁵ likely due in part to the fact that he worked with photography and amateur filmmaking at the beginning of his career. In other words, he is well acquainted with analog techniques. His latest series depicts new picture-making mechanisms which are fictional or imagined, never seen before but constructible in all probability. Some of them are computer graphics, examples of an art form typical for the heroic age of computer art. For example, there used to be an own art category in the early years of the Ars Electronica Festival in Linz. Tamás Waliczky won its highest award, the Golden Nica, in 1989, with the series Machines, which the latest series builds upon to a certain extent. Alongside the graphic works are also animations that simulate the operations of the structures, which we typically do not see in the case

A Life to See

of actual apparatuses because their covers, the outer "epidermis," hide these functional elements from us. 15 pictures and three animations from the series were presented for the first time in Hong Kong in 2018, where Waliczky is currently teaching. The black-andwhite images appear like well-lit reproductions from an unknown manufacturer's professional product catalog, which emphasizes the products' materiality. At first glance, we do not notice that we have never seen these kinds of instruments and that we are perhaps unable to identify their functions.

In an interview Waliczky offered the following explanation of the work: "I had two goals in making the prints. On the one hand, I aimed to create cameras that work, to design every detail in order to make machines that are able to take photos or record movies. On the other hand, I intended the display of the details and the whole of the composition to be appropriate as far as my aesthetic criteria are concerned."26 He also draws attention to the fact that in certain cases these cameras bear links with some known or forgotten instruments, personalities, or discoveries from the history of the media: "One print (Mirror Camera, 2017) departs from a forgotten discovery from photo history, Wolcott's mirror camera, 1840, and creates a new, non-existing film camera."27

In this form each and every camera in the series is a digital imaginary picture of a non-existent (analog) instrument, a characteristic view of a mechanism that is envisioned as being capable of making film and photo recordings. Relying on our knowledge of media history, we can find analogies for the types of instruments that were points of departure or references for the machine designs. However, we are unable to imagine what kind of images we could create with these instruments, which appear before us in picture form.

With the ubiquitous digitalization of the world of images, tools based on photochemical processes, which provided the foundation for their production, manipulation, and presentation techniques, are disappearing and can only be found in collections, on museum shelves, or in glass cabinets. It is almost exceptional when an institution takes it upon itself to present a film using the original projection materials and authentic instruments, typically in the framework of an art exhibition, or when the tools appear as integral elements of self-contained works, such as the installations of Rosa Barba or Simon Starling. As black-and-white is often seen as an outdated sign of the past, we could describe the pictures by Waliczky as digital memorials to vanished instruments, which have been ousted from our daily lives. But maybe something else is suggested here, namely that the accustomed hierarchy has been turned upside down. Usually we construct instruments to create something which otherwise would not be possible without their aid. Films, for example. When one looks at a film camera one cannot immediately ascertain what kinds of films it shoots, nor is this question even relevant. In the case of Tamás Waliczky's cameras, however, the message is not the multitude of images that can be created with these machines rather the diversity of these instruments, which never existed but are conceptually possible, presented through the medium of the picture. It is a collection of cameras that we cannot take pictures with yet, and which we may never have the chance to use.



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- 2. Charles Wheatstone, Contributions to the Physiology of Vision.—Part the First. On Some Remarkable, and Hitherto Unobserved, Phenomena of Binocular Vision. Philosophical Transactions of the Royal Society of London, 1838. doi: 10.1098/rstl.1838.0019 Phil. Trans. R. Soc. Lond. 1838 vol. 128 371–394, http://rstl.royalsocietypublishing.org/content/128/371.full.pdf+html
- 3. Peter Mark Roget, Explanation of an Optical Deception in the Appearance of the Spokes of a Wheel Seen through Vertical Apertures, doi: 10.1098/rspl.1815.0252 Proc. R. Soc. Lond. 1833 vol. 2 230–231, http://rspl.royalsocietypublishing.org/content/2/230. full.pdf+html; Michael Faraday, "On a Peculiar Class of Optical Deceptions," Journal of the Royal Institution (February 1831): pp. 205–223, https://archive.org/stream/journalofroyalin01roya#page/204/mode/2up

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- 5. W. G. Horner Esq., "XI. On the properties of the Dædaleum, a new instrument of optical illusion," *The London, Edinburgh, and Dublin Philosophical Magazine and Journal of Science* 4, no. 19 (1834): pp. 36–41, doi: 10.1080/14786443408648249, https://www.tandfonline.com/doi/abs/10.1080/14786443408648249
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- Miklós Bölcskey, Zero Axioma to Photography, folded camera obscura (William Henry Fox Talbot House, Lacock Abbey, Wiltshire, UK), 1999, 50 × 70 cm.
- 9. bauhaus lab, "Miklós Bölcskey: Camera Obscura Performance," http://bauhauslab.c3.hu/events/camera-obscura-performance/ 10. "All Is Not Visible – Péter Türk (1943–2015) Retrospective," Ludwig Museum, Budapest, 2018, https://www.ludwigmuseum.hu/ en/exhibition/all-not-visible-peter-turk-1943-2015-retrospective
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- 14. Attila Csörgő, "How to Construct an Orange?," http://www.c3.hu/~acsorgo/angol/narancs_leiras.html
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- 16. Gusztáv Hámos, http://www.hamos.info/
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- 21. Ferenc Gróf, "A Life To See," http://www.ferencgrof.com/index3.html
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ON THE DISAPPEARANCE OF BUTTONS #LOSTANDFOUND

Nina Jukić

I. THE FUTURE

Aldous Huxley's *Brave New World* (1932) takes place in A.F. 632, or 632 years after Henry Ford first produced his Model T (1908–27), the first car manufactured by purely mass-production methods. The novel opens with the Director of the Central London Hatchery and Conditioning Centre (a building of "only 34 stories") explaining the process of human cloning to some gathered students. The students vigorously take notes. In their notebooks. With pencils. It is the year 2540, and, in Huxley's vision of a futuristic dystopia, students still carry notebooks and pencils with them.

In 2019 we live in a world where the digital not only dominates the ways we take notes or make photos every day. We can do almost anything with just one small device from finding the name of the song currently playing in a café to monitoring our heartbeat. Technology keeps progressing at a great speed. Now we can operate our loudspeakers by talking to them. Our data is stored in clouds. The future is wireless, they say.

Ironically, in the week before the deadline for this essay several of the machines I use every day started having problems. My smartphone's motherboard suddenly died on me; my old laptop refuses to connect to the home Wi-Fi network every other day; and the other laptop seems to be infected with a virus. To avoid frustration, I mostly took notes for this text with my pencil, on blank A4 paper. This might sound as anachronistic today as it would most likely in 2540. Or will it? The truth is, I just always really liked paper. Notebooks and pencils, and the way they feel in my hands.

II. THE PRESENT

Just some 10 to 15 years ago it seemed as if most spheres of our media environment would inevitably be transformed into digital, forever. In photography and film the masses of users who switched to digital cameras and finally camera phones resulted in big companies like Kodak, Fuji, and Polaroid ceasing production of cameras and film and photo labs closing down. However, the same interest in the materiality of photo-chemical processes and opto-mechanical apparatuses has been recurring as of late, not only in artistic but also amateur photographic and filmic practices. The digital age has reduced the presence of the analog in everyday life, but at the same time it has sparked a renewed interest in the very material, physical aspects intrinsic to analog photography and film, which has been manifesting in a wide variety of ways.







Enfojer



Sun&Cloud camera

Let us mention just a few examples that **#resettheapparatus** by blurring these illusory boundaries. The Austrian artist and filmmaker Siegfried A. Fruhauf created his short film *Where Do We Go?* (2018) with the Lomo Supersampler camera. The Thai film director Apichatpong Weerasethakul's experimental short *Ashes* (2012) was made with a Lomo-Kino. Or the Impossible Project: although—or maybe because—their first Polaroid films were quite unpredictable for normative usage, they proved ideal for experiments with different techniques such as emulsion lifts or repurposing the photos. Of course, artists had already done this with Polaroid photography a long time ago, back when it was a prevalent form of everyday image-making.¹ However, in the digital age such activities become interesting even for amateurs who appreciate Polaroid photography precisely because of its very materiality and physicality, regardless of the image quality. A book has even been published, a collection of *101 Ways To Do Something Impossible*,² showcasing amateurs' works in the manner of a proper, beautifully designed art monograph, including instructions on how the works were made.

Without the initiatives of small companies, who are saving the production of analog film supplies from permanent extinction, artists would have less materials to work with as well. In order for artists to be able to **#resettheapparatus** first there have to be resettable materials available. And, slowly, it seems to be happening again. FILM Ferrania, the successor of what was once "Italy's equivalent of Kodak or Polaroid,"³ aims to revive its production with a small team of enthusiasts. Vienna-based Revolog produces handmade 35 mm photo film with "special effects," such as textures or light streaks. The Impossible Project successfully saved Polaroid photography from its certain death ten years ago, and now the much-improved film has been rebranded as Polaroid Originals. Instant photography is currently the liveliest field of popular analog photography. It combines the instantaneity of the digital with the materiality, uniqueness, and rarification of the analog. Lomography's latest camera is a Diana Instant Square, the first Instax camera with interchangeable lenses and a hot shoe mount. Fuji has just released its first ever all analog instant square camera, the Instax Square SQ6. Interestingly, the previous model of the camera, the SQ10 released in 2017, was an **#analogital** hybrid.

Several inventions have appeared in recent years which employ both analog and digital technologies, especially by combining the photo-chemical processes with the practicality of smartphones. One such example is the Enfojer, a portable darkroom designed in Croatia, which makes it possible to use a smartphone instead of a negative to expose the photo-sensitive paper. Impossible Project's Instant Lab uses the same principle to create Polaroid photos. By the time this book is published, Kodak will have probably released its new #analogital Super 8 camera under the motto "analog renaissance," "merging analog magic with digital convenience."⁴ The already mentioned LomoKino is also one such hybrid: It is a hand-cranked camera that shoots short silent movies on standard photographic 35 mm film at a #veryslow frame rate of four to five fps, and the scanned stills can then be animated digitally #still-moving. The hand crank itself is a peculiar occurrence in the digital age and deserves closer attention. It goes beyond purely

For more than two decades now the Vienna-based Lomography Society International has been producing film and analog cameras specifically designed to inspire experimentation, such as cameras that expose the sprocket holes, cameras with four or nine lenses, 360° cameras, and so on #scale&format. Lomography is also an online community of more than one million enthusiasts, many of them in their early 20s, who are discovering analog photography for the first time. The company shares tips on how to experiment with alternative photographic techniques, such as putting film into a dishwasher #materialagency or placing it in body fluids #bodyinvolvement. Here the resetting of the apparatus is not only happening on the side of the user. In postmodern popular culture it is possible for a company to encourage creative resetting of its own products. Art or commerce? It is an obsolete discussion, one rooted in the modernist idea of the legitimacy of binary oppositions such as high vs. low culture.

utilitarian purposes and also beyond retro-technological fetishism. Instead, it is transformed from a mere mechanism into a dispositif of its own.

The Sun&Cloud camera, released in 2013 by the Japanese company SuperHeadz, incorporates a hand crank as well. This first self-sustainable digital camera is equipped with a solar panel. When the battery is low and there is no computer around to charge it via USB, you do not have to wait around for hours while it charges in the sunshine either—you can charge it by simply winding the hand crank, just enough to shoot a few very lo-fi photos. Here the role of the hand crank is stripped to the mechanism's very essence: kinetic energy. The purpose of this crank is nothing more but to be moved by a human hand in order to transform this motion into another form of energy.

On the topic of pre-cinematic hand-cranked devices, Benoît Turquety states: "The presence of a crank does in fact completely transform the relation to the machine. Without it, the handler/spectator [...] will start or restart the machine and possibly stop it. [...] However, he cannot physically give a constant speed to the machine. [...] Only the presence of a crank permits real control over the rotation speed, if one that is relative in terms of precision."5 In this respect our digital gadgets are similar to pre-cinematic devices without a hand crank. The presence of a hand crank in contemporary cameras is thus more about the bodily action required to control the camera than anything else. Precisely because of its obsolescence and, as in the case of the Sun&Cloud camera, its redundancy, it becomes possible through its re-introduction to accentuate the mechanism's insistence on #bodyinvolvement, the presence and the action of the human body. Operating a hand crank on these cameras becomes a sort of a media-archaeological activity per se, a digging into the past and commenting on the present of our media #lostandfound. In the digital age, when it suffices to just lightly touch a screen in order to execute any kind of action, a hand crank demands to be turned, employing not just the tip of the finger but the whole arm.

III. THE PAST

When I was doing research before buying my new smartphone I noticed that the latest models typically lack the home button—one of the last buttons that was on the phone. The whole front is becoming one smooth, flat, shiny surface with nothing to "really" press. And just like the paper and pencils, I also really like buttons.

I don't think this has to do with nostalgia. I think I could be classified as a sort of a transitional digital native, one of the first ones. I started surfing the Internet in 1998, when I was 13 years old. Back then the Internet connection was very slow and unreliable in Croatia. With the Internet as a precious scarcity, I started exchanging my first ever emails with a boy from California whom I had met on a music forum. It was not possible to send media files or video links yet, and this was just before the rise of digital photography. So he would occasionally send me a package, per post, with some grunge cassette



Revolog films Copyright: Revolog

> All This Leaving Nina Jukić, 2013 Digitized 35 mm LomoKino stills from a music video for a song by ChocoJazz Courtesy of Nina Jukić



mixtapes. Once I sent him some photos of myself, also in the post. He sent me back some photos of his cats. In the age of Instagram it is hard to imagine that I spent more than a year exchanging emails with someone whose photo I have never seen.

This was the world I lived in 20 years ago, a kind of an #analogital world, as hybrid as it gets. It all changed very soon. Slowly but surely, the media landscape became more and more one-dimensional. Sure, it is great to have high-speed Internet access all the time. But touchscreens bore my fingers to death. I am a classically trained piano player. I like using my hands and fingers to push buttons that make sound, give some kind of resistance. Back in school I could secretly punch in text messages with my hands under the desk (and fast). I knew which keys to press just by feeling them. Not possible with smartphones.

Like millions of others, I spend a lot of time looking at the screen of my phone or laptop every day, taking thousands of photos and videos a year, which I often do not even look at afterwards. But when I travel, take a long walk by myself, or just want to experiment I pick up one of my analog cameras. I slow down, soak up my surroundings, and shoot intuitively. I take time to focus the image, knowing that I am limited by the amount of photos I can take. I embrace the possible imperfections. There is something very relaxing and meditative about that. About not knowing what I captured on film right away. About having to wait to pick it up from the lab. I enjoy opening a camera to insert the film, seeing its mechanical insides, hearing the sounds they make, smelling the plastic and the metal and the chemicals. There is nothing nostalgic about this. Only the here and the now. Being in the moment, with all of my senses. Holding in my hands a large, bumpy object that has no Wi-Fi, no Facebook, and no distractions. Instead, buttons to push and cranks to turn.

 For example, see: Achim Heine, Ulrike Willingman, and Rebekka Reuter (eds.), From Polaroid to Impossible. Masterpieces of Instant Photography – The Westlicht Collection (Ostfildern: Hatje Cantz Verlag, 2011), exh. cat. of Polaroid (Im)possible – The Westlicht Collection at Westlicht, Schauplatz f
ür Fotografie, Vienna, Austria, June 17 – August 21, 2011.

- 2. The Impossible Project, Marlene Kelnreiter (ed.), 101 Ways to Do Something Impossible, foreword by Florian Kaps (Vienna: The Impossible Project, 2012).
- 3. David Sax, The Revenge of the Analog. Real Things and Why They Matter (New York: Public Affairs, 2016), p. 54.

4. The latest slogan is "Analog magic, meet modern convenience." For further information see: "Kodak Super 8 Camera," https:// www.kodak.com/gb/en/Consumer/Products/Super8/Super8-camera/default.htm (accessed on Sept. 16, 2018).

5. Benoît Turquety, "Forms of Machines, Forms of Movement," in *Cine-Dispositives. Essays in Epistemology Across Media*, eds. François Albera and Maria Tortajada (Amsterdam: Amsterdam University Press, 2015), p. 290.

DIS POSITIF ION Ferdinand Schmatz What is there, does it stand for itself as that what it is? What it must be, or can be? As a given. As a possible. As a thing an image a word—like dichositif

As a thing, an image, a word—like dispositif. As a thing, an image, a word—like disposition.

Not just the prefix "dis-" connects the two words, let's say: terms, which stand for something. Outside of the suffixes the core of the terms is the same.

So what do these two so similar words—differentiated only by tiny material units—stand for, what must they or can they stand for? Or: want to stand for?

What about the sense of reality and sense of possibility? (cf. Robert Musil)

Ihe word disþositif is clear. Ihe word disþosition is clear. Iheir meaning as something given. As reality. Iheir meaning as something prescribed. As reality. But We make a possible out of both words or terms: the DISPOSITIFION As something put into position.

As reality of realities. The thing like the word. The word like the term. The term like the image.

¿es, but how and by whom is intervened here, is something made?

By us, a We (written intentionally with a capital), which describes an attempt to focus differently on our self-understanding than how it is prescribed to us. It describes an attempt to introduce a different behavior—to attempt a different coordination of statements, rules, oractices, and above all, institutions in relation to the I, the We, and their bodies By whom:

How are the other possibilities, the reality of meanings to be investigated, tapped, which as such are already part of the desired change as an assumption or precondition?

A word without a defined meaning emerges. The material of letters gives way to a new, idiosyncratically constructed, shared meaning Like this: We take the letters or syllables of the two terms dispositif and disposition and connect them anew:

Alone this evolution per se will lend, give, bestow the word—and We who explore it—meaning. And:

As a mechanism, as a process, which consists of the "old" materials and emerges as "new":

DISPOSITIFION

l We find ourselves in Material Agency.

The material of the word takes to the stage, which We build with this material of letters and where it presents itself as something connected to us.

| DISPOSITIFION Let's stay a bit with the words. Words used to mean things. Once.

Stipulated and approved in the dictionary.

But this is in vogue again.

The prescribed code, the normative usage, however, does not generate the world of worlds, rather one, and confirms it, determines it.

Objects or things are to be named, recognized, cataloged. Words do not place them in mobile positions, they confine them within.

They are not up for disposition—they are not at stake, on the brink, on the knife's edge, on shaky ground, not on the verge of collapse, not debatable, not beginning to totter. (cf. Wikipedia)

There is no negotiation, no evocation of what they could otherwise mean or effect when used

Defined and checked, "we" must speak and act accordingly.

In old semantics rigid, an immobile normative usage.

The words and terms are as rigidly defined as the things—through directives set by the system in which they operate, or act, or better put: allowed to act.

The dispositif of power, as Foucault named and analyzed it. Parading the knowledge of power, which is not ours.

But:

Material Agency resists.

We (repeat We, with a capital) have idiosyncratic plans, We search for different, our dispositifs: They result in our investigative treatment

of words, images, and things—through comprehending: We hold the words of the world in our hands and detach them from old terms: Standing and moving.

> Paper Landscape #1 Guy Sherwin, 1975 Expanded film performance with transparent screen and white paint, Super 8 mm projector, color, silent, Super 8, 10:00 min Courtesy of Guy Sherwin



Now, in another kind of world production, the things like the words or the things as words are really up for disposition. Paper and landscape and eye and hand become a floating body—a collective celebration of acting. The borders between body world and outside world, skin and universe ask of each other:

Materials detach from their carriers, but We realize that they and We are here together. After We have lifted off together and landed once Where are We? Where do We find each other? Do you cover me or do I cover you? Where can We go like this? again.

The flying paper rests

leaving a defined field, drifting away from this defined field. Away and different, possibly transformed, back inside.

| Possibly means: Yes AND No, not just Yes or No.

There is a between.

It is not defined. It is not a condition, rather it consists of conditions of movements.

Art things have been navigating this between since longer. From nature they strive back to nature and are always on their way.

possibility to learn to see, to understand differently. The striking type bar places a slightly smudged letter on the paper. The machine rustles. Nietzsche's typewriter, one of the first that a thinker fell for, is fibbing, and does it well. As a medium for him, it provides us with the The fibbing becomes a kind of truth, it expands reality.

Its objects, the images, the words are found as hybrids—of art—between nature and civilization.

FERDINAND SCHMATZ 199

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We are in the Analogital:

anticipated other, in this between. There, possibly, number and rule turn up again in the material—but are set free artistically-methodologically. There: Behind every stipulated convention, although they apply these conventions. The rigid dictionary disintegrates, the letters fly, they "Analog" and "digital," each on their own, separate the worlds of knowledge, of theories, of technologies. Conceived together they realize the are the stars on the cosmos of the screens—in the thing and in the mind, two screens, and more, turn on. The eye of the machine reveals the head of the human:



Lacomotion, twelve sequen photographs, captured on

circular paper negatives Copyright: Mr. Pippin, Loi

Nalking Naked, Image 9 steven Pippin, 1997 There. There-between.

Something repeats. Following the code in a contemporary time. The norms, the taboos are no longer hidden; they appear in this space. Yes. But: It is always different. They are repeated, not recollected and rigidly stored in the memory.

Repetition as opposed to recollection. (cf. Sören Kierkegaard) Through techniques. Through media. Material empathy via apparatuses, possibly.

> Eastman Kodak Kodabromide E3 expired May 1946, processed in 2008 Alison Rossiter, 2008 From the series *Latent*, gelatin silver print elatin silver print Courtesy of Yossi Milo Gallery, New York



constituents. The month is inscribed on the skin, like the moon on the fingernail—it is all a process in corporeal time, indeed, possibility What is decisive here: The change pervades the media that cause it, too. The medium itself transforms through the re-usage if its medial itself is time. And, correspondingly, the skin the space of the whole body, in its present absence. Skin calendar.

Material, abstract and concrete at the same time.

There floats a between-part that becomes whole: Signs appear as inscriptions on the skin, alluding to the conception of our body, there, where the skin becomes this complete body and does something with us, to locate and change what has been done to us, possibly.

> *one month on skin – Laura* Olena Newkryta, 2013–2014 Baryta paper, b/w, 50 × 57 cm Courtesy of Olena Newkryta



The convention of the complete body is changed substantially by applying different rules to its parts—in this case the skin. That's where negotiation comes into play again. Yes, it is also play. We call this re-usage, and this means: to give it new meaning.

Meaning then assumes the function of communicative negotiation. Not only in semantics, the study of meaning. Sensation, experience, thought, and speech correlate, they no longer define the concrete world for us, rather it is We who co-create it in DISPOSITIFION processes: 202

ا Of intertwining. Of miving

Of mixing.

The world inside and outside. It is We who sense, experience, speak, think. Hence, who are comprehensively whole in parts. Bodies that experience.

That which We are becomes what it can be, a contract through negotiation. A becoming,

The world of worlds of inside and outside, we are in the Analogital.

Ad hoc methods, theses as hypotheses.

Freedom and Turing machine?

This freedom exists in the moment before the decision is made. (cf. Alfred Andersch)

Whether this works out remains to be seen, but it is worth a try.

In order to change the digital space it is possibly enough to rearrange the algorithms of the chairs.

The hands grab the letters, the legs, the seat, etc. and rearrange them in the mind into a differently furnished room with the same materials. What is seen and what is perceived changes the order of the thought and charges it with new meaning.

We are in the cinema of sense, which resides in the senses, embodiment:

We, who sense, experience, speak, think with the hands once again become the comprehensively whole body in parts of the organs, from the tip of the toes to the brain.

These parts are the whole brought into position and set in motion.

Ameisenkino (Ant Cinema) Johann Lurf, 2009 16 mm installation, 6 × 4 mm, 1:00 min loop Courtesy of Johann Lurf



The ant finds itself as the represented in the other ant, which it encounters along the whole path of splitting paths. It receives its pointer, which triggers action.

Our ant consciousness on the imagination canvas, We, the spectators, receive the pointer of the tingling, which at some point seizes the rigid hand.

Disembodied corporeality.

The body is distributed. Its organs are not alone: The finger, the skin, the eye, the mouth blend together.

DISPOSITIFION

The mouth sees. The eye drinks.

Das dritte Auge (The Third Eye) Thomas Bachler, 1985 From the series *Das dritte Auge*, baryta paper, 30 × 40 cm Courtesy of Thomas Bachler



ا We see blurry but the blur harbors knowledge.

The darkroom becomes a mouth. A bright head emerges from the darkness of the maw.

The opening and seeing of the mouth.

The closing and drinking of the eye.

And the there-between.

It presents itself in the medium—in this case the film.

Between the teeth: The throat. The tongue. The song. The sound. The lid. The jaws. The word. The lash

The sentence? Before. The thought? Afterwards.

The mouth speaks in the eye. It speaks images. The inner eye sees the image that produces a word. This word thinks back once again, twice, three times, and so on... of the image.

Lost in speaking, found in writing. But it leaves the dictionary. Takes on a life of its own. Speech that escapes into writing. (cf. Reinhard The camera of the body unites the organs and reflects them without reflection. Reflex-Ion. Me? Priessnitz)



The word and the word and the word are writing.

This writing rustles. We clearly see this rustling in the image.

Apocalypse is clean writing in a chaos. Wild arrangements interwoven.

The eye writes. The hand thinks. The mouth shows.

A different understanding evolves.

With the dictionaries going beyond them, but building upon them.

The quote plays this game.

Montage and bricolage play it as well.

In this game We take the given as a rule, establish new rules, but remain in the "old" room.

(Moving the chairs is enough to change the room. (cf. Jan Mukarovsky))



Philipp Goldbach, 2013 Installation, small-image format slides, former slide archives of the University of Cologne's Institute of Art History

Goldbach, 2013

Copyright: Bildrecht, Vienna, 2018

The real that develops therefrom, the room of rooms—which we like better than reality—also depends on the circumstances around the beings, things, and words, which place it in a context—by showing or describing.

What results, so that it is there, resides in the field of order, the "materials" and their ascriptions, yet transforms them along with itself...

Something is happening:

A body into the body.

A thought into the thought. And out again.

And out again.

A word into a word.

And out again.

An image into an image.

And out again.

A medium into a medium. And out again.

In this time-space the other, possible, and real space of spaces, which are inside in the senses and outside in the meaningful realities, becomes active.

We are doing something there. Adding. Removing. Leaving it. Expanding or narrowing it.

nnovation is the new combination of old technologies, creative destruction. (cf. Joseph Schumpeter)

Freeing or fixing—in the transformed field of disposition and dispositif, both are possible:

DISPOSITIFION

There is, indeed, shared action, rearrangements, the inventory is expanded in itself and in the mixture with other things. The point is not to become the other in order to dominate it, rather to receive it, possibly, anew with old, lost means:

We are in the realm of the Lost and Found.

Becoming an own order transverse to the delimited fields, embrace it, rearrange it in order to move into the field where We think We are I-Once set in motion, to change or transform the old order, open toward the other, that is the point.

It is power, which it otherwise laughs at, as counter-power, to elicit what it believed it had placed in position: on the surface in the space, there the I is not a dream.

To contribute beyond oneself that which sets forth to interweave—or better yet, which opens up and sets in motion: the I and the systemic with oneself,

hence:

openness and end, at the same time, different openness:

CONTRIBUTORS

HUBERTUS VON AMELUNXEN is an internationally renowned philosopher and theoretician of photography and fine arts and curator. He was the president of The European Graduate School from 2013 to 2018, where he also teaches media philosophy and cultural studies. Since 2003 he has been a member of the Akademie der Künste in Berlin, where he lives.

ALEJANDRO BACHMANN is a passeur, curator, and author. He is an associate editor of *Found Footage Magazine* and writes frequently for scholarly publications and magazines with a focus on film theory and education, documentary film, and experimental cinema. He recently edited *Räume in der Zeit. Die Filme von Nikolaus Geyrhalter* (Sonderzahl, 2015) and co-edited *nach dem Film* No. 15: "The Invisible Cinema" and *Echos. Zum dokumentarischen Werk von Werner Herzog* (Vorwerk 8, 2018). Between 2014 and 2017 he worked on an experimental film discourse event at the Volksbühne Berlin, which he developed with Bernd Schoch and André Siegers.

ANDY BIRTWISTLE is a reader in Film and Sound at Canterbury Christ Church University, UK, and the author of *Cinesonica: Sounding Film and Video* (Manchester University Press, 2010). While specializing on research in film sound, he also writes on artists' film and video, sonic arts, and East Asian cinema. Andy is also a sound artist and filmmaker whose work has been screened, exhibited, and broadcast internationally. Recent projects include the *Start Here* series of audio cassettes, which explores issues of materiality through creative practice in sound.

GUSTAV DEUTSCH is an Austrian filmmaker and artist. Trained as an architect, he moved to film and art in the late 1980s and became one of the leading international filmmakers working with found footage. His trilogy *Film ist.*, realized in close cooperation with European and American film archives, has been shown widely at international film festivals and in exhibitions as installations. His feature film *Shirley – Visions of Reality* has been screened at numerous festivals and won several prizes. Retrospectives of his work have been organized by the Austrian Film Museum, Cineteca Nacional Mexico, and Film Archive Austria.

BARNABY DICKER is a visiting research fellow at King's College London and sits on the editorial board of *Animation: An Interdisciplinary Journal.* His research revolves around conceptual and material innovations in and through graphic technologies and arts, including cinematography and photography, with particular emphasis on avantgarde practices. This has led to work on topics such as animation, protocinematography, experimental film, graphic reproduction technologies, comic strips, and paleoart. A current project reconsiders the historiography of aesthetic theories and practices of abstraction. Over the last 23 years **DAVID GATTEN** has explored the borders of film as a medium. His 16 mm films often employ cameraless techniques in combination with texts-as-images, micro-cinematography, and handmade optical and contact printing devices. His body of work illuminates an array of historical, conceptual, and material concerns, using traditional research methods (reading old books) and nontraditional film processes (boiling old books). These films trace contours of private lives and public histories, combining philosophy and poetry with materialist experimentation. Gatten lives and makes movies in the historical mining community of Salina, Colorado. He is a professor in the Department of Cinema Studies & Moving Image Arts at the University of Colorado Boulder.

GIBSON + RECODER have been exhibiting their expanded cinema installations and performances since 2000. Their artworks are in the permanent collections of major museums such as the Whitney Museum of American Art in New York, Memorial Art Gallery in Rochester, and Museum Kunstpalast in Düsseldorf. Awards and commissions include the Rockefeller Foundation Bellagio Center in Italy, National Endowment for the Art's US-Japan Creative Artists Fellowship, and Madison Square Park Conservancy in New York. All artworks featured in their RTA! contribution were conceived during a residency at AIR Krems, Austria in 2017. Gibson + Recoder live and work in New York.

RUTH HORAK is an art historian who is active as a curator, author, and lecturer on contemporary art and photography. She focuses on border areas between photography, art, and film and appropriation, conceptual strategies, and abstraction in photography. She is the author and (co-)editor of numerous publications on contemporary artists and the theory of photography, such as *Image:/images* (Passagen Verlag, 2002), *Rethinking Photography* (Fotohof, 2003) and 21 *Reportagen zur Fotografie* (Fotohof, 2008). She curated exhibitions for the Angewandte Innovation Lab, Krinzinger Projects, or Camera Austria and currently teaches at the School for Artistic Photography and the University of Applied Arts Vienna.

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